ENSOLUM

CLOSURE REPORT

Property:

Chaco Plant Water/Amine Spill
Unit Letter N, S16 T26N R12W
San Juan County, New Mexico

New Mexico EMNRD OCD Incident ID No. NAPP2427534650

April 9, 2025

Ensolum Project No. 05A1226348

Prepared for:

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

Prepared by:

Landon Daniell
Project Geologist

Kyle Summers
Senior Managing Geologist

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1.0 INTRODUCTION

1.1 Site Description & Background

Operator:	Enterprise Field Services, LLC / Enterprise Products Operating LLC (Enterprise)
Site Name:	Chaco Plant Water/Amine Spill (Site)
NM EMNRD OCD Incident ID No.	NAPP2427534650
Location:	36.482033° North, 108.117893° West Unit Letter N, Section 16, Township 26 North, Range 12 West San Juan County, New Mexico
Property:	Private Property
Regulatory:	New Mexico (NM) Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On September 30, 2025, Enterprise personnel identified a release of water/amine from a temporary holding tank at the Enterprise Chaco Gas Plant. Enterprise determined the release was "reportable" and the NM EMNRD OCD was subsequently notified. On March 12, 2025, Enterprise initiated activities to remediate hydrocarbon impact.

A **Topographic Map** depicting the location of the Site is included as **Figure 1**, and a **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-site soils to below the applicable NM EMNRD OCD closure criteria.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the NM EMNRD OCD. During the evaluation and remediation of the Site, Ensolum, LLC (Ensolum) referenced New Mexico Administrative Code (NMAC) 19.15.29 *Releases,* which establishes investigation and abatement action requirements for oil and gas release sites that are subject to reporting and/or corrective action. The appropriate closure criteria for sites are determined using the siting requirements outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. Ensolum utilized the general site characteristics and information available from NM state agency databases and federal agency geospatial databases to determine the appropriate closure criteria for the Site. Supporting figures and documentation associated with the following Siting bullets are provided in **Appendix B**.

- The NM Office of the State Engineer (OSE) tracks the usage and assignment of water rights and water well installations and records this information in the Water Rights Reporting System (WRRS) database. Water wells and other points of diversion (PODs) are each assigned POD numbers in the database (which is searchable and includes an interactive map). Five PODs are located on the Chaco Plant property. No other PODs were identified in the same Public Land Survey System (PLSS) section. No PODs were identified in adjacent PLSS sections (**Figure A**, **Appendix B**). The closest POD (SJ-04463 POD 4) is approximately 768 feet west of the site and approximately 1 foot lower in elevation than the Site. The recorded depth to water (DTW) for this POD is 12 feet below grade surface (bgs) (*2023 Groundwater Monitoring Report*, Ensolum, January 9, 2024).

- No cathodic protection wells (CPWs) were identified in the NM EMNRD OCD imaging database in the same or adjacent PLSS sections (**Figure B** (**Appendix B**)).

- The Site is not located within 300 feet of a NM EMNRD OCD-defined continuously flowing watercourse or significant watercourse (**Figure C**, **Appendix B**).

- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.

- The Site is not located within 300 feet of a permanent residence, school, hospital, institution, or church (**Figure D**, **Appendix B**). The Site is within an active petroleum hydrocarbon processing facility.

- No springs, or private domestic freshwater wells used by less than five households for domestic or stock watering purposes were identified within 500 feet of the Site (**Figure E**, **Appendix B**).

- No freshwater wells or springs were identified within 1,000 feet of the Site (**Figure E**, **Appendix B**).

- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.

- Based on information identified in the U.S. Fish & Wildlife Service National Wetlands Inventory Wetlands Mapper, the Site is not within 300 feet of a wetland (**Figure F**, **Appendix B**). The nearest wetland is a riverine located approximately 1,600 feet to the southeast.

- Based on information identified in the NM Mining and Minerals Division's Geographic Information System (GIS) Maps and Mine Data database, the Site is not within an area overlying a subsurface mine (**Figure G**, **Appendix B**).

- The Site is not located within an unstable area per Paragraph (6) of Subsection U of 19.15.2.7 NMAC.

- Based on information provided by the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) geospatial database, the Site is not within a 100-year floodplain (**Figure H**, **Appendix B**).

Based on available information the depth to water at the Site is estimated to be less than 50 feet bgs, resulting in a Tier I ranking. The closure criteria for soils remaining in place at the Site include:

Tier I Closure Criteria for Soils Impacted by a Release		
Constituent[1]	**Method**	**Limit**
Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
TPH (GRO+DRO+MRO)[2]	EPA SW-846 Method 8015	100 mg/kg
BTEX[3]	EPA SW-846 Method 8021 or 8260	50 mg/kg
Benzene	EPA SW-846 Method 8021 or 8260	10 mg/kg

[1] – Constituent concentrations are in milligrams per kilogram (mg/kg).
[2] – Total Petroleum Hydrocarbons (TPH). Gasoline Range Organics (GRO). Diesel Range Organics (DRO). Motor Oil/Lube Oil Range Organics (MRO).
[3] – Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX).

3.0 SOIL REMEDIATION ACTIVITIES

On March 12, 2025, Enterprise initiated activities to remediate petroleum hydrocarbon impact resulting from the release. During the remediation and corrective action activities, Riley Industrial Services, Inc. and TRC Construction, Inc. provided heavy equipment and labor support, while Ensolum provided environmental consulting support.

The excavation measured approximately 190 feet long and 61 feet wide at the maximum extents. The average depth of the excavation measured approximately 0.5 feet to 0.8 feet bgs, with a footprint of approximately 5,550 ft^2. The lithology encountered during the completion of remediation activities consisted primarily of unconsolidated silty sand and clay overlain by a gravel driving surface.

Approximately 231 cubic yards (yd^3) of petroleum hydrocarbon-affected soils and surface gravel, and 560 barrels (bbls) of hydro-excavation soil cuttings and water were transported to the Envirotech, Inc., (Envirotech) landfarm in San Juan County, NM for disposal/remediation. The executed C-138 solid waste acceptance form is provided in **Appendix C**. The excavation was backfilled with imported fill and then contoured to the surrounding grade.

Figure 3 is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation with respect to the pipeline (**Appendix A**). Photographic documentation of the field activities is included in **Appendix D**.

4.0 SOIL SAMPLING PROGRAM

Ensolum field screened the soil samples from the excavation utilizing a calibrated Dexsil PetroFLAG® hydrocarbon analyzer system and a photoionization detector (PID) fitted with a 10.6 eV lamp to guide excavation extents.

Ensolum's soil sampling program included the collection of 28 composite soil samples (S-1 through S-17, S-17a, and S-18 through S-27) from the excavation and one composite sample (BF-1) from the backfill for laboratory analysis. The composite samples were comprised of five aliquots each and represent an estimated 400 square foot (ft^2) or less sample area as approved by the NM ENMRD OCD. The excavator bucket and/or hand tools were utilized to obtain fresh aliquots from the excavation and backfill. Regulatory correspondence is provided in **Appendix E**.

First Sampling Event
On March 3, 2025, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-1 through S-14 were collected from the flow path prior to remediation. The results for composite soil samples S-3, S-4, S-6, S-7, S-8, S-9, S-10, S-11, S-12, and S-14 indicated total combined TPH concentration exceedances.

Second Sampling Event
On March 14, 2025, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil samples S-15 through S-23 were collected from the floor and sidewalls of the excavation. The results for composite soil sample S-17 indicated a total combined TPH concentration exceedance.

Third Sampling Event
On March 19, 2025, after removing additional soil from the area represented by composite soil sample S-17, sampling was performed at the Site. The NM EMNRD OCD was notified of the

sampling event although no representative was present during sampling activities. Composite soil sample S-17a was collected from the excavation to replace composite soil sample S-17.

Fourth Sampling Event
On March 28, 2025, sampling was performed at the Site. The NM EMNRD OCD was notified of the sampling event although no representative was present during sampling activities. Composite soil sample BF-1 was collected from the imported fill.

All soil samples were collected and placed in laboratory-prepared glassware. The containers were labeled and sealed using the laboratory-supplied labels and custody seals and were stored on ice in a cooler. The samples were relinquished to the courier for Eurofins Environment Testing South Central, LLC (Eurofins) of Albuquerque, NM, under proper chain-of-custody procedures.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX using Environmental Protection Agency (EPA) SW-846 Method 8021; TPH GRO/DRO/MRO using EPA SW-846 Method 8015; and chlorides using EPA Method 300.0.

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

6.0 SOIL DATA EVALUATION

Ensolum compared the benzene, BTEX, TPH, and chloride laboratory analytical results or laboratory practical quantitation limits (PQLs) / reporting limits (RLs) associated with the composite soil samples to the applicable NM EMNRD OCD closure criteria. Due to the high PQLs/RLs associated with the TPH MRO results when using EPA SW-846 Method 8015, Ensolum only compared the quantified TPH results to the New Mexico EMNRD OCD closure criteria. The results for composite soil samples S-3 through S-14 and S-17 are not included in the following discussion because the impacted soils associated with these samples were removed from the Site and taken to the landfarm. The laboratory analytical results are summarized in **Table 1** (**Appendix F**).

- The laboratory analytical results for the composite soil samples indicate that benzene is not present at concentrations greater than the laboratory PQLs/RLs, which are less than the NM EMNRD OCD closure criteria of 10 mg/kg.

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

- The laboratory analytical results for composite soil samples S-1, S-2, and S-24 through S-27 indicate total combined TPH GRO/DRO/MRO concentrations ranging from 10 mg/kg (S-24) to 83 mg/kg (S-1), which are less than the NM EMNRD OCD closure criteria of 100 mg/kg. The analytical results for the other composite soil samples collected from soils remaining at the Site indicate that total combined TPH GRO/DRO/MRO concentrations are less than the laboratory PQLs / RLs, which are less than the NM EMNRD OCD closure criteria of 100 mg/kg.

- The laboratory analytical result for composite soil sample S-1 indicates a chloride concentration of 140 mg/kg, which is less than the NM EMNRD OCD closure criteria of 600 mg/kg. The analytical results for the other composite soil samples collected from soils

remaining at the Site indicate that chloride concentrations are less than the laboratory PQLs / RLs, which are less than the NM EMNRD OCD closure criteria of 600 mg/kg.

7.0 RECLAMATION

The excavation was backfilled with imported fill and then contoured to the surrounding grade. The backfill and the upper four feet of the excavation have been analytically verified to be below the Tier I soil standards of 50 mg/kg BTEX, 10 mg/kg benzene, 100 mg/kg total combined TPH, and 600 mg/kg Chloride. See **APPENDIX D** and **APPENDIX F** for further documentation.

8.0 REVEGETATION

Revegetation will be addressed in accordance with 19.15.29.13 NMAC utilizing the recommended seed mix as described in the Vegetation Community Descriptions and Seed Mixes provided by the BLM Farmington Field Office. In this case the surrounding vegetation is predominantly of the Grassland Vegetation Community. Enterprise will reseed the area with the appropriate seed mix once the Chaco Gas Plant is no longer used as a production facility. A revegetation report will be provided under separate cover.

9.0 FINDINGS AND RECOMMENDATION

- A total of 29 composite soil samples were collected from the Site. Based on laboratory analytical results, no benzene, total BTEX, chloride, or total combined TPH GRO/DRO/MRO exceedances were identified in the soils remaining at the Site.

- Approximately 231 yd^3 of petroleum hydrocarbon-affected soils and 560 bbls of hydro-excavation soil cuttings and water were transported to the Envirotech landfarm for disposal/remediation.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

10.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

10.1 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).

10.2 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.

10.3 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 this 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.

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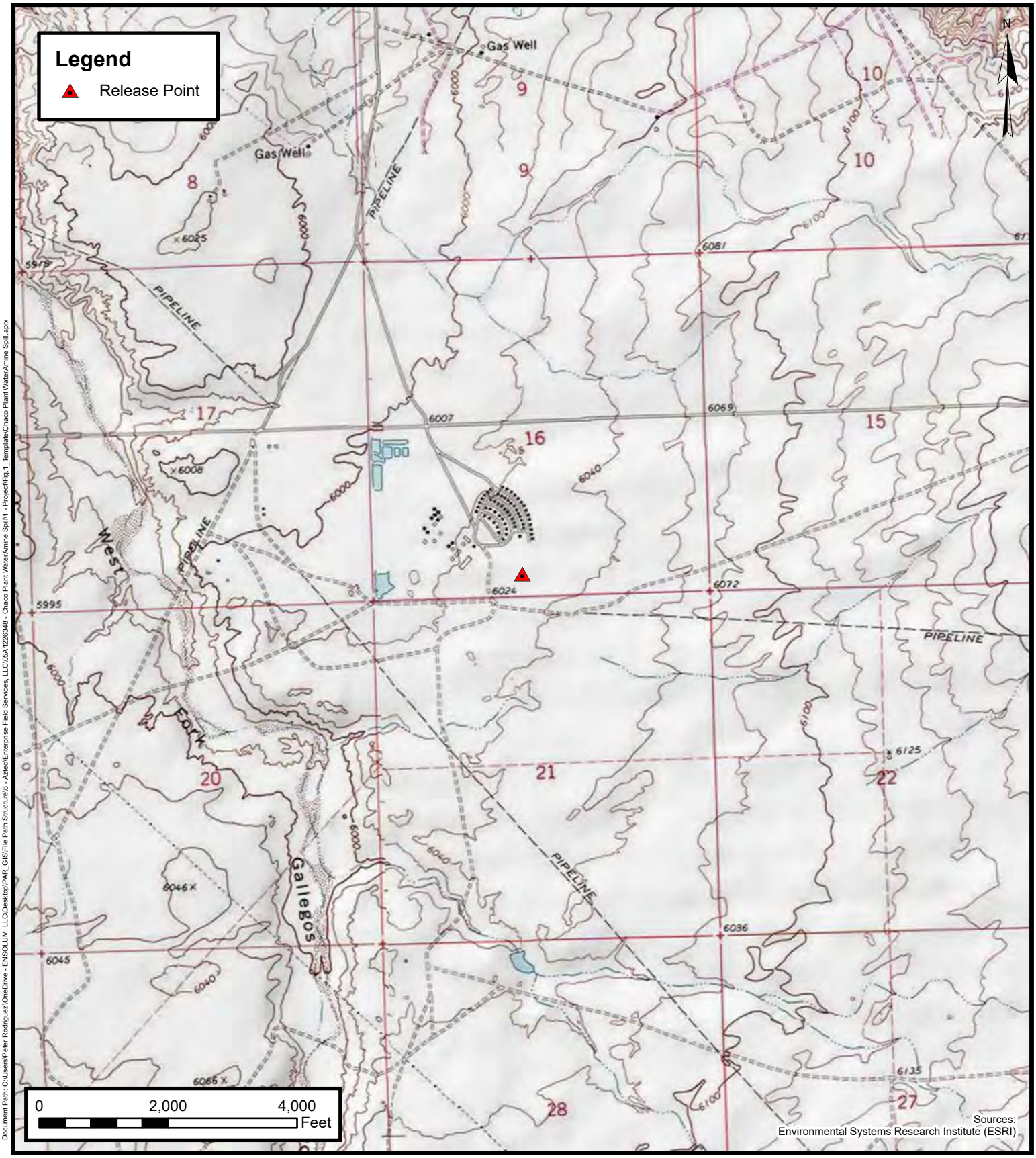
APPENDIX A

Figures



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Topographic Map

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE
1

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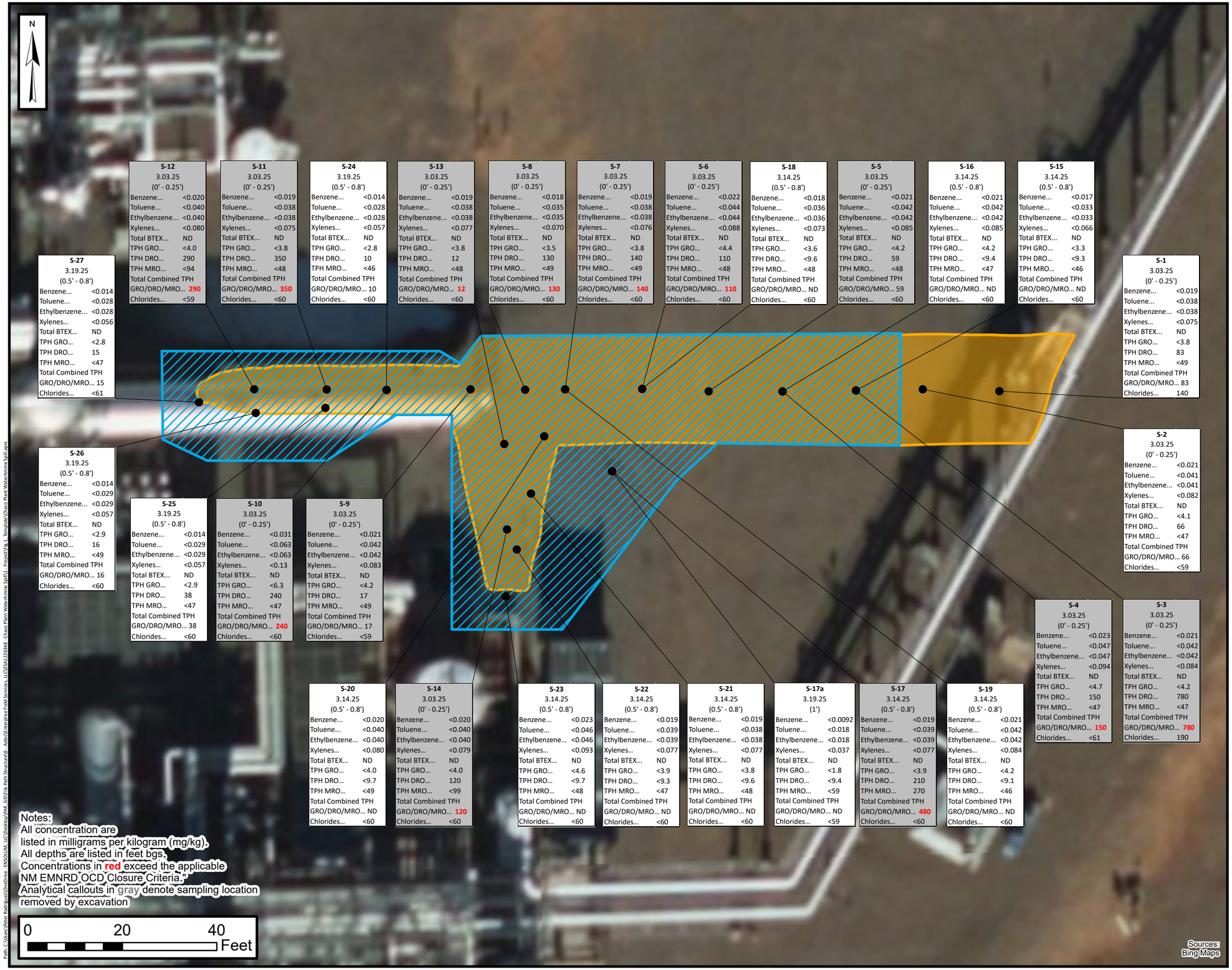
Site Vicinity Map

