

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP20365469843
District RP	
Facility ID	
Application ID	

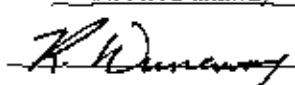
Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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.

Printed Name: Robert Dunaway Title: Senior Environmental Engineer
Signature:  Date: 10/8/21
email: rhunaway@eprod.com Telephone: 575-628-6802

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	nAPP20365469843
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Application ID	

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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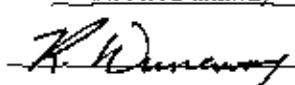
Closure

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- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
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- ☒ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)
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Printed Name: Robert Dunaway Title: Senior Environmental Engineer
Signature:  Date: 10/8/21
email: rhunaway@eprod.com Telephone: 575-628-6802

State of New Mexico
Oil Conservation Division

Incident ID	nAPP20365469843
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Facility ID	
Application ID	

OCD Only

Received by: Robert Hamlet

Date: 3/1/2022

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert Hamlet

Date: 3/1/2022

Printed Name: Robert Hamlet

Title: Environmental Specialist - Advanced



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

October 8, 2021

New Mexico Oil Conservation Division
Via the OCD Permitting Website

Re: Closure Report
Enterprise Field Services, LLC
58548OUQ Line Strike
Eddy County, New Mexico
Latitude: 32.236741, Longitude: -104.419843
Incident No. NAPP2036546984

Sir or Madam:

Enterprise Field Services, LLC ("Enterprise") is submitting the attached closure report required by 19.15.29.12.B.(1) NMAC associated with the 58548OUQ Line Strike (Incident No. NAPP2036546984).

On December 15, 2020, a third party line strike occurred on Line 58548OUQ that resulted in a natural gas and liquids release. Initial site assessment, excavation and confirmation soil sampling were subsequently conducted. An extension was approved by the OCD on March 15, 2021 (see Attachment 1 at the end of the included report) to allow for additional excavation as the site did not meet the basic OCD cleanup standards. A second extension was approved on June 28, 2021 (see Attachment 1 at the end of the included report) to allow Enterprise time to drill a confirmation well to determine if groundwater depth is > 50 ft bgs (so that cleanup standards for groundwater >50 bgs could be used), to take final samples, and to issue the report. The second extension ended on September 11, 2021.

Due to the unavailability of drillers, the confirmation well was not completed until August 16, 2021. This effort did verify that there was no groundwater present at 60 ft bgs. A copy of the well drillers log and associated map are attached (see Attachment 2 at the end of the attached report). Based on this information and the results of the most recent analytical results, closure of this effort is warranted. However, the analytical data could not be used for the final report as the sampling event was not associated with a final sampling event notification to the OCD.

Enterprise via our 3rd party contractor submitted notice of the final sampling event to OCD on September 2, 2021 with samples taken on September 8, 2021. A copy of that notification is attached (see Attachment 3 at the end of the included report). On September 10th, Enterprise requested an additional 90-day extension to review the analytical results of the sampling event and to prepare and submit the closure report, which is also attached at the end of the included report. As of the date of this letter, Enterprise has not received a response from the OCD.

P.O. BOX 4324
HOUSTON, TEXAS 77210-4324
713.381.6500

1100 LOUISIANA STREET
HOUSTON, TEXAS 77002-5227
www.enterpriseproducts.com

Enterprise appreciates the Oil Conservation Division's continued assistance with bringing this site remediation to closure. Should you have any questions, comments, concerns, or need additional information, please contact Rob Dunaway, Senior Environmental Engineer at (575) 628-6802 or Paul Reinermann, Field Environmental Manager at (830) 583-1924.

Thank you,

A handwritten signature in blue ink, appearing to read "Peter L. Cain".

Peter L. Cain
Manager, Environmental

A handwritten signature in blue ink, appearing to read "Bradley Cooley".

Bradley Cooley, P.E.
Director, Environmental

/bjm
Attachments



CLOSURE REPORT

Property:

**58548OUQ Line Strike
Eddy County, New Mexico
32.236741 N, 104.419843 W
NMOCD Incident No. NAPP2036546984
Enterprise ECIRT No. 93176**

September 23, 2021
Ensolum Project No. 03B1226038

Prepared for:

**Enterprise Field Services, LLC
P.O. Box 4324
Houston, TX 77210
Attn: Mr. Robert Dunaway**

Prepared by:


Beaux Jennings
Senior Project Manager


Liz Scaggs, PG
Principal



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CLOSURE REPORT

**58548OUQ Line Strike
Eddy County, New Mexico
32.236741 N, 104.419843 W
NMOCD Incident No. NAPP2036546984
Enterprise ECIRT No. 93176**