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE
2



LEGEND

- Composite Soil Sample Location
- Flow Path
- Excavation Extent

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Site Map with Soil Analytical Results

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Unit Letter N, S16 T26N R12W
San Juan County, New Mexico
36.482033, -108.117893

Figure 3

Project Number: 05A1226348

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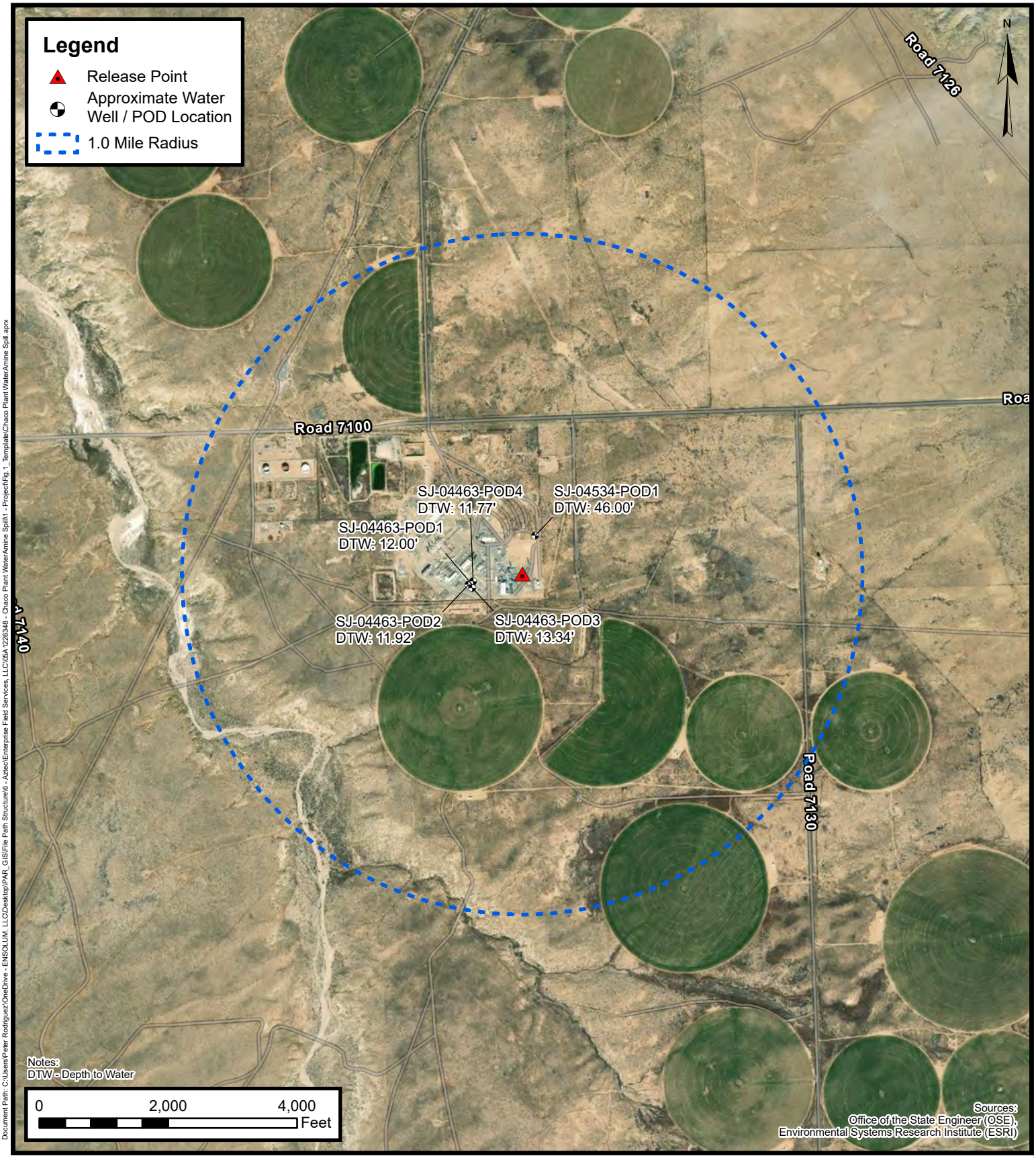
APPENDIX B

Siting Figures and Documentation



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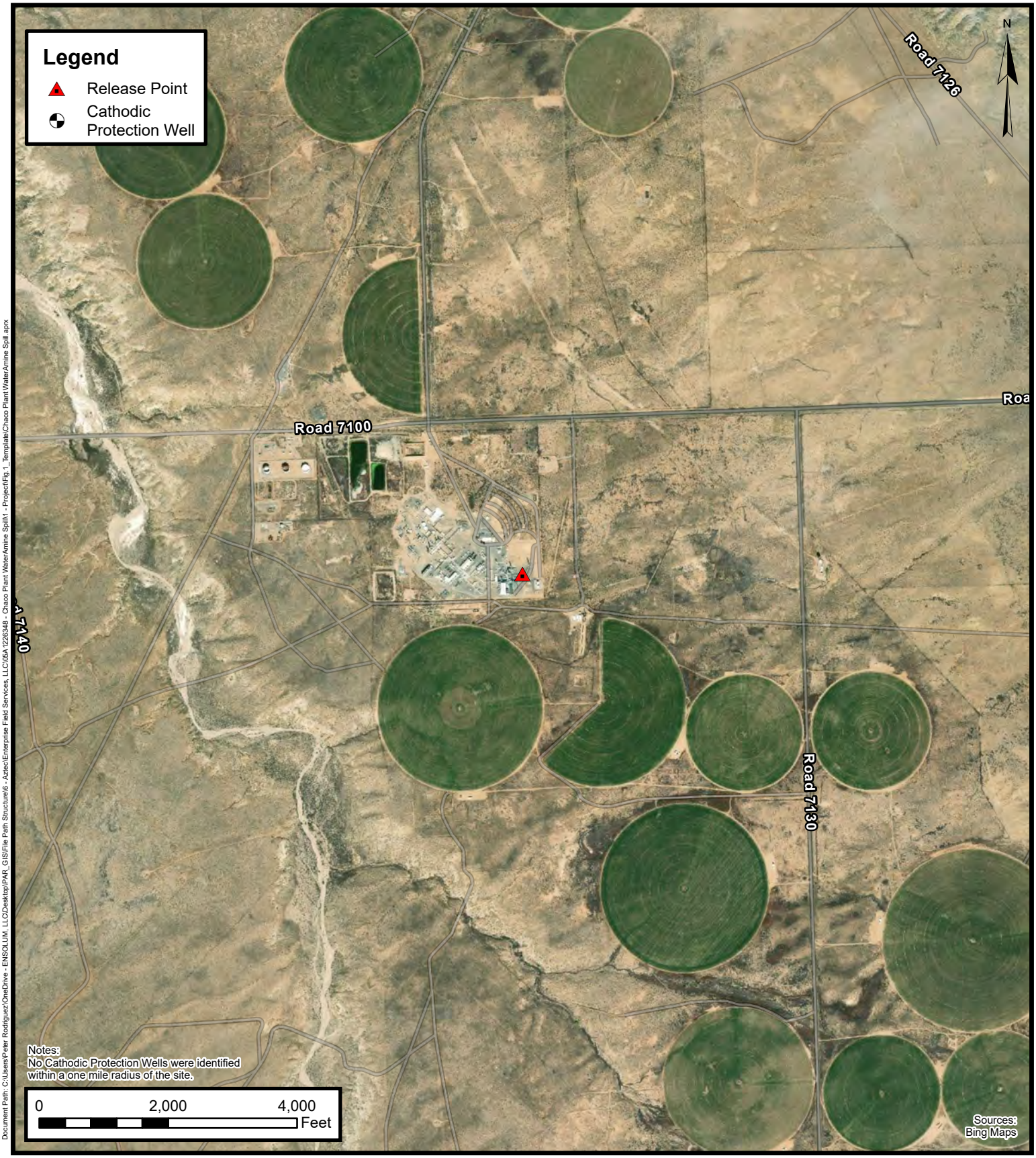
1.0 Mile Radius Water Well / POD Location Map

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348

Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE

A



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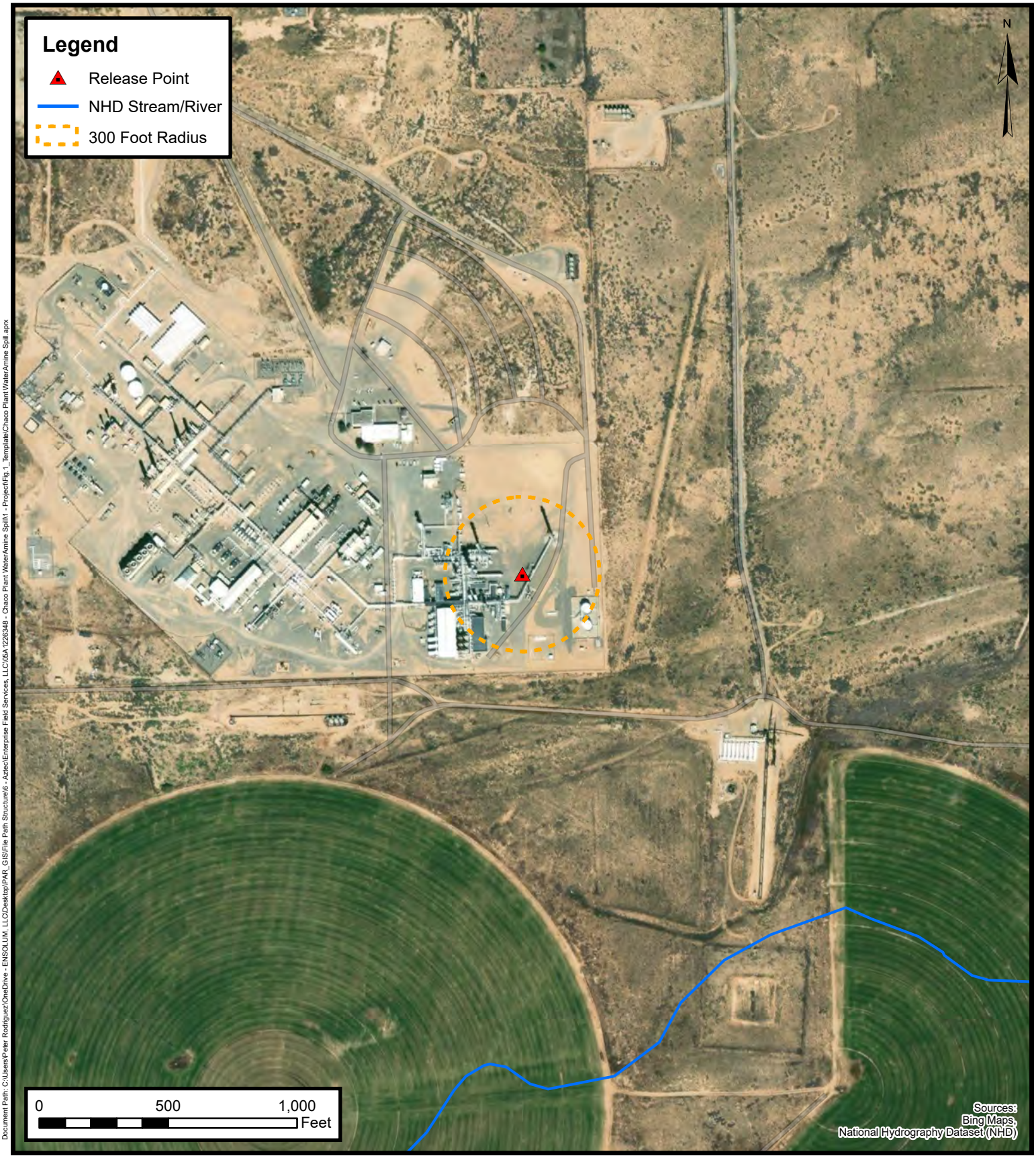
Cathodic Protection Well
Recorded Depth to Water
Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE
B



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300 Foot Radius Watercourse and Drainage Identification

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348

Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE

C

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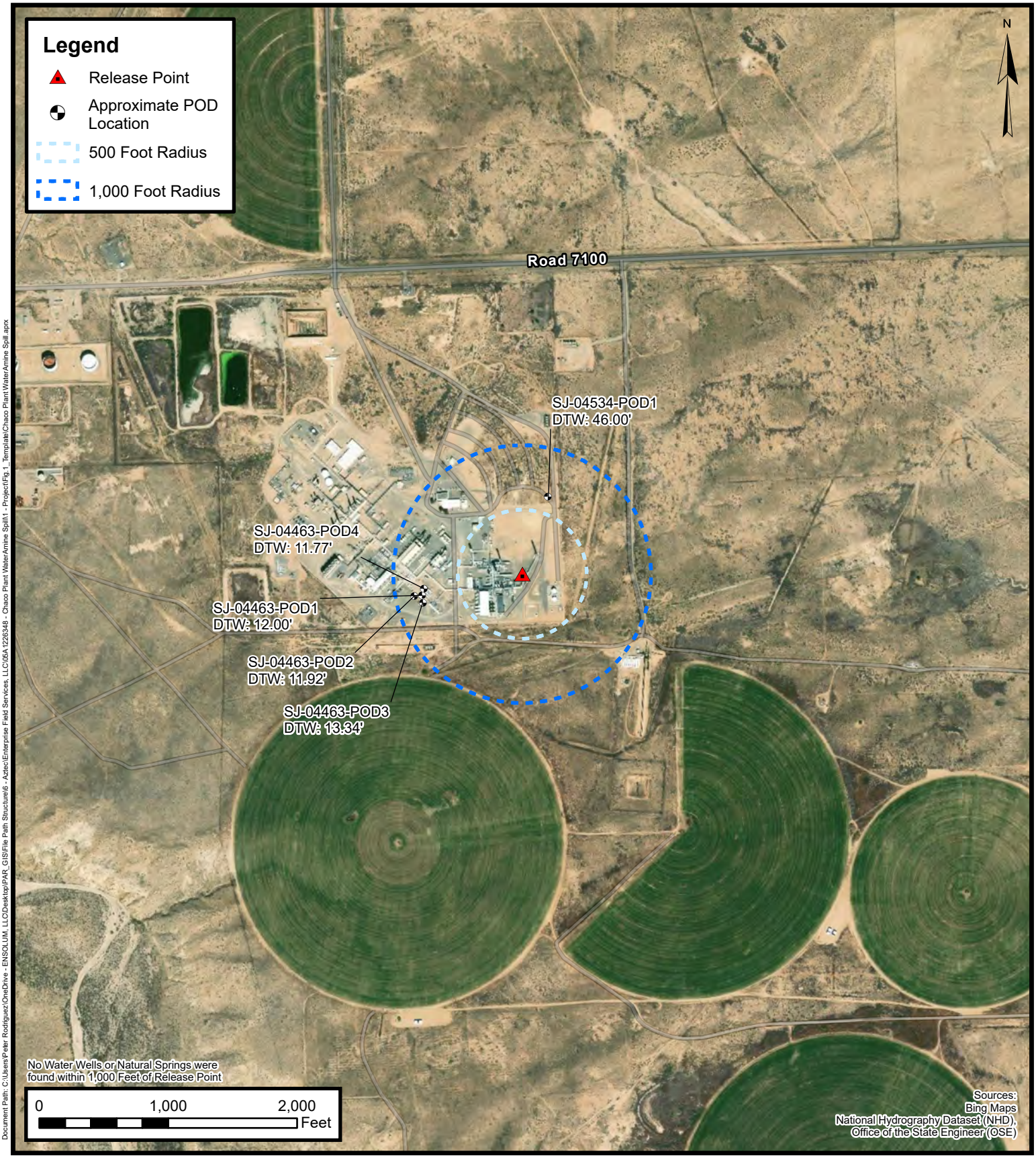
300 Foot Radius Occupied Structure Identification

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348

Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE

D



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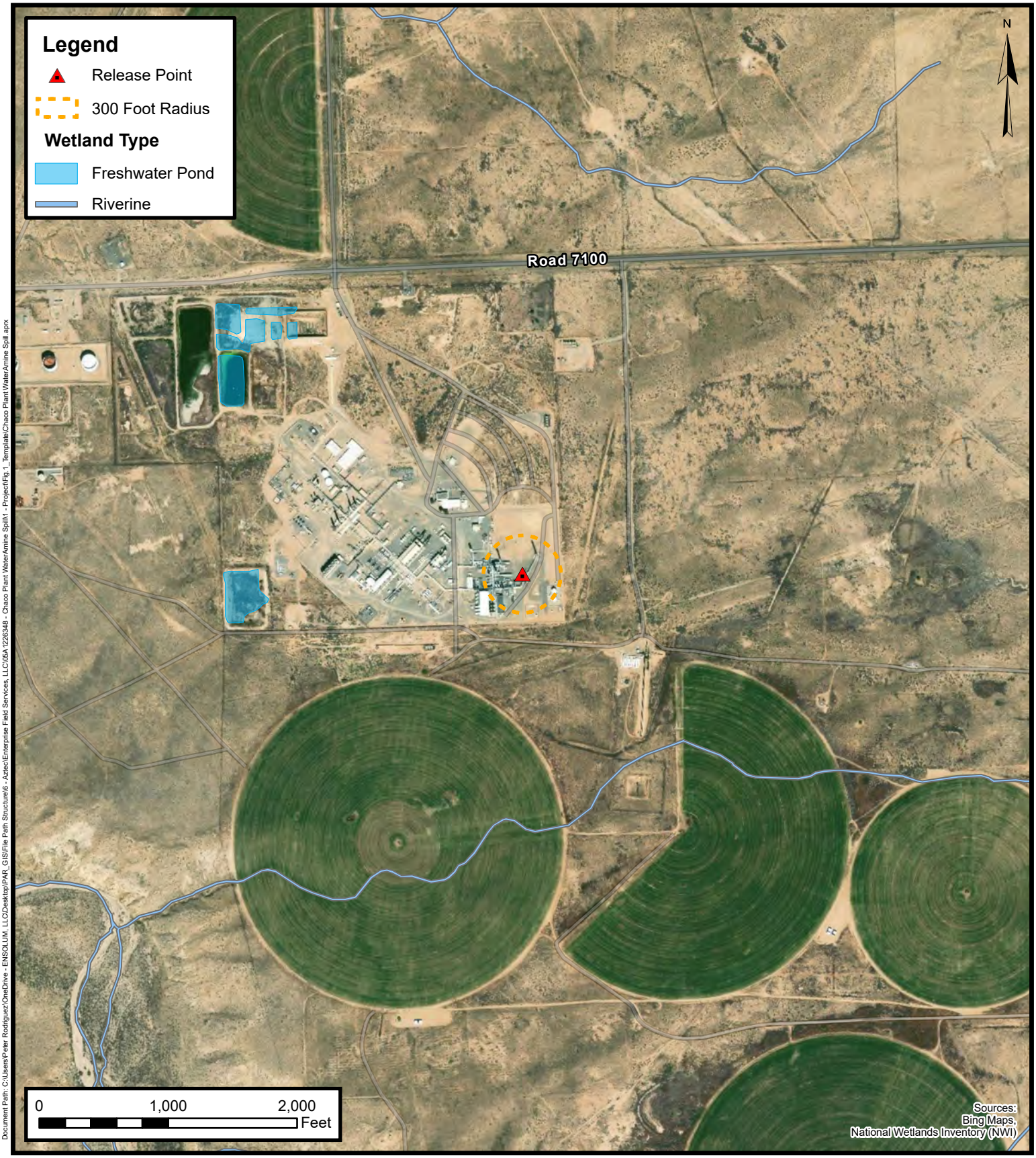
Water Well and Natural Spring Location

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE

E



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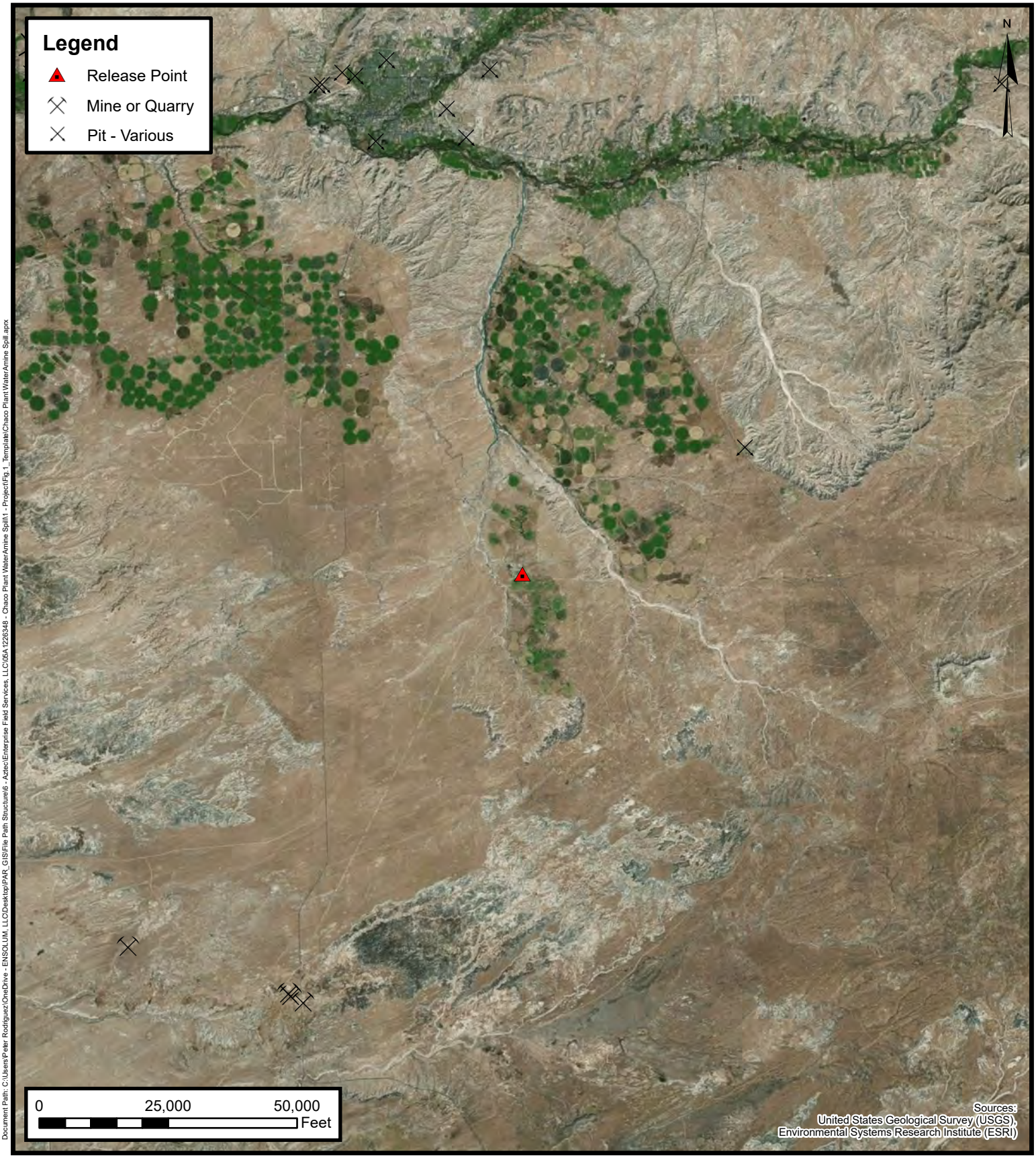
Wetlands

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE
F



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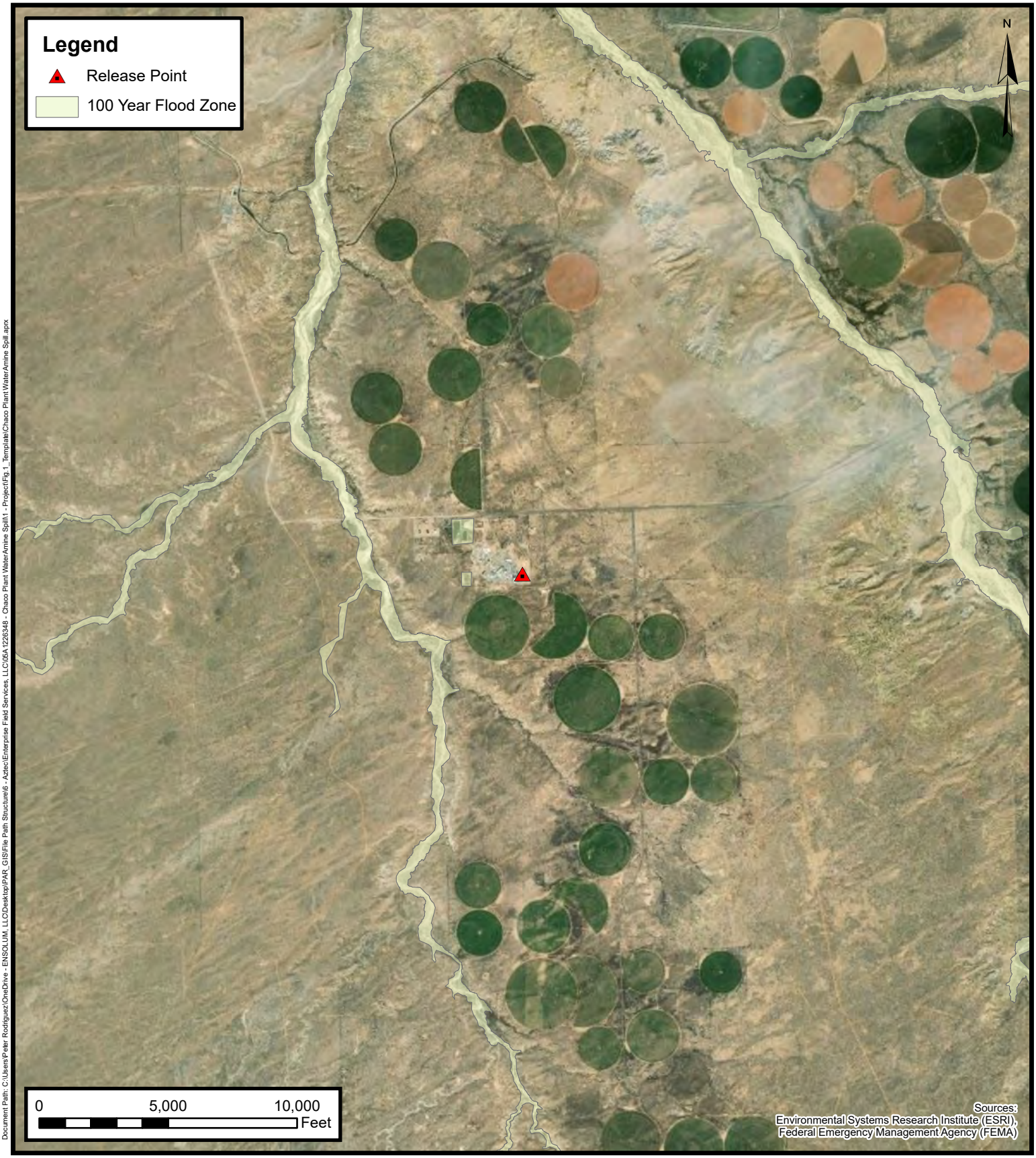
Mines, Mills, and Quarries

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE

G



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100-Year Flood Plain Map

Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Project Number: 05A1226348
Unit Letter N, S16 T26N R12W, San Juan County, New Mexico
36.482033, -108.117893

FIGURE
H

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.) (R=POD has been replaced, O=orphaned, C=the file is closed) (quarters are smallest to largest) (In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Well Depth	Depth Water	Water Column
SJ 04463 POD1		SJ	SJ		SE	SW	16	26N	12W	220433.4	4041900.8		20	20	0
SJ 04463 POD2		SJ	SJ		SE	SW	16	26N	12W	220415.1	4041900.1		20	20	0
SJ 04463 POD3		SJ	SJ		SE	SW	16	26N	12W	220433.7	4041873.7		20		
SJ 04463 POD4		SJ	SJ		SE	SW	16	26N	12W	220437.8	4041916.4		20	20	0

Average Depth to Water: **20 feet**

Minimum Depth: **20 feet**

Maximum Depth: **20 feet**

Record Count: 4

Basin/County Search:
Basin: SJ

PLSS Search:
Range: 12W
Township: 26N
Section: 8, 9,10,15,16,17,20,21,22

*** UTM location was derived from PLSS - see Help**

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APPENDIX C

Executed C-138 Solid Waste Acceptance Form

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-138
Revised 08/01/11

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address:
Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401

PayKey SF11548

PayKey:AM14058
PM: Erric Lucero
AFE: N75122

2. Originating Site:
Chaco Plant Amine Spill

3. Location of Material (Street Address, City, State or ULSTR):
Section 16 T26N R12W; 36.482033,-108.117893

4. Source and Description of Waste:
Source: Hydrocarbon/Amine impacted soil associated an amine release.
Description: Hydrocarbon/Amine impacted soil associated an amine release.
Estimated Volume 50 yd^3 / bbls Known Volume (to be entered by the operator at the end of the haul) 231/560 yd^3 / bbls

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long Thomas Long, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. *Operator Use Only: Waste Acceptance Frequency* ☐ *Monthly* ☐ *Weekly* ☐ *Per Load*

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long Thomas Long 3-11-2024, representative for Enterprise Products Operating authorizes Envirotech, Inc. to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, Greg Crabtree, representative for Envirotech, Inc. do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

5. Transporter: Riley Industrial and TRC

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011**
Address of Facility: **Hilltop, NM**
Method of Treatment and/or Disposal:
☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☑ **APPROVED** ☐ **DENIED** (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Crabtree TITLE: Enviro Manager DATE: 3/11/25
SIGNATURE: TELEPHONE NO.: 505-632-0615
Surface Waste Management Facility Authorized Agent

ENSOLUM

APPENDIX D

Photographic Documentation

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Ensolum Project No. 05A1226348

ENSOLUM

Photograph 1 Photograph Description: View of the in-process excavation activities.	
Photograph 2 Photograph Description: View of the in-process excavation activities.	
Photograph 3 Photograph Description: View of final excavation.	

SITE PHOTOGRAPHS

Closure Report
Enterprise Field Services, LLC
Chaco Plant Water/Amine Spill
Ensolum Project No. 05A1226348

ENSOLUM

Photograph 4 Photograph Description: View of final excavation.	
Photograph 5 Photograph Description: View of the excavation final restoration.	

ENSOLUM

APPENDIX E

Regulatory Correspondence

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, February 26, 2025 10:33 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 435493

[Use caution with links/attachments]

To whom it may concern (c/o Thomas Long for Enterprise Field Services, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2427534650.

The sampling event is expected to take place:

When: 03/03/2025 @ 09:00
Where: N-16-26N-12W 0 FNL 0 FEL (36.482033,-108.117893)

Additional Information: Ensolum, LLC

Additional Instructions: 36.482033,-108.117893

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the

sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, March 12, 2025 7:13 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 441524

[Use caution with links/attachments]

To whom it may concern (c/o Thomas Long for Enterprise Field Services, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2427534650.

The sampling event is expected to take place:

When: 03/14/2025 @ 10:00
Where: N-16-26N-12W 0 FNL 0 FEL (36.482033,-108.117893)

Additional Information: Ensolum, LLC

Additional Instructions: 36.482033,-108.117893

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to

19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, March 17, 2025 7:53 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 442847

[Use caution with links/attachments]

To whom it may concern (c/o Thomas Long for Enterprise Field Services, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2427534650.

The sampling event is expected to take place:

When: 03/19/2025 @ 09:00
Where: N-16-26N-12W 0 FNL 0 FEL (36.482033,-108.117893)

Additional Information: Ensolum, LLC.

Additional Instructions: 36.482033,-108.117893

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to

19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, March 26, 2025 7:43 AM
To: Long, Thomas <tjlong@eprod.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 445678

[Use caution with links/attachments]

To whom it may concern (c/o Thomas Long for Enterprise Field Services, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2427534650.

The sampling event is expected to take place:

When: 03/28/2025 @ 09:00
Where: N-16-26N-12W 0 FNL 0 FEL (36.482033,-108.117893)

Additional Information: Ensolum, LLC

Additional Instructions: 36.482033,-108.117893

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to

19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, March 26, 2025 2:38 PM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Re: [EXTERNAL] Chaco Plant Water/Amine Spill - UL N Section 16 T26N

R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650

[Use caution with links/attachments]

Good afternoon Tom,

Thank you for the inquiry. Your 30-day time extension request is approved. Remediation Due date updated to April 30, 2025.

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

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

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.nm.gov/ocd

From: Long, Thomas <tjlong@eprod.com>
Sent: Wednesday, March 26, 2025 1:38 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: RE: [EXTERNAL] Chaco Plant Water/Amine Spill - UL N Section 16 T26N R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650

Nelson,

Enterprise requests a variance for the Chaco Plant Water/Amine Spill - UL N Section 16 T26N R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650. Enterprise requests an additional time extension of 30 days for a closure report submittal of April 30, 2025. Remediation of the release is complete. The reason for the extension request is to finalize the closure report. Please acknowledge acceptance of this variance requests. 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: Monday, December 23, 2024 11:03 AM
To: Long, Thomas <tjlong@eprod.com>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: Re: [EXTERNAL] Chaco Plant Water/Amine Spill - UL N Section 16 T26N R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650

[Use caution with links/attachments]

Good morning Tom,

Your 90-day time extension request is approved. Remediation Due date has been updated to March 31, 2025.

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

Regards,

Nelson Velez ● Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

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

http://www.emnrd.nm.gov/ocd

From: Long, Thomas <tjlong@eprod.com>
Sent: Monday, December 2, 2024 1:08 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Stone, Brian <bmstone@eprod.com>
Subject: [EXTERNAL] Chaco Plant Water/Amine Spill - UL N Section 16 T26N R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650

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

Nelson,

Enterprise requests a variance from the 200 square feet sampling requirement cited in 19.15.29.12 (D)(1)(c) for the Chaco Plant Water/Amine Spill - UL N Section 16 T26N R12W;36.482033,-108.117893; NMOCD Incident # NAPP2427534650. Enterprise requests an alternate of 400 square feet because the release was a surface release. In addition, Enterprise requests a time extension. The original due date for the closure report submittal is December 30, 2024. Enterprise requests time extension of an additional **90 days** for a new submittal due date of March 30, 2025. The reason for the extension request is that another incident occurred at the facility that caused the area to be unsafe to complete the required sampling. Please acknowledge acceptance of this variance requests. If you have any questions, please call or email.

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

ENSOLUM

APPENDIX F

Table 1 – Soil Analytical Summary

ENSOLUM

TABLE 1
Chaco Plant Water/Amine Spill
SOIL ANALYTICAL SUMMARY

Sample I.D.	Date	Sample Type C- Composite G - Grab	Total Depth (feet)	Benzene (mg/kg)	Ethylbenzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Total BTEX[1] (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total Combined TPH (GRO/DRO/MRO)[1] (mg/kg)	Chloride (mg/kg)
New Mexico Energy, Mineral & Natural Resources Department Oil Conservation Division Closure Criteria (Tier I)				**10**	**NE**	**NE**	**NE**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Removed Excavation Composite Soil Samples													
S-3	3.03.25	C	0 to 0.25	<0.021	<0.042	<0.042	<0.084	ND	<4.2	780	<47	**780**	190
S-4	3.03.25	C	0 to 0.25	<0.023	<0.047	<0.047	<0.094	ND	<4.7	150	<47	**150**	<61
S-5	3.03.25	C	0 to 0.25	<0.021	<0.042	<0.042	<0.085	ND	<4.2	59	<48	59	<60
S-6	3.03.25	C	0 to 0.25	<0.022	<0.044	<0.044	<0.088	ND	<4.4	110	<48	**110**	<60
S-7	3.03.25	C	0 to 0.25	<0.019	<0.038	<0.038	<0.076	ND	<3.8	140	<49	**140**	<60
S-8	3.03.25	C	0 to 0.25	<0.018	<0.035	<0.035	<0.070	ND	<3.5	130	<49	**130**	<60
S-9	3.03.25	C	0 to 0.25	<0.021	<0.042	<0.042	<0.083	ND	<4.2	17	<49	17	<59
S-10	3.03.25	C	0 to 0.25	<0.031	<0.063	<0.063	<0.13	ND	<6.3	240	<47	**240**	<60
S-11	3.03.25	C	0 to 0.25	<0.019	<0.038	<0.038	<0.075	ND	<3.8	350	<48	**350**	<60
S-12	3.03.25	C	0 to 0.25	<0.020	<0.040	<0.040	<0.080	ND	<4.0	290	<94	**290**	<59
S-13	3.03.25	C	0 to 0.25	<0.019	<0.038	<0.038	<0.077	ND	<3.8	12	<48	12	<60
S-14	3.03.25	C	0 to 0.25	<0.020	<0.040	<0.040	<0.079	ND	<4.0	120	<99	**120**	<60
S-17	3.14.25	C	0.5 to 0.8	<0.019	<0.039	<0.039	<0.077	ND	<3.9	210	270	**480**	<60
Excavation Composite Soil Samples													
S-1	3.03.25	C	0 to 0.25	<0.019	<0.038	<0.038	<0.075	ND	<3.8	83	<49	83	140
S-2	3.03.25	C	0 to 0.25	<0.021	<0.041	<0.041	<0.082	ND	<4.1	66	<47	66	<59
S-15	3.14.25	C	0.5 to 0.8	<0.017	<0.033	<0.033	<0.066	ND	<3.3	<9.3	<46	ND	<60
S-16	3.14.25	C	0.5 to 0.8	<0.021	<0.042	<0.042	<0.085	ND	<4.2	<9.4	<47	ND	<60
S-18	3.14.25	C	0.5 to 0.8	<0.018	<0.036	<0.036	<0.073	ND	<3.6	<9.6	<48	ND	<60
S-19	3.14.25	C	0.5 to 0.8	<0.021	<0.042	<0.042	<0.084	ND	<4.2	<9.1	<46	ND	<60
S-20	3.14.25	C	0.5 to 0.8	<0.020	<0.040	<0.040	<0.080	ND	<4.0	<9.7	<49	ND	<60
S-21	3.14.25	C	0.5 to 0.8	<0.019	<0.038	<0.038	<0.077	ND	<3.8	<9.6	<48	ND	<60
S-22	3.14.25	C	0.5 to 0.8	<0.019	<0.039	<0.039	<0.077	ND	<3.9	<9.3	<47	ND	<60
S-23	3.14.25	C	0.5 to 0.8	<0.023	<0.046	<0.046	<0.093	ND	<4.6	<9.7	<48	ND	<60
S-17a	3.19.25	C	1	<0.0092	<0.018	<0.018	<0.037	ND	<1.8	<9.4	<59	ND	<59
S-24	3.19.25	C	0.5 to 0.8	<0.014	<0.028	<0.028	<0.057	ND	<2.8	10	<46	10	<60
S-25	3.19.25	C	0.5 to 0.8	<0.014	<0.029	<0.029	<0.057	ND	<2.9	38	<47	38	<60
S-26	3.19.25	C	0.5 to 0.8	<0.014	<0.029	<0.029	<0.057	ND	<2.9	16	<49	16	<60
S-27	3.19.25	C	0.5 to 0.8	<0.014	<0.028	<0.028	<0.056	ND	<2.8	15	<47	15	<61
Backfill Composite Soil Sample													
BF-1	3.28.25	C	BF	<0.015	<0.030	<0.030	<0.060	ND	<3.0	<9.3	<47	ND	<61