Ensolum Project No. 03B1226038

1.0 INTRODUCTION

1.1 Executive Summary

- On December 15, 2020, a line strike was reported on the Enterprise Field Services, LLC (Enterprise) 58548OUQ Line resulting in a natural gas release, due to a third-party company performing excavation activities for Marathon Oil (Marathon). The total event gas loss was reported at 1,260 thousand standard cubic feet (MSCF). The line was isolated by Enterprise. The New Mexico Oil Conservation Division (NMOCD) considers an unauthorized release of natural gas of volumes above 500 MSCF to be a "major release" and requires notification, remediation and reporting according to New Mexico Administrative Code (NMAC) 19.15.29 *Releases*. The impacted area was then excavated by New Mexico Rentals (NMR) and all impacted soil was placed into stockpiles that were staged along the 58548OUQ Line impacted area, hereinafter referred to as the "Site".
- On January 14, 2021, Ensolum, LLC (Ensolum) arrived at the Site and collected eight (8) composite soil samples (CS-1 through CS-8) from depths ranging from zero (0) feet to four-and-a-half (4.5) feet below ground surface (bgs). Additionally, Ensolum collected three (3) composite soil samples from the soil stockpiles (STP-1 through STP-3). Based on analytical results, additional excavation activities were required.
- On January 21, 2021, NMR continued excavation activities. Ensolum arrived at the Site and resampled (6) composite soil samples from soil sample locations (CS-1, CS-2, CS-4 through CS-6, and CS-8) from depths ranging from zero (0) feet to five (5) feet bgs as well as a new composite soil sample (CS-9) sampled at a depth of five (5) feet bgs. Ensolum collected four (4) additional composite soil stockpile samples (STP-4 through STP-7) from the stockpiles staged on-Site. Based on analytical results, additional excavation activities were required.
- On February 2, 2021, Ensolum arrived at the Site and resampled composite soil samples CS-6 from zero (0) feet to five (5) feet bgs, CS-9 at nine (9) feet bgs, and CS-14 from five (5) feet to nine (9) feet bgs. Composite soil sample locations (CS-10 through CS-13) had Photoionization Detection (PID) limits exceed 5.0 parts-per-million (ppm), which were beyond the screened limits determined in the field. Based on the field screening results, additional excavation activities were required.
- On February 4, 2021, Ensolum arrived at the Site and resampled composite soil samples CS-4 and CS-5 from depths ranging from zero (0) to five (5) feet bgs and composite soil sample CS-8 at a depth of 10 feet bgs. Additionally, four (4) composite soil were collected from depths ranging from five (5) feet to 10 feet bgs (CS-10 and CS-13), and at a depth of 10 feet bgs (CS-11 and CS-12). Based on analytical results, additional excavation activities were required.
- On March 22, 2021, Ensolum arrived at the Site and collected an additional eight (8) composite soil samples (CS-15 through CS-22) from depths ranging from zero (0) feet to 10 feet bgs. Based on analytical results, additional excavation activities were required.

Enterprise Field Services, LLC
 Closure Report
 58548OUQ Line Strike
 September 23, 2021



- Due to the NMOCD Closure Criteria standards for soils impacted by a release overlying groundwater ≤ 50 feet set forth, Ensolum, Enterprise, and Marathon met to discuss installing an investigation soil boring to determine if the depth to groundwater is over 50 feet at the Site. It was determined that the investigation soil boring (SB-1) would be drilled to approximately 60 feet. Approval documents from the New Mexico Office of the State Engineer (OSE) to drill the investigation soil boring are included in **Appendix G**.
- On August 16, 2021, Ensolum and West Texas Water Well Service (WTWWS) arrived at the Site to drill the investigation soil boring (SB-1) to a maximum depth of 60 feet bgs to determine if the depth to groundwater is over 50 feet. The soil boring was left open with a steel plate covering the hole for approximately 48 hours to allow any water to come into the boring. After 48 hours, no groundwater was present in the investigation soil boring; the boring was subsequently plugged and abandoned in accordance with the approved New Mexico OSE Well Plugging Plan of Operations document (**Appendix G**). Based upon the results concluding the investigation soil boring, the Closure Criteria for the Site was updated to limits for 50 feet - 100 feet (2,500 mg/kg for TPH), subsequently allowing for all composite soil sample results to be deemed below the acceptable NMOCD Closure Criteria.
- On September 2, 2021, NMOCD required 48-hour notification for final confirmation soil sampling was given via email. On September 8, 2021, Ensolum collected 26 final composite soil samples (FCS-1 through FCS-26) from depths ranging from zero (0) feet to 12 feet bgs. Additionally, Ensolum collected four (4) final composite stockpile soil samples (FSTP-1 through FSTP-4). Based on analytical results, no further excavation was required.
- The primary objective of the closure activities was to reduce constituents of concern (COCs) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release and to determine the depth to groundwater bgs using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- A total of 33 composite soil samples from 22 locations and a total of 26 final composite soil samples from 26 locations were collected from the excavated area. Seven (7) composite stockpile soil samples and four (4) final composite stockpile soil samples were collected from the on-Site soil stockpiles. Based on the final soil sample analytical results, the final composite soil samples (FCS-1 through FCS-26) are below the applicable NMOCD Closure Criteria. Based on the final soil sample analytical results, the final composite soil stockpile samples (FSTP-1 through FSTP-4) were below the applicable NMOCD Closure Criteria. The soil stockpiles staged on-Site will be utilized as backfill for the excavation.