*Note: Concentrations in **bold** and yellow exceed the applicable NM EMNRD Closure Criteria*

[1] *= Total combined concentrations are rounded to two (2) significant figures to match the laboratory resolution of the individual constituents.*

ND = Not Detected above the Practical Quantitation Limits (PQLs) or Reporting Limits (RLs)

NE = Not established

NS = Not sampled

mg/kg = milligrams per kilogram

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil/Lube Oil Range Organics

BF = Backfilled sample

ENSOLUM

APPENDIX G

Laboratory Data Sheets & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kyle Summers
Ensolum
606 S Rio Grande
Suite A
Aztec, New Mexico 87410

Generated 3/12/2025 5:48:34 PM

JOB DESCRIPTION

Chaco Amine Spill

JOB NUMBER

885-20755-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
3/12/2025 5:48:34 PM

Authorized for release by
John Caldwell, Project Manager
john.caldwell@et.eurofinsus.com
(505)345-3975

Client: Ensolum
Project/Site: Chaco Amine Spill

Laboratory Job ID: 885-20755-1

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
F1	MS and/or MSD recovery exceeds control limits.

HPLC/IC

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project: Chaco Amine Spill

Job ID: 885-20755-1

Job ID: 885-20755-1 Eurofins Albuquerque

Job Narrative
885-20755-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/4/2025 7:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.1°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The following samples were diluted due to the nature of the sample matrix: S-12 (885-20755-12) and S-14 (885-20755-14). Elevated reporting limits (RLs) are provided.

Method 8015D_DRO: Surrogate recovery for the following sample is outside the lower control limit: (CCVRT 885-21819/2). However, target analytes recovered within expected limits, therefore any associated samples with passing surrogate have been reported.

Method 8015D_DRO: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 885-21796 and analytical batch 885-21791 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits, and surrogate recoveries were within expected limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-1
Lab Sample ID: 885-20755-1
Date Collected: 03/03/25 09:30
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8		mg/Kg		03/04/25 08:53	03/04/25 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*03/04/25 08:53*	*03/04/25 12:47*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/04/25 08:53	03/04/25 12:47	1
Ethylbenzene	ND		0.038		mg/Kg		03/04/25 08:53	03/04/25 12:47	1
Toluene	ND		0.038		mg/Kg		03/04/25 08:53	03/04/25 12:47	1
Xylenes, Total	ND		0.075		mg/Kg		03/04/25 08:53	03/04/25 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*	*03/04/25 08:53*	*03/04/25 12:47*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**83**	**F1**	9.7		mg/Kg		03/04/25 08:51	03/04/25 10:46	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/04/25 08:51	03/04/25 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*03/04/25 08:51*	*03/04/25 10:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**	**F2**	60		mg/Kg		03/04/25 10:18	03/04/25 11:52	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-2
Lab Sample ID: 885-20755-2
Date Collected: 03/03/25 09:45
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.1		mg/Kg		03/04/25 09:42	03/04/25 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*35 - 166*	*03/04/25 09:42*	*03/04/25 13:09*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/04/25 09:42	03/04/25 13:09	1
Ethylbenzene	ND		0.041		mg/Kg		03/04/25 09:42	03/04/25 13:09	1
Toluene	ND		0.041		mg/Kg		03/04/25 09:42	03/04/25 13:09	1
Xylenes, Total	ND		0.082		mg/Kg		03/04/25 09:42	03/04/25 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*48 - 145*	*03/04/25 09:42*	*03/04/25 13:09*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**66**		9.5		mg/Kg		03/04/25 08:51	03/04/25 11:18	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/04/25 08:51	03/04/25 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		03/04/25 10:18	03/04/25 12:03	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-3
Lab Sample ID: 885-20755-3
Date Collected: 03/03/25 10:00
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.2		mg/Kg		03/04/25 09:42	03/04/25 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*35 - 166*	*03/04/25 09:42*	*03/04/25 13:31*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/04/25 09:42	03/04/25 13:31	1
Ethylbenzene	ND		0.042		mg/Kg		03/04/25 09:42	03/04/25 13:31	1
Toluene	ND		0.042		mg/Kg		03/04/25 09:42	03/04/25 13:31	1
Xylenes, Total	ND		0.084		mg/Kg		03/04/25 09:42	03/04/25 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*48 - 145*	*03/04/25 09:42*	*03/04/25 13:31*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**780**		9.4		mg/Kg		03/04/25 08:51	03/04/25 11:28	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/04/25 08:51	03/04/25 11:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*103*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**190**		61		mg/Kg		03/04/25 10:18	03/04/25 12:13	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-4
Lab Sample ID: 885-20755-4
Date Collected: 03/03/25 10:15
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7		mg/Kg		03/04/25 09:42	03/04/25 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*03/04/25 09:42*	*03/04/25 13:53*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/04/25 09:42	03/04/25 13:53	1
Ethylbenzene	ND		0.047		mg/Kg		03/04/25 09:42	03/04/25 13:53	1
Toluene	ND		0.047		mg/Kg		03/04/25 09:42	03/04/25 13:53	1
Xylenes, Total	ND		0.094		mg/Kg		03/04/25 09:42	03/04/25 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/04/25 09:42*	*03/04/25 13:53*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**150**		9.3		mg/Kg		03/04/25 08:51	03/04/25 11:39	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/04/25 08:51	03/04/25 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61		mg/Kg		03/04/25 10:18	03/04/25 12:23	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-5
Lab Sample ID: 885-20755-5
Date Collected: 03/03/25 10:45
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.2		mg/Kg		03/04/25 09:42	03/04/25 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*35 - 166*	*03/04/25 09:42*	*03/04/25 14:15*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/04/25 09:42	03/04/25 14:15	1
Ethylbenzene	ND		0.042		mg/Kg		03/04/25 09:42	03/04/25 14:15	1
Toluene	ND		0.042		mg/Kg		03/04/25 09:42	03/04/25 14:15	1
Xylenes, Total	ND		0.085		mg/Kg		03/04/25 09:42	03/04/25 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*48 - 145*	*03/04/25 09:42*	*03/04/25 14:15*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**59**		9.7		mg/Kg		03/04/25 08:51	03/04/25 11:49	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/04/25 08:51	03/04/25 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 12:34	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-6
Lab Sample ID: 885-20755-6
Date Collected: 03/03/25 11:15
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.4		mg/Kg		03/04/25 09:42	03/04/25 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*35 - 166*	*03/04/25 09:42*	*03/04/25 14:37*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.022		mg/Kg		03/04/25 09:42	03/04/25 14:37	1
Ethylbenzene	ND		0.044		mg/Kg		03/04/25 09:42	03/04/25 14:37	1
Toluene	ND		0.044		mg/Kg		03/04/25 09:42	03/04/25 14:37	1
Xylenes, Total	ND		0.088		mg/Kg		03/04/25 09:42	03/04/25 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*48 - 145*	*03/04/25 09:42*	*03/04/25 14:37*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**110**		9.5		mg/Kg		03/04/25 08:51	03/04/25 12:00	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/04/25 08:51	03/04/25 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 12:44	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-7
Lab Sample ID: 885-20755-7
Date Collected: 03/03/25 11:30
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8		mg/Kg		03/04/25 08:53	03/04/25 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*03/04/25 08:53*	*03/04/25 11:08*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/04/25 08:53	03/04/25 11:08	1
Ethylbenzene	ND		0.038		mg/Kg		03/04/25 08:53	03/04/25 11:08	1
Toluene	ND		0.038		mg/Kg		03/04/25 08:53	03/04/25 11:08	1
Xylenes, Total	ND		0.076		mg/Kg		03/04/25 08:53	03/04/25 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*03/04/25 08:53*	*03/04/25 11:08*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**140**		9.8		mg/Kg		03/04/25 08:51	03/04/25 12:11	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/04/25 08:51	03/04/25 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 12:54	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-8
Lab Sample ID: 885-20755-8
Date Collected: 03/03/25 11:45
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5		mg/Kg		03/04/25 09:47	03/04/25 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*03/04/25 09:47*	*03/04/25 11:32*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018		mg/Kg		03/04/25 09:47	03/04/25 11:32	1
Ethylbenzene	ND		0.035		mg/Kg		03/04/25 09:47	03/04/25 11:32	1
Toluene	ND		0.035		mg/Kg		03/04/25 09:47	03/04/25 11:32	1
Xylenes, Total	ND		0.070		mg/Kg		03/04/25 09:47	03/04/25 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*03/04/25 09:47*	*03/04/25 11:32*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**130**		9.8		mg/Kg		03/04/25 08:51	03/04/25 12:21	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/04/25 08:51	03/04/25 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 13:05	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-9
Lab Sample ID: 885-20755-9
Date Collected: 03/03/25 12:00
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.2		mg/Kg		03/04/25 09:47	03/04/25 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*35 - 166*	*03/04/25 09:47*	*03/04/25 11:56*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/04/25 09:47	03/04/25 11:56	1
Ethylbenzene	ND		0.042		mg/Kg		03/04/25 09:47	03/04/25 11:56	1
Toluene	ND		0.042		mg/Kg		03/04/25 09:47	03/04/25 11:56	1
Xylenes, Total	ND		0.083		mg/Kg		03/04/25 09:47	03/04/25 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*48 - 145*	*03/04/25 09:47*	*03/04/25 11:56*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**17**		9.9		mg/Kg		03/04/25 08:51	03/04/25 12:32	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/04/25 08:51	03/04/25 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*109*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		03/04/25 10:18	03/04/25 13:36	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-10
Lab Sample ID: 885-20755-10
Date Collected: 03/03/25 12:15
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		6.3		mg/Kg		03/04/25 09:47	03/04/25 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*35 - 166*	*03/04/25 09:47*	*03/04/25 12:19*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.031		mg/Kg		03/04/25 09:47	03/04/25 12:19	1
Ethylbenzene	ND		0.063		mg/Kg		03/04/25 09:47	03/04/25 12:19	1
Toluene	ND		0.063		mg/Kg		03/04/25 09:47	03/04/25 12:19	1
Xylenes, Total	ND		0.13		mg/Kg		03/04/25 09:47	03/04/25 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*48 - 145*	*03/04/25 09:47*	*03/04/25 12:19*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**240**		9.5		mg/Kg		03/04/25 08:51	03/04/25 12:43	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/04/25 08:51	03/04/25 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 13:46	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-11
Lab Sample ID: 885-20755-11
Date Collected: 03/03/25 12:30
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8		mg/Kg		03/04/25 09:47	03/04/25 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*03/04/25 09:47*	*03/04/25 12:43*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/04/25 09:47	03/04/25 12:43	1
Ethylbenzene	ND		0.038		mg/Kg		03/04/25 09:47	03/04/25 12:43	1
Toluene	ND		0.038		mg/Kg		03/04/25 09:47	03/04/25 12:43	1
Xylenes, Total	ND		0.075		mg/Kg		03/04/25 09:47	03/04/25 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*03/04/25 09:47*	*03/04/25 12:43*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**350**		9.6		mg/Kg		03/04/25 08:51	03/04/25 10:52	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/04/25 08:51	03/04/25 10:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*03/04/25 08:51*	*03/04/25 10:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 13:57	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-12
Lab Sample ID: 885-20755-12
Date Collected: 03/03/25 13:15
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.0		mg/Kg		03/04/25 09:47	03/04/25 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*35 - 166*	*03/04/25 09:47*	*03/04/25 13:07*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020		mg/Kg		03/04/25 09:47	03/04/25 13:07	1
Ethylbenzene	ND		0.040		mg/Kg		03/04/25 09:47	03/04/25 13:07	1
Toluene	ND		0.040		mg/Kg		03/04/25 09:47	03/04/25 13:07	1
Xylenes, Total	ND		0.080		mg/Kg		03/04/25 09:47	03/04/25 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*	*03/04/25 09:47*	*03/04/25 13:07*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**290**		19		mg/Kg		03/04/25 08:51	03/04/25 11:15	2
Motor Oil Range Organics [C28-C40]	ND	D	94		mg/Kg		03/04/25 08:51	03/04/25 11:15	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:15*	*2*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		03/04/25 10:18	03/04/25 14:07	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-13
Lab Sample ID: 885-20755-13
Date Collected: 03/03/25 13:30
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8		mg/Kg		03/04/25 09:47	03/04/25 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*03/04/25 09:47*	*03/04/25 13:32*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/04/25 09:47	03/04/25 13:32	1
Ethylbenzene	ND		0.038		mg/Kg		03/04/25 09:47	03/04/25 13:32	1
Toluene	ND		0.038		mg/Kg		03/04/25 09:47	03/04/25 13:32	1
Xylenes, Total	ND		0.077		mg/Kg		03/04/25 09:47	03/04/25 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*48 - 145*	*03/04/25 09:47*	*03/04/25 13:32*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**12**		9.6		mg/Kg		03/04/25 08:51	03/04/25 11:39	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/04/25 08:51	03/04/25 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*87*		*62 - 134*	*03/04/25 08:51*	*03/04/25 11:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 14:17	20

Client Sample Results

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-14
Lab Sample ID: 885-20755-14
Date Collected: 03/03/25 13:45
Matrix: Solid
Date Received: 03/04/25 07:15

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.0		mg/Kg		03/04/25 09:47	03/04/25 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*35 - 166*	*03/04/25 09:47*	*03/04/25 13:56*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020		mg/Kg		03/04/25 09:47	03/04/25 13:56	1
Ethylbenzene	ND		0.040		mg/Kg		03/04/25 09:47	03/04/25 13:56	1
Toluene	ND		0.040		mg/Kg		03/04/25 09:47	03/04/25 13:56	1
Xylenes, Total	ND		0.079		mg/Kg		03/04/25 09:47	03/04/25 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*48 - 145*	*03/04/25 09:47*	*03/04/25 13:56*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**120**		20		mg/Kg		03/04/25 08:51	03/04/25 12:02	2
Motor Oil Range Organics [C28-C40]	ND	D	99		mg/Kg		03/04/25 08:51	03/04/25 12:02	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*	*03/04/25 08:51*	*03/04/25 12:02*	*2*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/04/25 10:18	03/04/25 14:28	20

QC Sample Results

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-21797/1-A
Matrix: Solid
Analysis Batch: 21828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21797

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/04/25 08:53	03/04/25 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*35 - 166*	*03/04/25 08:53*	*03/04/25 12:25*	*1*

Lab Sample ID: LCS 885-21797/2-A
Matrix: Solid
Analysis Batch: 21828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21797

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.9		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*197*		*35 - 166*

Lab Sample ID: 885-20755-1 MS
Matrix: Solid
Analysis Batch: 21828

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 21797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		18.8	17.5		mg/Kg		93	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*175*		*35 - 166*

Lab Sample ID: 885-20755-1 MSD
Matrix: Solid
Analysis Batch: 21828

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 21797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		18.8	17.2		mg/Kg		92	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*176*		*35 - 166*

Lab Sample ID: MB 885-21798/1-A
Matrix: Solid
Analysis Batch: 21800

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21798

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/04/25 08:53	03/04/25 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*03/04/25 08:53*	*03/04/25 10:44*	*1*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 885-21798/2-A
Matrix: Solid
Analysis Batch: 21800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21798

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	26.3		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*190*		*35 - 166*

Lab Sample ID: 885-20755-7 MS
Matrix: Solid
Analysis Batch: 21800

Client Sample ID: S-7
Prep Type: Total/NA
Prep Batch: 21798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		18.9	21.4		mg/Kg		113	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*195*		*35 - 166*

Lab Sample ID: 885-20755-7 MSD
Matrix: Solid
Analysis Batch: 21800

Client Sample ID: S-7
Prep Type: Total/NA
Prep Batch: 21798

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		18.9	20.4		mg/Kg		108	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*195*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-21797/1-A
Matrix: Solid
Analysis Batch: 21829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21797

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.00050		mg/Kg		03/04/25 08:53	03/04/25 12:25	1
Ethylbenzene	ND		0.0010		mg/Kg		03/04/25 08:53	03/04/25 12:25	1
Toluene	ND		0.0010		mg/Kg		03/04/25 08:53	03/04/25 12:25	1
Xylenes, Total	ND		0.0020		mg/Kg		03/04/25 08:53	03/04/25 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*	*03/04/25 08:53*	*03/04/25 12:25*	*1*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 885-21797/3-A
Matrix: Solid
Analysis Batch: 21829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21797

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.873		mg/Kg		87	70 - 130		
Ethylbenzene			1.00	0.874		mg/Kg		87	70 - 130		
Toluene			1.00	0.884		mg/Kg		88	70 - 130		
Xylenes, Total			3.00	2.64		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*

Lab Sample ID: 885-20755-2 MS
Matrix: Solid
Analysis Batch: 21829

Client Sample ID: S-2
Prep Type: Total/NA
Prep Batch: 21797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.822	0.689		mg/Kg		84	70 - 130		
Ethylbenzene	ND		0.822	0.697		mg/Kg		85	70 - 130		
Toluene	ND		0.822	0.696		mg/Kg		85	70 - 130		
Xylenes, Total	ND		2.47	2.10		mg/Kg		85	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*

Lab Sample ID: 885-20755-2 MSD
Matrix: Solid
Analysis Batch: 21829

Client Sample ID: S-2
Prep Type: Total/NA
Prep Batch: 21797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.822	0.687		mg/Kg		84	70 - 130	0	20
Ethylbenzene	ND		0.822	0.696		mg/Kg		85	70 - 130	0	20
Toluene	ND		0.822	0.687		mg/Kg		84	70 - 130	1	20
Xylenes, Total	ND		2.47	2.10		mg/Kg		85	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*48 - 145*

Lab Sample ID: MB 885-21798/1-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21798

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/04/25 08:53	03/04/25 10:44	1
Ethylbenzene	ND		0.050		mg/Kg		03/04/25 08:53	03/04/25 10:44	1
Toluene	ND		0.050		mg/Kg		03/04/25 08:53	03/04/25 10:44	1
Xylenes, Total	ND		0.10		mg/Kg		03/04/25 08:53	03/04/25 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*48 - 145*	*03/04/25 08:53*	*03/04/25 10:44*	*1*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 885-21798/3-A
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21798

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	1.10		mg/Kg		110	70 - 130		
Ethylbenzene			1.00	1.08		mg/Kg		108	70 - 130		
Toluene			1.00	1.04		mg/Kg		104	70 - 130		
Xylenes, Total			3.00	3.21		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*48 - 145*

Lab Sample ID: 885-20755-8 MS
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: S-8
Prep Type: Total/NA
Prep Batch: 21798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.702	0.721		mg/Kg		103	70 - 130		
Ethylbenzene	ND		0.702	0.729		mg/Kg		104	70 - 130		
Toluene	ND		0.702	0.706		mg/Kg		101	70 - 130		
Xylenes, Total	ND		2.11	2.08		mg/Kg		99	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*

Lab Sample ID: 885-20755-8 MSD
Matrix: Solid
Analysis Batch: 21801

Client Sample ID: S-8
Prep Type: Total/NA
Prep Batch: 21798

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.702	0.690		mg/Kg		98	70 - 130	4	20
Ethylbenzene	ND		0.702	0.714		mg/Kg		102	70 - 130	2	20
Toluene	ND		0.702	0.671		mg/Kg		96	70 - 130	5	20
Xylenes, Total	ND		2.11	2.02		mg/Kg		96	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-21796/1-A
Matrix: Solid
Analysis Batch: 21791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21796

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/04/25 08:51	03/04/25 10:25	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/04/25 08:51	03/04/25 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/04/25 08:51*	*03/04/25 10:25*	*1*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 885-21796/2-A
Matrix: Solid
Analysis Batch: 21791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21796

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	50.5		mg/Kg		101	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*83*		*62 - 134*

Lab Sample ID: 885-20755-1 MS
Matrix: Solid
Analysis Batch: 21791

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 21796

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	83	F1	47.6	88.8	F1	mg/Kg		12	44 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*

Lab Sample ID: 885-20755-1 MSD
Matrix: Solid
Analysis Batch: 21791

Client Sample ID: S-1
Prep Type: Total/NA
Prep Batch: 21796

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83	F1	48.1	88.4	F1	mg/Kg		12	44 - 136	0	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*90*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-21818/1-A
Matrix: Solid
Analysis Batch: 21826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 21818

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0		mg/Kg		03/04/25 10:18	03/04/25 11:32	1

Lab Sample ID: LCS 885-21818/2-A
Matrix: Solid
Analysis Batch: 21826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 21818

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			30.0	29.8		mg/Kg		99	90 - 110		

QC Association Summary

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

GC VOA

Prep Batch: 21797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	5035	
885-20755-2	S-2	Total/NA	Solid	5035	
885-20755-3	S-3	Total/NA	Solid	5035	
885-20755-4	S-4	Total/NA	Solid	5035	
885-20755-5	S-5	Total/NA	Solid	5035	
885-20755-6	S-6	Total/NA	Solid	5035	
MB 885-21797/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-21797/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-21797/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-20755-1 MS	S-1	Total/NA	Solid	5035	
885-20755-1 MSD	S-1	Total/NA	Solid	5035	
885-20755-2 MS	S-2	Total/NA	Solid	5035	
885-20755-2 MSD	S-2	Total/NA	Solid	5035	

Prep Batch: 21798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-7	S-7	Total/NA	Solid	5035	
885-20755-8	S-8	Total/NA	Solid	5035	
885-20755-9	S-9	Total/NA	Solid	5035	
885-20755-10	S-10	Total/NA	Solid	5035	
885-20755-11	S-11	Total/NA	Solid	5035	
885-20755-12	S-12	Total/NA	Solid	5035	
885-20755-13	S-13	Total/NA	Solid	5035	
885-20755-14	S-14	Total/NA	Solid	5035	
MB 885-21798/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-21798/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-21798/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-20755-7 MS	S-7	Total/NA	Solid	5035	
885-20755-7 MSD	S-7	Total/NA	Solid	5035	
885-20755-8 MS	S-8	Total/NA	Solid	5035	
885-20755-8 MSD	S-8	Total/NA	Solid	5035	

Analysis Batch: 21800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-7	S-7	Total/NA	Solid	8015M/D	21798
885-20755-8	S-8	Total/NA	Solid	8015M/D	21798
885-20755-9	S-9	Total/NA	Solid	8015M/D	21798
885-20755-10	S-10	Total/NA	Solid	8015M/D	21798
885-20755-11	S-11	Total/NA	Solid	8015M/D	21798
885-20755-12	S-12	Total/NA	Solid	8015M/D	21798
885-20755-13	S-13	Total/NA	Solid	8015M/D	21798
885-20755-14	S-14	Total/NA	Solid	8015M/D	21798
MB 885-21798/1-A	Method Blank	Total/NA	Solid	8015M/D	21798
LCS 885-21798/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	21798
885-20755-7 MS	S-7	Total/NA	Solid	8015M/D	21798
885-20755-7 MSD	S-7	Total/NA	Solid	8015M/D	21798

Analysis Batch: 21801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-7	S-7	Total/NA	Solid	8021B	21798
885-20755-8	S-8	Total/NA	Solid	8021B	21798

QC Association Summary

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

GC VOA (Continued)

Analysis Batch: 21801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-9	S-9	Total/NA	Solid	8021B	21798
885-20755-10	S-10	Total/NA	Solid	8021B	21798
885-20755-11	S-11	Total/NA	Solid	8021B	21798
885-20755-12	S-12	Total/NA	Solid	8021B	21798
885-20755-13	S-13	Total/NA	Solid	8021B	21798
885-20755-14	S-14	Total/NA	Solid	8021B	21798
MB 885-21798/1-A	Method Blank	Total/NA	Solid	8021B	21798
LCS 885-21798/3-A	Lab Control Sample	Total/NA	Solid	8021B	21798
885-20755-8 MS	S-8	Total/NA	Solid	8021B	21798
885-20755-8 MSD	S-8	Total/NA	Solid	8021B	21798

Analysis Batch: 21828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	8015M/D	21797
885-20755-2	S-2	Total/NA	Solid	8015M/D	21797
885-20755-3	S-3	Total/NA	Solid	8015M/D	21797
885-20755-4	S-4	Total/NA	Solid	8015M/D	21797
885-20755-5	S-5	Total/NA	Solid	8015M/D	21797
885-20755-6	S-6	Total/NA	Solid	8015M/D	21797
MB 885-21797/1-A	Method Blank	Total/NA	Solid	8015M/D	21797
LCS 885-21797/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	21797
885-20755-1 MS	S-1	Total/NA	Solid	8015M/D	21797
885-20755-1 MSD	S-1	Total/NA	Solid	8015M/D	21797

Analysis Batch: 21829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	8021B	21797
885-20755-2	S-2	Total/NA	Solid	8021B	21797
885-20755-3	S-3	Total/NA	Solid	8021B	21797
885-20755-4	S-4	Total/NA	Solid	8021B	21797
885-20755-5	S-5	Total/NA	Solid	8021B	21797
885-20755-6	S-6	Total/NA	Solid	8021B	21797
MB 885-21797/1-A	Method Blank	Total/NA	Solid	8021B	21797
LCS 885-21797/3-A	Lab Control Sample	Total/NA	Solid	8021B	21797
885-20755-2 MS	S-2	Total/NA	Solid	8021B	21797
885-20755-2 MSD	S-2	Total/NA	Solid	8021B	21797

GC Semi VOA

Analysis Batch: 21791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	8015M/D	21796
885-20755-2	S-2	Total/NA	Solid	8015M/D	21796
885-20755-3	S-3	Total/NA	Solid	8015M/D	21796
885-20755-4	S-4	Total/NA	Solid	8015M/D	21796
885-20755-5	S-5	Total/NA	Solid	8015M/D	21796
885-20755-6	S-6	Total/NA	Solid	8015M/D	21796
885-20755-7	S-7	Total/NA	Solid	8015M/D	21796
885-20755-8	S-8	Total/NA	Solid	8015M/D	21796
885-20755-9	S-9	Total/NA	Solid	8015M/D	21796
885-20755-10	S-10	Total/NA	Solid	8015M/D	21796

QC Association Summary

Client: Ensolum
Project/Site: Chaco Amine Spill

Job ID: 885-20755-1

GC Semi VOA (Continued)

Analysis Batch: 21791 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-21796/1-A	Method Blank	Total/NA	Solid	8015M/D	21796
LCS 885-21796/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	21796
885-20755-1 MS	S-1	Total/NA	Solid	8015M/D	21796
885-20755-1 MSD	S-1	Total/NA	Solid	8015M/D	21796

Prep Batch: 21796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	SHAKE	
885-20755-2	S-2	Total/NA	Solid	SHAKE	
885-20755-3	S-3	Total/NA	Solid	SHAKE	
885-20755-4	S-4	Total/NA	Solid	SHAKE	
885-20755-5	S-5	Total/NA	Solid	SHAKE	
885-20755-6	S-6	Total/NA	Solid	SHAKE	
885-20755-7	S-7	Total/NA	Solid	SHAKE	
885-20755-8	S-8	Total/NA	Solid	SHAKE	
885-20755-9	S-9	Total/NA	Solid	SHAKE	
885-20755-10	S-10	Total/NA	Solid	SHAKE	
885-20755-11	S-11	Total/NA	Solid	SHAKE	
885-20755-12	S-12	Total/NA	Solid	SHAKE	
885-20755-13	S-13	Total/NA	Solid	SHAKE	
885-20755-14	S-14	Total/NA	Solid	SHAKE	
MB 885-21796/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-21796/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-20755-1 MS	S-1	Total/NA	Solid	SHAKE	
885-20755-1 MSD	S-1	Total/NA	Solid	SHAKE	

Analysis Batch: 21819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-11	S-11	Total/NA	Solid	8015M/D	21796
885-20755-12	S-12	Total/NA	Solid	8015M/D	21796
885-20755-13	S-13	Total/NA	Solid	8015M/D	21796
885-20755-14	S-14	Total/NA	Solid	8015M/D	21796

HPLC/IC

Prep Batch: 21818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	300_Prep	
885-20755-2	S-2	Total/NA	Solid	300_Prep	
885-20755-3	S-3	Total/NA	Solid	300_Prep	
885-20755-4	S-4	Total/NA	Solid	300_Prep	
885-20755-5	S-5	Total/NA	Solid	300_Prep	
885-20755-6	S-6	Total/NA	Solid	300_Prep	
885-20755-7	S-7	Total/NA	Solid	300_Prep	
885-20755-8	S-8	Total/NA	Solid	300_Prep	
885-20755-9	S-9	Total/NA	Solid	300_Prep	
885-20755-10	S-10	Total/NA	Solid	300_Prep	
885-20755-11	S-11	Total/NA	Solid	300_Prep	
885-20755-12	S-12	Total/NA	Solid	300_Prep	
885-20755-13	S-13	Total/NA	Solid	300_Prep	
885-20755-14	S-14	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Ensolum Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

HPLC/IC (Continued)

Prep Batch: 21818 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-21818/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-21818/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 21826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-20755-1	S-1	Total/NA	Solid	300.0	21818
885-20755-2	S-2	Total/NA	Solid	300.0	21818
885-20755-3	S-3	Total/NA	Solid	300.0	21818
885-20755-4	S-4	Total/NA	Solid	300.0	21818
885-20755-5	S-5	Total/NA	Solid	300.0	21818
885-20755-6	S-6	Total/NA	Solid	300.0	21818
885-20755-7	S-7	Total/NA	Solid	300.0	21818
885-20755-8	S-8	Total/NA	Solid	300.0	21818
885-20755-9	S-9	Total/NA	Solid	300.0	21818
885-20755-10	S-10	Total/NA	Solid	300.0	21818
885-20755-11	S-11	Total/NA	Solid	300.0	21818
885-20755-12	S-12	Total/NA	Solid	300.0	21818
885-20755-13	S-13	Total/NA	Solid	300.0	21818
885-20755-14	S-14	Total/NA	Solid	300.0	21818
MB 885-21818/1-A	Method Blank	Total/NA	Solid	300.0	21818
LCS 885-21818/2-A	Lab Control Sample	Total/NA	Solid	300.0	21818

Lab Chronicle

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-1
Lab Sample ID: 885-20755-1
Date Collected: 03/03/25 09:30
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 08:53
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 12:47
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 08:53
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 12:47
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 10:46
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 11:52

Client Sample ID: S-2
Lab Sample ID: 885-20755-2
Date Collected: 03/03/25 09:45
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 13:09
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 13:09
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 11:18
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:03

Client Sample ID: S-3
Lab Sample ID: 885-20755-3
Date Collected: 03/03/25 10:00
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 13:31
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 13:31
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 11:28
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:13

Client Sample ID: S-4
Lab Sample ID: 885-20755-4
Date Collected: 03/03/25 10:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 13:53

Lab Chronicle

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-4
Lab Sample ID: 885-20755-4
Date Collected: 03/03/25 10:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 13:53
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 11:39
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:23

Client Sample ID: S-5
Lab Sample ID: 885-20755-5
Date Collected: 03/03/25 10:45
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 14:15
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 14:15
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 11:49
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:34

Client Sample ID: S-6
Lab Sample ID: 885-20755-6
Date Collected: 03/03/25 11:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8015M/D		1	21828	AT	EET ALB	03/04/25 14:37
Total/NA	Prep	5035			21797	AT	EET ALB	03/04/25 09:42
Total/NA	Analysis	8021B		1	21829	AT	EET ALB	03/04/25 14:37
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 12:00
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:44

Client Sample ID: S-7
Lab Sample ID: 885-20755-7
Date Collected: 03/03/25 11:30
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 08:53
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 11:08
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 08:53
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 11:08

Lab Chronicle

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-7
Lab Sample ID: 885-20755-7
Date Collected: 03/03/25 11:30
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 12:11
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 12:54

Client Sample ID: S-8
Lab Sample ID: 885-20755-8
Date Collected: 03/03/25 11:45
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 11:32
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 11:32
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 12:21
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 13:05

Client Sample ID: S-9
Lab Sample ID: 885-20755-9
Date Collected: 03/03/25 12:00
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 11:56
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 11:56
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 12:32
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 13:36

Client Sample ID: S-10
Lab Sample ID: 885-20755-10
Date Collected: 03/03/25 12:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 12:19
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 12:19
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21791	MI	EET ALB	03/04/25 12:43

Lab Chronicle

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-10
Lab Sample ID: 885-20755-10
Date Collected: 03/03/25 12:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 13:46

Client Sample ID: S-11
Lab Sample ID: 885-20755-11
Date Collected: 03/03/25 12:30
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 12:43
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 12:43
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21819	MI	EET ALB	03/04/25 10:52
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 13:57

Client Sample ID: S-12
Lab Sample ID: 885-20755-12
Date Collected: 03/03/25 13:15
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 13:07
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 13:07
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		2	21819	MI	EET ALB	03/04/25 11:15
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 14:07

Client Sample ID: S-13
Lab Sample ID: 885-20755-13
Date Collected: 03/03/25 13:30
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 13:32
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 13:32
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		1	21819	MI	EET ALB	03/04/25 11:39
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 14:17

Lab Chronicle

Client: Ensolum
Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Client Sample ID: S-14
Lab Sample ID: 885-20755-14

Date Collected: 03/03/25 13:45
Matrix: Solid
Date Received: 03/04/25 07:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8015M/D		1	21800	JP	EET ALB	03/04/25 13:56
Total/NA	Prep	5035			21798	AT	EET ALB	03/04/25 09:47
Total/NA	Analysis	8021B		1	21801	JP	EET ALB	03/04/25 13:56
Total/NA	Prep	SHAKE			21796	MI	EET ALB	03/04/25 08:51
Total/NA	Analysis	8015M/D		2	21819	MI	EET ALB	03/04/25 12:02
Total/NA	Prep	300_Prep			21818	DL	EET ALB	03/04/25 10:18
Total/NA	Analysis	300.0		20	21826	DL	EET ALB	03/04/25 14:28

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ensolum Job ID: 885-20755-1
Project/Site: Chaco Amine Spill

Laboratory: Eurofins Albuquerque

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0682	10-21-25
Texas	NELAP	T104704424-23-16	06-01-25

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 100% Same Day

Project Name: Chaco Amine Spill

Project #: SEE NOTES

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.1 ± 0 = 0.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABOR
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 871
Tel. 505-345-3975 Fax 505-345-4107
885-20755 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE~~ / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/3/25	9:30	S	S-1	1x4oz jar	Cool		X	X					X			
3/3/25	9:45	S	S-2	1x4oz jar	Cool		X	X					X			
3/3/25	10:00	S	S-3	1x4oz jar	Cool		X	X					X			
3/3/25	10:15	S	S-4	1x4oz jar	Cool		X	X					X			
3/3/25	10:45	S	S-5	1x4oz jar	Cool		X	X					X			
3/3/25	11:15	S	S-6	1x4oz jar	Cool		X	X					X			
3/3/25	11:30	S	S-7	1x4oz jar	Cool		X	X					X			
3/3/25	11:45	S	S-8	1x4oz jar	Cool		X	X					X			
3/3/25	12:00	S	S-9	1x4oz jar	Cool		X	X					X			
3/3/25	12:15	S	S-10	1x4oz jar	Cool		X	X					X			
3/3/25	12:30	S	S-11	1x4oz jar	Cool		X	X					X			
3/3/25	13:15	S	S-12	1x4oz jar	Cool		X	X					X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/3/25	1539				3/3/25	1539
3/3/25	1830			courier	3/4/25	7:15

Remarks: PM Tom Long Same Day

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

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

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 100% Same Day

Project Name: Chaco Amine Spill

Project #: SEE NOTES

Project Manager: K. Summers

Sampler: L. Daniell

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.1 +0 = 0.1 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/2/25	13:30	S	S-13	1x4oz jar	Cool		X	X					X			
3/2/25	13:45	S	S-14	1x4oz jar	Cool		X	X					X			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
3/3/25	1539				3/3/25	1539
3/3/25	1836			courier	3/4/25	7:15

Remarks: PM Tom Long Same Day

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.

Login Sample Receipt Checklist

Client: Ensolum Job Number: 885-20755-1

Login Number: 20755 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kyle Summers
Ensolum
606 S Rio Grande
Suite A
Aztec, New Mexico 87410

Generated 3/18/2025 7:23:34 PM

JOB DESCRIPTION

Chaco Plant Amine

JOB NUMBER

885-21545-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
3/18/2025 7:23:34 PM

Authorized for release by
John Caldwell, Project Manager
john.caldwell@et.eurofinsus.com
(505)345-3975

Client: Ensolum
Project/Site: Chaco Plant Amine

Laboratory Job ID: 885-21545-1

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project: Chaco Plant Amine

Job ID: 885-21545-1

Job ID: 885-21545-1 Eurofins Albuquerque

Job Narrative
885-21545-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/15/2025 7:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-15
Lab Sample ID: 885-21545-1
Date Collected: 03/14/25 10:00
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.3		mg/Kg		03/17/25 09:31	03/17/25 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*35 - 166*	*03/17/25 09:31*	*03/17/25 11:23*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.017		mg/Kg		03/17/25 09:31	03/17/25 11:23	1
Ethylbenzene	ND		0.033		mg/Kg		03/17/25 09:31	03/17/25 11:23	1
Toluene	ND		0.033		mg/Kg		03/17/25 09:31	03/17/25 11:23	1
Xylenes, Total	ND		0.066		mg/Kg		03/17/25 09:31	03/17/25 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*03/17/25 09:31*	*03/17/25 11:23*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		03/17/25 08:34	03/17/25 10:18	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/17/25 08:34	03/17/25 10:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*03/17/25 08:34*	*03/17/25 10:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 11:18	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-16
Lab Sample ID: 885-21545-2
Date Collected: 03/14/25 10:05
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.2		mg/Kg		03/17/25 09:31	03/17/25 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*35 - 166*	*03/17/25 09:31*	*03/17/25 11:45*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/17/25 09:31	03/17/25 11:45	1
Ethylbenzene	ND		0.042		mg/Kg		03/17/25 09:31	03/17/25 11:45	1
Toluene	ND		0.042		mg/Kg		03/17/25 09:31	03/17/25 11:45	1
Xylenes, Total	ND		0.085		mg/Kg		03/17/25 09:31	03/17/25 11:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*48 - 145*	*03/17/25 09:31*	*03/17/25 11:45*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/17/25 08:34	03/17/25 10:29	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/17/25 08:34	03/17/25 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*	*03/17/25 08:34*	*03/17/25 10:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 11:28	20

Client Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

Client Sample ID: S-17

Date Collected: 03/14/25 10:10
Date Received: 03/15/25 07:05

Lab Sample ID: 885-21545-3

Matrix: Solid

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.9		mg/Kg		03/17/25 09:31	03/17/25 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*35 - 166*	*03/17/25 09:31*	*03/17/25 12:06*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/17/25 09:31	03/17/25 12:06	1
Ethylbenzene	ND		0.039		mg/Kg		03/17/25 09:31	03/17/25 12:06	1
Toluene	ND		0.039		mg/Kg		03/17/25 09:31	03/17/25 12:06	1
Xylenes, Total	ND		0.077		mg/Kg		03/17/25 09:31	03/17/25 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*48 - 145*	*03/17/25 09:31*	*03/17/25 12:06*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**210**		9.5		mg/Kg		03/17/25 08:34	03/17/25 10:39	1
Motor Oil Range Organics [C28-C40]	**270**		47		mg/Kg		03/17/25 08:34	03/17/25 10:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*105*		*62 - 134*	*03/17/25 08:34*	*03/17/25 10:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 11:38	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-18
Lab Sample ID: 885-21545-4
Date Collected: 03/14/25 10:15
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.6		mg/Kg		03/17/25 09:31	03/17/25 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*35 - 166*	*03/17/25 09:31*	*03/17/25 12:28*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018		mg/Kg		03/17/25 09:31	03/17/25 12:28	1
Ethylbenzene	ND		0.036		mg/Kg		03/17/25 09:31	03/17/25 12:28	1
Toluene	ND		0.036		mg/Kg		03/17/25 09:31	03/17/25 12:28	1
Xylenes, Total	ND		0.073		mg/Kg		03/17/25 09:31	03/17/25 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*48 - 145*	*03/17/25 09:31*	*03/17/25 12:28*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		03/17/25 08:34	03/17/25 10:50	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/17/25 08:34	03/17/25 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/17/25 08:34*	*03/17/25 10:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 11:49	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-19
Lab Sample ID: 885-21545-5
Date Collected: 03/14/25 10:20
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.2		mg/Kg		03/17/25 09:31	03/17/25 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*35 - 166*	*03/17/25 09:31*	*03/17/25 12:50*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.021		mg/Kg		03/17/25 09:31	03/17/25 12:50	1
Ethylbenzene	ND		0.042		mg/Kg		03/17/25 09:31	03/17/25 12:50	1
Toluene	ND		0.042		mg/Kg		03/17/25 09:31	03/17/25 12:50	1
Xylenes, Total	ND		0.084		mg/Kg		03/17/25 09:31	03/17/25 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*48 - 145*	*03/17/25 09:31*	*03/17/25 12:50*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1		mg/Kg		03/17/25 08:34	03/17/25 11:01	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/17/25 08:34	03/17/25 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/17/25 08:34*	*03/17/25 11:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 11:59	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-20
Lab Sample ID: 885-21545-6
Date Collected: 03/14/25 10:25
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.0		mg/Kg		03/17/25 09:31	03/17/25 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*35 - 166*	*03/17/25 09:31*	*03/17/25 13:11*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020		mg/Kg		03/17/25 09:31	03/17/25 13:11	1
Ethylbenzene	ND		0.040		mg/Kg		03/17/25 09:31	03/17/25 13:11	1
Toluene	ND		0.040		mg/Kg		03/17/25 09:31	03/17/25 13:11	1
Xylenes, Total	ND		0.080		mg/Kg		03/17/25 09:31	03/17/25 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*48 - 145*	*03/17/25 09:31*	*03/17/25 13:11*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/17/25 08:34	03/17/25 11:11	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/17/25 08:34	03/17/25 11:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*101*		*62 - 134*	*03/17/25 08:34*	*03/17/25 11:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 12:09	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-21
Lab Sample ID: 885-21545-7
Date Collected: 03/14/25 10:30
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.8		mg/Kg		03/17/25 09:31	03/17/25 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*35 - 166*	*03/17/25 09:31*	*03/17/25 13:33*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/17/25 09:31	03/17/25 13:33	1
Ethylbenzene	ND		0.038		mg/Kg		03/17/25 09:31	03/17/25 13:33	1
Toluene	ND		0.038		mg/Kg		03/17/25 09:31	03/17/25 13:33	1
Xylenes, Total	ND		0.077		mg/Kg		03/17/25 09:31	03/17/25 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*	*03/17/25 09:31*	*03/17/25 13:33*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6		mg/Kg		03/17/25 08:34	03/17/25 11:22	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/17/25 08:34	03/17/25 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*03/17/25 08:34*	*03/17/25 11:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 12:40	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-22
Lab Sample ID: 885-21545-8
Date Collected: 03/14/25 10:35
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.9		mg/Kg		03/17/25 09:31	03/17/25 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*35 - 166*	*03/17/25 09:31*	*03/17/25 13:55*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.019		mg/Kg		03/17/25 09:31	03/17/25 13:55	1
Ethylbenzene	ND		0.039		mg/Kg		03/17/25 09:31	03/17/25 13:55	1
Toluene	ND		0.039		mg/Kg		03/17/25 09:31	03/17/25 13:55	1
Xylenes, Total	ND		0.077		mg/Kg		03/17/25 09:31	03/17/25 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*	*03/17/25 09:31*	*03/17/25 13:55*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		03/17/25 08:34	03/17/25 11:32	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/17/25 08:34	03/17/25 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*102*		*62 - 134*	*03/17/25 08:34*	*03/17/25 11:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 12:51	20

Client Sample Results

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-23
Lab Sample ID: 885-21545-9
Date Collected: 03/14/25 10:40
Matrix: Solid
Date Received: 03/15/25 07:05

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.6		mg/Kg		03/17/25 09:33	03/17/25 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*35 - 166*	*03/17/25 09:33*	*03/17/25 14:17*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023		mg/Kg		03/17/25 09:33	03/17/25 14:17	1
Ethylbenzene	ND		0.046		mg/Kg		03/17/25 09:33	03/17/25 14:17	1
Toluene	ND		0.046		mg/Kg		03/17/25 09:33	03/17/25 14:17	1
Xylenes, Total	ND		0.093		mg/Kg		03/17/25 09:33	03/17/25 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*	*03/17/25 09:33*	*03/17/25 14:17*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.7		mg/Kg		03/17/25 08:34	03/17/25 11:43	1
Motor Oil Range Organics [C28-C40]	ND		48		mg/Kg		03/17/25 08:34	03/17/25 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*104*		*62 - 134*	*03/17/25 08:34*	*03/17/25 11:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/17/25 09:07	03/17/25 13:01	20

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-22574/1-A
Matrix: Solid
Analysis Batch: 22566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22574

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/17/25 09:31	03/17/25 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*35 - 166*	*03/17/25 09:31*	*03/17/25 11:01*	*1*

Lab Sample ID: LCS 885-22574/2-A
Matrix: Solid
Analysis Batch: 22566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22574

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	23.2		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*196*		*35 - 166*

Lab Sample ID: 885-21545-1 MS
Matrix: Solid
Analysis Batch: 22566

Client Sample ID: S-15
Prep Type: Total/NA
Prep Batch: 22574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		16.5	13.9		mg/Kg		75	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*176*		*35 - 166*

Lab Sample ID: 885-21545-1 MSD
Matrix: Solid
Analysis Batch: 22566

Client Sample ID: S-15
Prep Type: Total/NA
Prep Batch: 22574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		16.5	14.5		mg/Kg		79	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*168*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-22574/1-A
Matrix: Solid
Analysis Batch: 22567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22574

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/17/25 09:31	03/17/25 11:01	1
Ethylbenzene	ND		0.050		mg/Kg		03/17/25 09:31	03/17/25 11:01	1
Toluene	ND		0.050		mg/Kg		03/17/25 09:31	03/17/25 11:01	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-22574/1-A
Matrix: Solid
Analysis Batch: 22567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22574

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		03/17/25 09:31	03/17/25 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*48 - 145*	*03/17/25 09:31*	*03/17/25 11:01*	*1*

Lab Sample ID: LCS 885-22574/3-A
Matrix: Solid
Analysis Batch: 22567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22574

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.866		mg/Kg		87	70 - 130		
Ethylbenzene			1.00	0.899		mg/Kg		90	70 - 130		
Toluene			1.00	0.878		mg/Kg		88	70 - 130		
Xylenes, Total			3.00	2.64		mg/Kg		88	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*48 - 145*

Lab Sample ID: 885-21545-2 MS
Matrix: Solid
Analysis Batch: 22567

Client Sample ID: S-16
Prep Type: Total/NA
Prep Batch: 22574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.846	0.729		mg/Kg		86	70 - 130		
Ethylbenzene	ND		0.846	0.743		mg/Kg		88	70 - 130		
Toluene	ND		0.846	0.738		mg/Kg		87	70 - 130		
Xylenes, Total	ND		2.54	2.21		mg/Kg		87	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*48 - 145*

Lab Sample ID: 885-21545-2 MSD
Matrix: Solid
Analysis Batch: 22567

Client Sample ID: S-16
Prep Type: Total/NA
Prep Batch: 22574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.846	0.725		mg/Kg		86	70 - 130	1	20
Ethylbenzene	ND		0.846	0.745		mg/Kg		88	70 - 130	0	20
Toluene	ND		0.846	0.736		mg/Kg		87	70 - 130	0	20
Xylenes, Total	ND		2.54	2.22		mg/Kg		87	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*48 - 145*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-22565/1-A
Matrix: Solid
Analysis Batch: 22562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22565

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/17/25 08:34	03/17/25 09:57	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/17/25 08:34	03/17/25 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*100*		*62 - 134*	*03/17/25 08:34*	*03/17/25 09:57*	*1*

Lab Sample ID: LCS 885-22565/2-A
Matrix: Solid
Analysis Batch: 22562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22565

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	47.1		mg/Kg		94	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*74*		*62 - 134*

Lab Sample ID: 885-21545-9 MS
Matrix: Solid
Analysis Batch: 22562

Client Sample ID: S-23
Prep Type: Total/NA
Prep Batch: 22565

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		46.3	49.1		mg/Kg		106	44 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*92*		*62 - 134*

Lab Sample ID: 885-21545-9 MSD
Matrix: Solid
Analysis Batch: 22562

Client Sample ID: S-23
Prep Type: Total/NA
Prep Batch: 22565

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		46.6	49.0		mg/Kg		105	44 - 136	0	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*89*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-22568/1-A
Matrix: Solid
Analysis Batch: 22576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22568

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		03/17/25 08:51	03/17/25 10:36	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-22568/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22576 — **Prep Batch: 22568**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.0	14.6		mg/Kg		97	90 - 110

Lab Sample ID: LLCS 885-22568/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22576 — **Prep Batch: 22568**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.50	1.55		mg/Kg		104	50 - 150

Lab Sample ID: MRL 885-22576/42 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 22576

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.521		mg/L		104	50 - 150

QC Association Summary

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21545-1

GC VOA

Analysis Batch: 22566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	8015M/D	22574
885-21545-2	S-16	Total/NA	Solid	8015M/D	22574
885-21545-3	S-17	Total/NA	Solid	8015M/D	22574
885-21545-4	S-18	Total/NA	Solid	8015M/D	22574
885-21545-5	S-19	Total/NA	Solid	8015M/D	22574
885-21545-6	S-20	Total/NA	Solid	8015M/D	22574
885-21545-7	S-21	Total/NA	Solid	8015M/D	22574
885-21545-8	S-22	Total/NA	Solid	8015M/D	22574
885-21545-9	S-23	Total/NA	Solid	8015M/D	22574
MB 885-22574/1-A	Method Blank	Total/NA	Solid	8015M/D	22574
LCS 885-22574/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22574
885-21545-1 MS	S-15	Total/NA	Solid	8015M/D	22574
885-21545-1 MSD	S-15	Total/NA	Solid	8015M/D	22574

Analysis Batch: 22567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	8021B	22574
885-21545-2	S-16	Total/NA	Solid	8021B	22574
885-21545-3	S-17	Total/NA	Solid	8021B	22574
885-21545-4	S-18	Total/NA	Solid	8021B	22574
885-21545-5	S-19	Total/NA	Solid	8021B	22574
885-21545-6	S-20	Total/NA	Solid	8021B	22574
885-21545-7	S-21	Total/NA	Solid	8021B	22574
885-21545-8	S-22	Total/NA	Solid	8021B	22574
885-21545-9	S-23	Total/NA	Solid	8021B	22574
MB 885-22574/1-A	Method Blank	Total/NA	Solid	8021B	22574
LCS 885-22574/3-A	Lab Control Sample	Total/NA	Solid	8021B	22574
885-21545-2 MS	S-16	Total/NA	Solid	8021B	22574
885-21545-2 MSD	S-16	Total/NA	Solid	8021B	22574

Prep Batch: 22574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	5035	
885-21545-2	S-16	Total/NA	Solid	5035	
885-21545-3	S-17	Total/NA	Solid	5035	
885-21545-4	S-18	Total/NA	Solid	5035	
885-21545-5	S-19	Total/NA	Solid	5035	
885-21545-6	S-20	Total/NA	Solid	5035	
885-21545-7	S-21	Total/NA	Solid	5035	
885-21545-8	S-22	Total/NA	Solid	5035	
885-21545-9	S-23	Total/NA	Solid	5035	
MB 885-22574/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-22574/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-22574/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-21545-1 MS	S-15	Total/NA	Solid	5035	
885-21545-1 MSD	S-15	Total/NA	Solid	5035	
885-21545-2 MS	S-16	Total/NA	Solid	5035	
885-21545-2 MSD	S-16	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

GC Semi VOA

Analysis Batch: 22562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	8015M/D	22565
885-21545-2	S-16	Total/NA	Solid	8015M/D	22565
885-21545-3	S-17	Total/NA	Solid	8015M/D	22565
885-21545-4	S-18	Total/NA	Solid	8015M/D	22565
885-21545-5	S-19	Total/NA	Solid	8015M/D	22565
885-21545-6	S-20	Total/NA	Solid	8015M/D	22565
885-21545-7	S-21	Total/NA	Solid	8015M/D	22565
885-21545-8	S-22	Total/NA	Solid	8015M/D	22565
885-21545-9	S-23	Total/NA	Solid	8015M/D	22565
MB 885-22565/1-A	Method Blank	Total/NA	Solid	8015M/D	22565
LCS 885-22565/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22565
885-21545-9 MS	S-23	Total/NA	Solid	8015M/D	22565
885-21545-9 MSD	S-23	Total/NA	Solid	8015M/D	22565

Prep Batch: 22565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	SHAKE	
885-21545-2	S-16	Total/NA	Solid	SHAKE	
885-21545-3	S-17	Total/NA	Solid	SHAKE	
885-21545-4	S-18	Total/NA	Solid	SHAKE	
885-21545-5	S-19	Total/NA	Solid	SHAKE	
885-21545-6	S-20	Total/NA	Solid	SHAKE	
885-21545-7	S-21	Total/NA	Solid	SHAKE	
885-21545-8	S-22	Total/NA	Solid	SHAKE	
885-21545-9	S-23	Total/NA	Solid	SHAKE	
MB 885-22565/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-22565/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-21545-9 MS	S-23	Total/NA	Solid	SHAKE	
885-21545-9 MSD	S-23	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 22568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	300_Prep	
885-21545-2	S-16	Total/NA	Solid	300_Prep	
885-21545-3	S-17	Total/NA	Solid	300_Prep	
885-21545-4	S-18	Total/NA	Solid	300_Prep	
885-21545-5	S-19	Total/NA	Solid	300_Prep	
885-21545-6	S-20	Total/NA	Solid	300_Prep	
885-21545-7	S-21	Total/NA	Solid	300_Prep	
885-21545-8	S-22	Total/NA	Solid	300_Prep	
885-21545-9	S-23	Total/NA	Solid	300_Prep	
MB 885-22568/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-22568/3-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LLCS 885-22568/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 22576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-1	S-15	Total/NA	Solid	300.0	22568
885-21545-2	S-16	Total/NA	Solid	300.0	22568

QC Association Summary

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

HPLC/IC (Continued)

Analysis Batch: 22576 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21545-3	S-17	Total/NA	Solid	300.0	22568
885-21545-4	S-18	Total/NA	Solid	300.0	22568
885-21545-5	S-19	Total/NA	Solid	300.0	22568
885-21545-6	S-20	Total/NA	Solid	300.0	22568
885-21545-7	S-21	Total/NA	Solid	300.0	22568
885-21545-8	S-22	Total/NA	Solid	300.0	22568
885-21545-9	S-23	Total/NA	Solid	300.0	22568
MB 885-22568/1-A	Method Blank	Total/NA	Solid	300.0	22568
LCS 885-22568/3-A	Lab Control Sample	Total/NA	Solid	300.0	22568
LLCS 885-22568/2-A	Lab Control Sample	Total/NA	Solid	300.0	22568
MRL 885-22576/42	Lab Control Sample	Total/NA	Solid	300.0	

Lab Chronicle

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-15
Lab Sample ID: 885-21545-1
Date Collected: 03/14/25 10:00
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 11:23
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 11:23
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 10:18
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 11:18

Client Sample ID: S-16
Lab Sample ID: 885-21545-2
Date Collected: 03/14/25 10:05
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 11:45
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 11:45
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 10:29
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 11:28

Client Sample ID: S-17
Lab Sample ID: 885-21545-3
Date Collected: 03/14/25 10:10
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 12:06
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 12:06
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 10:39
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 11:38

Client Sample ID: S-18
Lab Sample ID: 885-21545-4
Date Collected: 03/14/25 10:15
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 12:28

Lab Chronicle

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-18
Lab Sample ID: 885-21545-4
Date Collected: 03/14/25 10:15
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 12:28
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 10:50
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 11:49

Client Sample ID: S-19
Lab Sample ID: 885-21545-5
Date Collected: 03/14/25 10:20
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 12:50
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 12:50
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 11:01
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 11:59

Client Sample ID: S-20
Lab Sample ID: 885-21545-6
Date Collected: 03/14/25 10:25
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 13:11
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 13:11
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 11:11
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 12:09

Client Sample ID: S-21
Lab Sample ID: 885-21545-7
Date Collected: 03/14/25 10:30
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 13:33
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 13:33

Lab Chronicle

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-21
Lab Sample ID: 885-21545-7
Date Collected: 03/14/25 10:30
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 11:22
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 12:40

Client Sample ID: S-22
Lab Sample ID: 885-21545-8
Date Collected: 03/14/25 10:35
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 13:55
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:31
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 13:55
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 11:32
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 12:51

Client Sample ID: S-23
Lab Sample ID: 885-21545-9
Date Collected: 03/14/25 10:40
Matrix: Solid
Date Received: 03/15/25 07:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:33
Total/NA	Analysis	8015M/D		1	22566	AT	EET ALB	03/17/25 14:17
Total/NA	Prep	5035			22574	AT	EET ALB	03/17/25 09:33
Total/NA	Analysis	8021B		1	22567	AT	EET ALB	03/17/25 14:17
Total/NA	Prep	SHAKE			22565	MI	EET ALB	03/17/25 08:34
Total/NA	Analysis	8015M/D		1	22562	MI	EET ALB	03/17/25 11:43
Total/NA	Prep	300_Prep			22568	DL	EET ALB	03/17/25 09:07
Total/NA	Analysis	300.0		20	22576	RC	EET ALB	03/17/25 13:01

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ensolum
Job ID: 885-21545-1
Project/Site: Chaco Plant Amine

Laboratory: Eurofins Albuquerque

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-26

Chain-of-Custody Record

Client: Ensolum

Mailing Address: 606 S Rio Grande Suit A 87410

Phone #

email or Fax#:

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

Accreditation ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 168 Hr
☐ Standard ☒ Rush 3-17-25

Project Name: Chaco Plant Amine

Project #:

Project Manager: R Summers

Sampler: C D Aponte

On Ice: ☒ Yes ☐ No 4 of 9

# of Coolers: 1

Cooler Temp (including CF): 0.1 - 0.1 = 0 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109 885-21545 COC
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO3, NO2, PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/14	1000	S	S-15	4oz Jar	Cool		✓	✓					✓			
3/14	1005	S	S-16	"	"		✓	✓					✓			
3/14	1010	S	S-17				✓	✓					✓			
3/14	1015	S	S-18				✓	✓					✓			
3/14	1020	S	S-19				✓	✓					✓			
3/14	1025	S	S-20				✓	✓					✓			
3/14	1030	S	S-21				✓	✓					✓			
3/14	1035	S	S-22				✓	✓					✓			
3/14	1040	S	S-23				✓	✓					✓			

Analysis Request

Date	Time	Relinquished by	Received by:	Via	Date	Time
3/14/25	1456		NA Wade		3/14/25	1456
3/14/25	1730			courier	3/15/25	7:05

Remarks: Tom Long AM140558 Same Day

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.

Login Sample Receipt Checklist

Client: Ensolum Job Number: 885-21545-1

Login Number: 21545 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	False	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kyle Summers
Ensolum
606 S Rio Grande
Suite A
Aztec, New Mexico 87410

Generated 3/26/2025 12:48:48 PM

JOB DESCRIPTION

Chaco Plant Amine

JOB NUMBER

885-21782-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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3/26/2025 12:48:48 PM

Authorized for release by
John Caldwell, Project Manager
john.caldwell@et.eurofinsus.com
(505)345-3975

Client: Ensolum
Project/Site: Chaco Plant Amine

Laboratory Job ID: 885-21782-1

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project: Chaco Plant Amine

Job ID: 885-21782-1

Job ID: 885-21782-1 Eurofins Albuquerque

Job Narrative
885-21782-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/20/2025 6:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 885-22776 recovered above the upper control limit for m,p-xylenes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: S-17a (885-21782-1), S-24 (885-21782-2), S-25 (885-21782-3), S-26 (885-21782-4) and S-27 (885-21782-5).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-17a
Lab Sample ID: 885-21782-1
Date Collected: 03/19/25 10:00
Matrix: Solid
Date Received: 03/20/25 06:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		1.8		mg/Kg		03/20/25 08:42	03/20/25 11:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*03/20/25 08:42*	*03/20/25 11:00*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.0092		mg/Kg		03/20/25 08:42	03/20/25 11:00	1
Ethylbenzene	ND		0.018		mg/Kg		03/20/25 08:42	03/20/25 11:00	1
Toluene	ND		0.018		mg/Kg		03/20/25 08:42	03/20/25 11:00	1
Xylenes, Total	ND		0.037		mg/Kg		03/20/25 08:42	03/20/25 11:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*	*03/20/25 08:42*	*03/20/25 11:00*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4		mg/Kg		03/20/25 09:17	03/20/25 10:57	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/20/25 09:17	03/20/25 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*108*		*62 - 134*	*03/20/25 09:17*	*03/20/25 10:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		59		mg/Kg		03/20/25 09:44	03/20/25 11:19	20

Client Sample Results

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-24
Lab Sample ID: 885-21782-2
Date Collected: 03/19/25 10:05
Matrix: Solid
Date Received: 03/20/25 06:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		2.8		mg/Kg		03/20/25 08:42	03/20/25 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*03/20/25 08:42*	*03/20/25 11:23*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.014		mg/Kg		03/20/25 08:42	03/20/25 11:23	1
Ethylbenzene	ND		0.028		mg/Kg		03/20/25 08:42	03/20/25 11:23	1
Toluene	ND		0.028		mg/Kg		03/20/25 08:42	03/20/25 11:23	1
Xylenes, Total	ND		0.057		mg/Kg		03/20/25 08:42	03/20/25 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*48 - 145*	*03/20/25 08:42*	*03/20/25 11:23*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**10**		9.2		mg/Kg		03/20/25 09:17	03/20/25 11:08	1
Motor Oil Range Organics [C28-C40]	ND		46		mg/Kg		03/20/25 09:17	03/20/25 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*108*		*62 - 134*	*03/20/25 09:17*	*03/20/25 11:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/20/25 09:44	03/20/25 11:29	20

Client Sample Results

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-25
Lab Sample ID: 885-21782-3
Date Collected: 03/19/25 10:10
Matrix: Solid
Date Received: 03/20/25 06:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		2.9		mg/Kg		03/20/25 08:42	03/20/25 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*35 - 166*	*03/20/25 08:42*	*03/20/25 11:47*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.014		mg/Kg		03/20/25 08:42	03/20/25 11:47	1
Ethylbenzene	ND		0.029		mg/Kg		03/20/25 08:42	03/20/25 11:47	1
Toluene	ND		0.029		mg/Kg		03/20/25 08:42	03/20/25 11:47	1
Xylenes, Total	ND		0.057		mg/Kg		03/20/25 08:42	03/20/25 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*48 - 145*	*03/20/25 08:42*	*03/20/25 11:47*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**38**		9.4		mg/Kg		03/20/25 09:17	03/20/25 11:18	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/20/25 09:17	03/20/25 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*115*		*62 - 134*	*03/20/25 09:17*	*03/20/25 11:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/20/25 09:44	03/20/25 11:39	20

Client Sample Results

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-26
Lab Sample ID: 885-21782-4
Date Collected: 03/19/25 10:15
Matrix: Solid
Date Received: 03/20/25 06:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		2.9		mg/Kg		03/20/25 09:15	03/20/25 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*03/20/25 09:15*	*03/20/25 12:10*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.014		mg/Kg		03/20/25 09:15	03/20/25 12:10	1
Ethylbenzene	ND		0.029		mg/Kg		03/20/25 09:15	03/20/25 12:10	1
Toluene	ND		0.029		mg/Kg		03/20/25 09:15	03/20/25 12:10	1
Xylenes, Total	ND		0.057		mg/Kg		03/20/25 09:15	03/20/25 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*48 - 145*	*03/20/25 09:15*	*03/20/25 12:10*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**16**		9.9		mg/Kg		03/20/25 09:17	03/20/25 11:29	1
Motor Oil Range Organics [C28-C40]	ND		49		mg/Kg		03/20/25 09:17	03/20/25 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*	*03/20/25 09:17*	*03/20/25 11:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		60		mg/Kg		03/20/25 09:44	03/20/25 11:49	20

Client Sample Results

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-27
Lab Sample ID: 885-21782-5
Date Collected: 03/19/25 10:20
Matrix: Solid
Date Received: 03/20/25 06:35

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		2.8		mg/Kg		03/20/25 09:15	03/20/25 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*35 - 166*	*03/20/25 09:15*	*03/20/25 12:34*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.014		mg/Kg		03/20/25 09:15	03/20/25 12:34	1
Ethylbenzene	ND		0.028		mg/Kg		03/20/25 09:15	03/20/25 12:34	1
Toluene	ND		0.028		mg/Kg		03/20/25 09:15	03/20/25 12:34	1
Xylenes, Total	ND		0.056		mg/Kg		03/20/25 09:15	03/20/25 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*48 - 145*	*03/20/25 09:15*	*03/20/25 12:34*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**15**		9.4		mg/Kg		03/20/25 09:17	03/20/25 11:39	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/20/25 09:17	03/20/25 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*98*		*62 - 134*	*03/20/25 09:17*	*03/20/25 11:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61		mg/Kg		03/20/25 09:44	03/20/25 11:59	20

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21782-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-22774/1-A
Matrix: Solid
Analysis Batch: 22775

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22774

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/20/25 08:42	03/20/25 10:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*35 - 166*	*03/20/25 08:42*	*03/20/25 10:36*	*1*

Lab Sample ID: LCS 885-22774/2-A
Matrix: Solid
Analysis Batch: 22775

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22774

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	24.7		mg/Kg		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*184*		*35 - 166*

Lab Sample ID: 885-21782-1 MS
Matrix: Solid
Analysis Batch: 22775

Client Sample ID: S-17a
Prep Type: Total/NA
Prep Batch: 22774

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		9.22	9.65		mg/Kg		105	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*194*		*35 - 166*

Lab Sample ID: 885-21782-1 MSD
Matrix: Solid
Analysis Batch: 22775

Client Sample ID: S-17a
Prep Type: Total/NA
Prep Batch: 22774

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		9.22	9.72		mg/Kg		105	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*198*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-22774/1-A
Matrix: Solid
Analysis Batch: 22776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22774

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/20/25 08:42	03/20/25 10:36	1
Ethylbenzene	ND		0.050		mg/Kg		03/20/25 08:42	03/20/25 10:36	1
Toluene	ND		0.050		mg/Kg		03/20/25 08:42	03/20/25 10:36	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21782-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-22774/1-A
Matrix: Solid
Analysis Batch: 22776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22774

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		03/20/25 08:42	03/20/25 10:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*48 - 145*	*03/20/25 08:42*	*03/20/25 10:36*	*1*

Lab Sample ID: LCS 885-22774/3-A
Matrix: Solid
Analysis Batch: 22776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22774

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.990		mg/Kg		99	70 - 130		
Ethylbenzene			1.00	0.947		mg/Kg		95	70 - 130		
Toluene			1.00	0.967		mg/Kg		97	70 - 130		
Xylenes, Total			3.00	3.12		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*

Lab Sample ID: 885-21782-2 MS
Matrix: Solid
Analysis Batch: 22776

Client Sample ID: S-24
Prep Type: Total/NA
Prep Batch: 22774

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.569	0.606		mg/Kg		107	70 - 130		
Ethylbenzene	ND		0.569	0.598		mg/Kg		105	70 - 130		
Toluene	ND		0.569	0.609		mg/Kg		107	70 - 130		
Xylenes, Total	ND		1.71	1.88		mg/Kg		110	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*48 - 145*

Lab Sample ID: 885-21782-2 MSD
Matrix: Solid
Analysis Batch: 22776

Client Sample ID: S-24
Prep Type: Total/NA
Prep Batch: 22774

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.569	0.610		mg/Kg		107	70 - 130	1	20
Ethylbenzene	ND		0.569	0.603		mg/Kg		106	70 - 130	1	20
Toluene	ND		0.569	0.600		mg/Kg		105	70 - 130	1	20
Xylenes, Total	ND		1.71	1.87		mg/Kg		110	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*48 - 145*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21782-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-22786/1-A
Matrix: Solid
Analysis Batch: 22780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22786

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/20/25 09:17	03/20/25 10:36	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/20/25 09:17	03/20/25 10:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*106*		*62 - 134*	*03/20/25 09:17*	*03/20/25 10:36*	*1*

Lab Sample ID: LCS 885-22786/2-A
Matrix: Solid
Analysis Batch: 22780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22786

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	49.2		mg/Kg		98	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*80*		*62 - 134*

Lab Sample ID: 885-21782-5 MS
Matrix: Solid
Analysis Batch: 22780

Client Sample ID: S-27
Prep Type: Total/NA
Prep Batch: 22786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	15		47.1	58.4		mg/Kg		91	44 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*91*		*62 - 134*

Lab Sample ID: 885-21782-5 MSD
Matrix: Solid
Analysis Batch: 22780

Client Sample ID: S-27
Prep Type: Total/NA
Prep Batch: 22786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	15		45.8	60.3		mg/Kg		98	44 - 136	3	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*93*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-22791/1-A
Matrix: Solid
Analysis Batch: 22795

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 22791

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		03/20/25 09:44	03/20/25 10:59	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21782-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-22791/2-A
Matrix: Solid
Analysis Batch: 22795

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 22791

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			15.0	14.4		mg/Kg		96	90 - 110		

Lab Sample ID: 885-21782-1 MS
Matrix: Solid
Analysis Batch: 22795

Client Sample ID: S-17a
Prep Type: Total/NA
Prep Batch: 22791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		29.9	ND		mg/Kg		NC	50 - 150		

Lab Sample ID: 885-21782-1 MSD
Matrix: Solid
Analysis Batch: 22795

Client Sample ID: S-17a
Prep Type: Total/NA
Prep Batch: 22791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		29.8	ND		mg/Kg		NC	50 - 150	NC	20

QC Association Summary

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-21782-1

GC VOA

Prep Batch: 22774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	5035	
885-21782-2	S-24	Total/NA	Solid	5035	
885-21782-3	S-25	Total/NA	Solid	5035	
885-21782-4	S-26	Total/NA	Solid	5035	
885-21782-5	S-27	Total/NA	Solid	5035	
MB 885-22774/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-22774/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-22774/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-21782-1 MS	S-17a	Total/NA	Solid	5035	
885-21782-1 MSD	S-17a	Total/NA	Solid	5035	
885-21782-2 MS	S-24	Total/NA	Solid	5035	
885-21782-2 MSD	S-24	Total/NA	Solid	5035	

Analysis Batch: 22775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	8015M/D	22774
885-21782-2	S-24	Total/NA	Solid	8015M/D	22774
885-21782-3	S-25	Total/NA	Solid	8015M/D	22774
885-21782-4	S-26	Total/NA	Solid	8015M/D	22774
885-21782-5	S-27	Total/NA	Solid	8015M/D	22774
MB 885-22774/1-A	Method Blank	Total/NA	Solid	8015M/D	22774
LCS 885-22774/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22774
885-21782-1 MS	S-17a	Total/NA	Solid	8015M/D	22774
885-21782-1 MSD	S-17a	Total/NA	Solid	8015M/D	22774

Analysis Batch: 22776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	8021B	22774
885-21782-2	S-24	Total/NA	Solid	8021B	22774
885-21782-3	S-25	Total/NA	Solid	8021B	22774
885-21782-4	S-26	Total/NA	Solid	8021B	22774
885-21782-5	S-27	Total/NA	Solid	8021B	22774
MB 885-22774/1-A	Method Blank	Total/NA	Solid	8021B	22774
LCS 885-22774/3-A	Lab Control Sample	Total/NA	Solid	8021B	22774
885-21782-2 MS	S-24	Total/NA	Solid	8021B	22774
885-21782-2 MSD	S-24	Total/NA	Solid	8021B	22774

GC Semi VOA

Analysis Batch: 22780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	8015M/D	22786
885-21782-2	S-24	Total/NA	Solid	8015M/D	22786
885-21782-3	S-25	Total/NA	Solid	8015M/D	22786
885-21782-4	S-26	Total/NA	Solid	8015M/D	22786
885-21782-5	S-27	Total/NA	Solid	8015M/D	22786
MB 885-22786/1-A	Method Blank	Total/NA	Solid	8015M/D	22786
LCS 885-22786/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	22786
885-21782-5 MS	S-27	Total/NA	Solid	8015M/D	22786
885-21782-5 MSD	S-27	Total/NA	Solid	8015M/D	22786

QC Association Summary

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

GC Semi VOA

Prep Batch: 22786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	SHAKE	
885-21782-2	S-24	Total/NA	Solid	SHAKE	
885-21782-3	S-25	Total/NA	Solid	SHAKE	
885-21782-4	S-26	Total/NA	Solid	SHAKE	
885-21782-5	S-27	Total/NA	Solid	SHAKE	
MB 885-22786/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-22786/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-21782-5 MS	S-27	Total/NA	Solid	SHAKE	
885-21782-5 MSD	S-27	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 22791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	300_Prep	
885-21782-2	S-24	Total/NA	Solid	300_Prep	
885-21782-3	S-25	Total/NA	Solid	300_Prep	
885-21782-4	S-26	Total/NA	Solid	300_Prep	
885-21782-5	S-27	Total/NA	Solid	300_Prep	
MB 885-22791/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-22791/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-21782-1 MS	S-17a	Total/NA	Solid	300_Prep	
885-21782-1 MSD	S-17a	Total/NA	Solid	300_Prep	

Analysis Batch: 22795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-21782-1	S-17a	Total/NA	Solid	300.0	22791
885-21782-2	S-24	Total/NA	Solid	300.0	22791
885-21782-3	S-25	Total/NA	Solid	300.0	22791
885-21782-4	S-26	Total/NA	Solid	300.0	22791
885-21782-5	S-27	Total/NA	Solid	300.0	22791
MB 885-22791/1-A	Method Blank	Total/NA	Solid	300.0	22791
LCS 885-22791/2-A	Lab Control Sample	Total/NA	Solid	300.0	22791
885-21782-1 MS	S-17a	Total/NA	Solid	300.0	22791
885-21782-1 MSD	S-17a	Total/NA	Solid	300.0	22791

Lab Chronicle

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-17a
Lab Sample ID: 885-21782-1
Date Collected: 03/19/25 10:00
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8015M/D		1	22775	JP	EET ALB	03/20/25 11:00
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8021B		1	22776	JP	EET ALB	03/20/25 11:00
Total/NA	Prep	SHAKE			22786	MI	EET ALB	03/20/25 09:17
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 10:57
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 11:19

Client Sample ID: S-24
Lab Sample ID: 885-21782-2
Date Collected: 03/19/25 10:05
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8015M/D		1	22775	JP	EET ALB	03/20/25 11:23
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8021B		1	22776	JP	EET ALB	03/20/25 11:23
Total/NA	Prep	SHAKE			22786	MI	EET ALB	03/20/25 09:17
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 11:08
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 11:29

Client Sample ID: S-25
Lab Sample ID: 885-21782-3
Date Collected: 03/19/25 10:10
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8015M/D		1	22775	JP	EET ALB	03/20/25 11:47
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 08:42
Total/NA	Analysis	8021B		1	22776	JP	EET ALB	03/20/25 11:47
Total/NA	Prep	SHAKE			22786	MI	EET ALB	03/20/25 09:17
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 11:18
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 11:39

Client Sample ID: S-26
Lab Sample ID: 885-21782-4
Date Collected: 03/19/25 10:15
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 09:15
Total/NA	Analysis	8015M/D		1	22775	JP	EET ALB	03/20/25 12:10

Lab Chronicle

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Client Sample ID: S-26
Lab Sample ID: 885-21782-4
Date Collected: 03/19/25 10:15
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 09:15
Total/NA	Analysis	8021B		1	22776	JP	EET ALB	03/20/25 12:10
Total/NA	Prep	SHAKE			22786	MI	EET ALB	03/20/25 09:17
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 11:29
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 11:49

Client Sample ID: S-27
Lab Sample ID: 885-21782-5
Date Collected: 03/19/25 10:20
Matrix: Solid
Date Received: 03/20/25 06:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 09:15
Total/NA	Analysis	8015M/D		1	22775	JP	EET ALB	03/20/25 12:34
Total/NA	Prep	5035			22774	JP	EET ALB	03/20/25 09:15
Total/NA	Analysis	8021B		1	22776	JP	EET ALB	03/20/25 12:34
Total/NA	Prep	SHAKE			22786	MI	EET ALB	03/20/25 09:17
Total/NA	Analysis	8015M/D		1	22780	MI	EET ALB	03/20/25 11:39
Total/NA	Prep	300_Prep			22791	DL	EET ALB	03/20/25 09:44
Total/NA	Analysis	300.0		20	22795	DL	EET ALB	03/20/25 11:59

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ensolum
Job ID: 885-21782-1
Project/Site: Chaco Plant Amine

Laboratory: Eurofins Albuquerque

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-26

Chain-of-Custody Record

Client: Ensolum

Mailing Address: 606 S Rio Grande Suit A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Hard
☐ Standard ☑ Rush 3-20-25

Project Name: Chaco Plant Emine

Project #:

Project Manager: K Summers

Sampler: C D Aponti

On Ice: ☑ Yes ☐ No 4oz

# of Coolers: 1

Cooler Temp(Including CF): 0.9+0=0.9 (°C)

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

885-21782 COC

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO3, NO2, PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/19	1000	S	S-17a	4oz Jar	Cool		✓	✓					✓			
3/19	1005	S	S-24	4oz Jar	Cool		✓	✓					✓			
3/19	1010	S	S-25	4oz Jar	Cool		✓	✓					✓			
3/19	1015	S	S-26	4oz Jar	Cool		✓	✓					✓			
3/19	1020	S	S-27	4oz Jar	Cool		✓	✓					✓			

Analysis Request

Date	Time	Relinquished by	Received by	Via	Date	Time
3/19/25	1300			Courier	3/20/25	6:35
Date	Time	Relinquished by	Received by	Via	Date	Time

Remarks: Tom Long AM 140558

Sent Dry

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.

Login Sample Receipt Checklist

Client: Ensolum Job Number: 885-21782-1

Login Number: 21782 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kyle Summers
Ensolum
606 S Rio Grande
Suite A
Aztec, New Mexico 87410

Generated 4/1/2025 2:55:29 PM

JOB DESCRIPTION

Chaco Plant Amine

JOB NUMBER

885-22306-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

See page two for job notes and contact information.

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

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4/1/2025 2:55:29 PM

Authorized for release by
John Caldwell, Project Manager
john.caldwell@et.eurofinsus.com
(505)345-3975

Client: Ensolum
Project/Site: Chaco Plant Amine

Laboratory Job ID: 885-22306-1

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project: Chaco Plant Amine

Job ID: 885-22306-1

Job ID: 885-22306-1 Eurofins Albuquerque

Job Narrative
885-22306-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 3/29/2025 8:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.4°C.

Gasoline Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method 8015D_DRO: The continuing calibration verification (CCV) associated with batch 885-23370 recovered above the upper control limit for Diesel Range Organics [C10-C28]. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: BF-1 (885-22306-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Ensolum
Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

Client Sample ID: BF-1
Lab Sample ID: 885-22306-1
Date Collected: 03/28/25 09:00
Matrix: Solid
Date Received: 03/29/25 08:40

Method: SW846 8015M/D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.0		mg/Kg		03/31/25 11:40	03/31/25 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*35 - 166*	*03/31/25 11:40*	*03/31/25 13:42*	*1*

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.015		mg/Kg		03/31/25 11:40	03/31/25 13:42	1
Ethylbenzene	ND		0.030		mg/Kg		03/31/25 11:40	03/31/25 13:42	1
Toluene	ND		0.030		mg/Kg		03/31/25 11:40	03/31/25 13:42	1
Xylenes, Total	ND		0.060		mg/Kg		03/31/25 11:40	03/31/25 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*48 - 145*	*03/31/25 11:40*	*03/31/25 13:42*	*1*

Method: SW846 8015M/D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3		mg/Kg		03/31/25 09:38	03/31/25 14:26	1
Motor Oil Range Organics [C28-C40]	ND		47		mg/Kg		03/31/25 09:38	03/31/25 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*124*		*62 - 134*	*03/31/25 09:38*	*03/31/25 14:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		61		mg/Kg		03/31/25 10:42	03/31/25 12:53	20

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-22306-1

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-23396/1-A
Matrix: Solid
Analysis Batch: 23383

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23396

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0		mg/Kg		03/31/25 11:40	03/31/25 13:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*35 - 166*	*03/31/25 11:40*	*03/31/25 13:19*	*1*

Lab Sample ID: LCS 885-23396/3-A
Matrix: Solid
Analysis Batch: 23383

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23396

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]			25.0	27.2		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*210*		*35 - 166*

Lab Sample ID: 885-22306-1 MS
Matrix: Solid
Analysis Batch: 23383

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics [C6 - C10]	ND		14.9	16.7		mg/Kg		112	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*216*		*35 - 166*

Lab Sample ID: 885-22306-1 MSD
Matrix: Solid
Analysis Batch: 23383

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		14.9	16.0		mg/Kg		108	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*215*		*35 - 166*

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-23396/1-A
Matrix: Solid
Analysis Batch: 23384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23396

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025		mg/Kg		03/31/25 11:40	03/31/25 13:19	1
Ethylbenzene	ND		0.050		mg/Kg		03/31/25 11:40	03/31/25 13:19	1
Toluene	ND		0.050		mg/Kg		03/31/25 11:40	03/31/25 13:19	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-22306-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-23396/1-A
Matrix: Solid
Analysis Batch: 23384

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23396

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10		mg/Kg		03/31/25 11:40	03/31/25 13:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*	*03/31/25 11:40*	*03/31/25 13:19*	*1*

Lab Sample ID: LCS 885-23396/2-A
Matrix: Solid
Analysis Batch: 23384

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23396

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			1.00	0.943		mg/Kg		94	70 - 130		
Ethylbenzene			1.00	0.937		mg/Kg		94	70 - 130		
Toluene			1.00	0.953		mg/Kg		95	70 - 130		
Xylenes, Total			3.00	2.91		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*

Lab Sample ID: 885-22306-1 MS
Matrix: Solid
Analysis Batch: 23384

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		0.595	0.620		mg/Kg		104	70 - 130		
Ethylbenzene	ND		0.595	0.611		mg/Kg		103	70 - 130		
Toluene	ND		0.595	0.622		mg/Kg		104	70 - 130		
Xylenes, Total	ND		1.79	1.88		mg/Kg		105	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*48 - 145*

Lab Sample ID: 885-22306-1 MSD
Matrix: Solid
Analysis Batch: 23384

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.595	0.595		mg/Kg		100	70 - 130	4	20
Ethylbenzene	ND		0.595	0.596		mg/Kg		100	70 - 130	2	20
Toluene	ND		0.595	0.588		mg/Kg		99	70 - 130	6	20
Xylenes, Total	ND		1.79	1.85		mg/Kg		103	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*48 - 145*

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-22306-1

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-23375/1-A
Matrix: Solid
Analysis Batch: 23370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23375

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10		mg/Kg		03/31/25 09:38	03/31/25 15:53	1
Motor Oil Range Organics [C28-C40]	ND		50		mg/Kg		03/31/25 09:38	03/31/25 15:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Di-n-octyl phthalate (Surr)	*112*		*62 - 134*	*03/31/25 09:38*	*03/31/25 15:53*	*1*

Lab Sample ID: LCS 885-23375/2-A
Matrix: Solid
Analysis Batch: 23370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23375

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]			50.0	41.2		mg/Kg		82	60 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*99*		*62 - 134*

Lab Sample ID: 885-22306-1 MS
Matrix: Solid
Analysis Batch: 23370

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics [C10-C28]	ND		46.6	43.8		mg/Kg		94	44 - 136		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*95*		*62 - 134*

Lab Sample ID: 885-22306-1 MSD
Matrix: Solid
Analysis Batch: 23370

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		49.7	47.9		mg/Kg		96	44 - 136	9	32

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Di-n-octyl phthalate (Surr)	*88*		*62 - 134*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-23388/1-A
Matrix: Solid
Analysis Batch: 23391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 23388

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5		mg/Kg		03/31/25 10:42	03/31/25 12:33	1

QC Sample Results

Client: Ensolum
Project/Site: Chaco Plant Amine

Job ID: 885-22306-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-23388/2-A
Matrix: Solid
Analysis Batch: 23391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 23388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			15.0	14.7		mg/Kg		98	90 - 110		

Lab Sample ID: 885-22306-1 MS
Matrix: Solid
Analysis Batch: 23391

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23388

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	ND		29.8	ND		mg/Kg		NC	50 - 150		

Lab Sample ID: 885-22306-1 MSD
Matrix: Solid
Analysis Batch: 23391

Client Sample ID: BF-1
Prep Type: Total/NA
Prep Batch: 23388

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	ND		30.0	ND		mg/Kg		NC	50 - 150	NC	20

QC Association Summary

Client: Ensolum
Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

GC VOA

Analysis Batch: 23383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	8015M/D	23396
MB 885-23396/1-A	Method Blank	Total/NA	Solid	8015M/D	23396
LCS 885-23396/3-A	Lab Control Sample	Total/NA	Solid	8015M/D	23396
885-22306-1 MS	BF-1	Total/NA	Solid	8015M/D	23396
885-22306-1 MSD	BF-1	Total/NA	Solid	8015M/D	23396

Analysis Batch: 23384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	8021B	23396
MB 885-23396/1-A	Method Blank	Total/NA	Solid	8021B	23396
LCS 885-23396/2-A	Lab Control Sample	Total/NA	Solid	8021B	23396
885-22306-1 MS	BF-1	Total/NA	Solid	8021B	23396
885-22306-1 MSD	BF-1	Total/NA	Solid	8021B	23396

Prep Batch: 23396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	5035	
MB 885-23396/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-23396/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-23396/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-22306-1 MS	BF-1	Total/NA	Solid	5035	
885-22306-1 MS	BF-1	Total/NA	Solid	5035	
885-22306-1 MSD	BF-1	Total/NA	Solid	5035	
885-22306-1 MSD	BF-1	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 23370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	8015M/D	23375
MB 885-23375/1-A	Method Blank	Total/NA	Solid	8015M/D	23375
LCS 885-23375/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	23375
885-22306-1 MS	BF-1	Total/NA	Solid	8015M/D	23375
885-22306-1 MSD	BF-1	Total/NA	Solid	8015M/D	23375

Prep Batch: 23375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	SHAKE	
MB 885-23375/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-23375/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-22306-1 MS	BF-1	Total/NA	Solid	SHAKE	
885-22306-1 MSD	BF-1	Total/NA	Solid	SHAKE	

HPLC/IC

Prep Batch: 23388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	300_Prep	
MB 885-23388/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-23388/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-22306-1 MS	BF-1	Total/NA	Solid	300_Prep	
885-22306-1 MSD	BF-1	Total/NA	Solid	300_Prep	

QC Association Summary

Client: Ensolum
Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

HPLC/IC

Analysis Batch: 23391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-22306-1	BF-1	Total/NA	Solid	300.0	23388
MB 885-23388/1-A	Method Blank	Total/NA	Solid	300.0	23388
LCS 885-23388/2-A	Lab Control Sample	Total/NA	Solid	300.0	23388
885-22306-1 MS	BF-1	Total/NA	Solid	300.0	23388
885-22306-1 MSD	BF-1	Total/NA	Solid	300.0	23388

Lab Chronicle

Client: Ensolum
Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

Client Sample ID: BF-1
Date Collected: 03/28/25 09:00
Date Received: 03/29/25 08:40

Lab Sample ID: 885-22306-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			23396	JP	EET ALB	03/31/25 11:40
Total/NA	Analysis	8015M/D		1	23383	JP	EET ALB	03/31/25 13:42
Total/NA	Prep	5035			23396	JP	EET ALB	03/31/25 11:40
Total/NA	Analysis	8021B		1	23384	JP	EET ALB	03/31/25 13:42
Total/NA	Prep	SHAKE			23375	MI	EET ALB	03/31/25 09:38
Total/NA	Analysis	8015M/D		1	23370	MI	EET ALB	03/31/25 14:26
Total/NA	Prep	300_Prep			23388	DL	EET ALB	03/31/25 10:42
Total/NA	Analysis	300.0		20	23391	DL	EET ALB	03/31/25 12:53

Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ensolum
Job ID: 885-22306-1
Project/Site: Chaco Plant Amine

Laboratory: Eurofins Albuquerque

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-26

Chain-of-Custody Record

Client: Ensolum

Mailing Address: 606 S Rio Grand Suit A 87410

Phone #:

email or Fax#:

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

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: 1 hr
☐ Standard ☑ Rush 3-31-25

Project Name: Chaco Plant Amine

Project #:

Project Manager: K Summers

Sampler: CDAdonti

On Ice: ☑ Yes ☐ No check

# of Coolers: 1

Cooler Temp(Including CF): 3.2+0.2=3.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORA
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109 885-22306 COC
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / ~~MTBE~~ / ~~TMB's~~ (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, ~~F~~, ~~Br~~, NO_3, ~~NO_2~~, PO_4, ~~SO_4~~	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
3/28	900	S	BF-1	4oz Jar	Cool		✓	✓					✓			

Date	Time	Relinquished by	Received by	Via	Date	Time
3/28	1127					
3/28/25	1706			courier	3/29/25	8:40

Remarks:
Tom Long
AM 140558
Same Day

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.

Login Sample Receipt Checklist

Client: Ensolum Job Number: 885-22306-1

Login Number: 22306 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 451931

QUESTIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2427534650**
Incident Name	**NAPP2427534650 CHACO PLANT WATER/AMINE SPILL @ 0**
Incident Type	**Other**
Incident Status	**Reclamation Report Received**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	CHACO PLANT WATER/AMINE SPILL
Date Release Discovered	09/30/2024
Surface Owner	Private

Incident Details *Please answer all the questions in this group.*	
Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	Cause: Human Error | Frac Tank | Other (Specify) | Released: 67 BBL | Recovered: 25 BBL | Lost: 42 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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

QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 10/08/2024

Sante Fe Main Office
Phone: (505) 476-3441

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

QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	140
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	83
GRO+DRO (EPA SW-846 Method 8015M)	83
BTEX (EPA SW-846 Method 8021B or 8260B)	0.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	03/12/2025
On what date will (or did) the final sampling or liner inspection occur	03/19/2025
On what date will (or was) the remediation complete(d)	03/19/2025
What is the estimated surface area (in square feet) that will be reclaimed	5550
What is the estimated volume (in cubic yards) that will be reclaimed	231
What is the estimated surface area (in square feet) that will be remediated	5550
What is the estimated volume (in cubic yards) that will be remediated	231
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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Oil Conservation Division
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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	ENVIROTECH LANDFARM #1 [fEEM0112334691]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 04/15/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**445678**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**03/28/2025**
What was the (estimated) number of samples that were to be gathered	**1**
What was the sampling surface area in square feet	**400**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	5550
What was the total volume (cubic yards) remediated	231
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	5550
What was the total volume (in cubic yards) reclaimed	231
Summarize any additional remediation activities not included by answers (above)	None

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 04/15/2025

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	5550
What was the total volume of replacement material (in cubic yards) for this site	231
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	04/01/2050
Summarize any additional reclamation activities not included by answers (above)	None
The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 04/15/2025

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QUESTIONS (continued)

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 451931
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation closure and reclamation report are approved, but it should be noted that the incident occurred within an area reasonably needed for production or subsequently drilling operations and that the reclamation portion has not been completed per 19.15.29.13D (2) NMAC.	6/25/2025