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

1.2 Site Description & Background

Operator:	Enterprise Field Services, LLC (Enterprise)
Site Name:	58548OUQ Line Strike
Location:	32.236741 N, 104.419843 W Section 8, Township 24 South, Range 25 East Eddy County, New Mexico
Property:	State Land Office (SLO)
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

Enterprise Field Services, LLC
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On December 15, 2020, a line strike was reported on the Enterprise 58548OUQ Line resulting in a natural gas release due to a third party company performing excavation activities for Marathon. The total event gas loss was reported at 1,260 MSCF. The line was isolated by Operations. The NMOCD considers an unauthorized release of natural gas of volumes above 500 MSCF to be a “major release” and requires notification, remediation and reporting according to NMAC 19.15.29 Releases.

The Topographic Map depicting the location of the Site is included as **Figure 1**, the Site Vicinity Map is included as **Figure 2**, the Site Map indicating the locations of composite soil samples and soil stockpiles is included as **Figure 3**, and the Site Map indicating the locations of the final composite soil samples and final composite soil stockpiles is included as **Figure 3A** in **Appendix A**.

1.3 Project Objective

The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria concentrations.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references NMAC 19.15.29 Releases, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico OSE and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

Supporting documentation associated with the following bullets are provided in **Appendix B** and on the Closure Criteria Map included as **Figure 4** in **Appendix A**.

- Three (3) water wells were identified within a half-mile radius of the Site on the OSE Water Rights Reporting System (WRRS) database. The nearest well was identified 0.35 miles northwest of the Site, with an unknown maximum depth.

New Mexico OSE WRRS			
Well #	Distance from Site	Direction from Site	Well Status
C-01305	0.35 miles	Northwest	Prospecting or Development of Natural Resource
C-01231	0.35 miles	Northwest	Prospecting or Development of Natural Resource
C-02169	0.40 miles	Northeast	Prospecting or Development of Natural Resource

- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or any other significant watercourse.
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet from an occupied permanent residence, school, hospital, institution, or church.

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- According to the OSE WRSS database there are no private, domestic freshwater wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are no freshwater wells identified within 1,000 feet of the Site as declared in the previous bullet.
- 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 NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is not located within a 100-year floodplain.

Based on the results of the soil boring (SB-1) installation activities, cleanup goals for soils remaining in place at the Site include:

Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
51 feet - 100 feet	Chloride	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	TPH (GRO+DRO)	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

3.0 SOIL REMEDIATION ACTIVITIES

On December 15, 2020, a line strike was reported on the 58548OUQ Line resulting in a natural gas release. The total event gas loss was reported at 1,260 MSCF. The line was isolated by Enterprise. The impacted area was then excavated by NMR and all impacted soil was placed into stockpiles that were staged along the 58548OUQ Line impacted area.

On December 16, 2020, Ensolum was contacted by Enterprise with the purpose of sampling the excavated area as well as the associated soil stockpiles staged on-Site to determine if further excavation was required.

Enterprise Field Services, LLC
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September 23, 2021



On January 14, 2021, Ensolum arrived on-Site and collected eight (8) composite soil samples (CS-1 through CS-8) from depths ranging from zero (0) feet to four-and-a-half (4.5) bgs, which were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX), total petroleum hydrocarbons (TPH) and chloride in accordance with NMOCD Closure Criteria for Soils Impacted by a Release. Composite soil sample CS-7 exhibited results below the applicable NMOCD Closure Criteria, while CS-1 through CS-6 and CS-8 exhibited laboratory analytical results above the applicable NMOCD Closure Criteria of 100 milligrams per kilogram (mg/kg) for ≤ 50 feet. Additionally, Ensolum collected three (3) composite soil samples from the soil stockpiles (STP-1 through STP-3).

Based on analytical results, additional excavation activities were required.

On January 21, 2021, NMR continued excavation activities. Ensolum arrived at the Site and resampled (6) composite soil samples from soil sample locations (CS-1, CS-2, CS-4 through CS-6, and CS-8) from depths ranging from zero (0) feet to five (5) feet bgs as well as a new composite soil sample (CS-9) sampled at a depth five (5) feet bgs. The composite soil samples CS-1 and CS-2 exhibited results below the applicable NMOCD Closure Criteria for ≤ 50 feet. The composite soil samples CS-4 through CS-6 and CS-8 through CS-9 exhibited a range of total TPH results from 316 mg/kg to 1,450 mg/kg, which exceed the applicable NMOCD Closure Criteria of 100 mg/kg for ≤ 50 feet.

Based on analytical results, additional excavation activities were required.

On February 02, 2021, Ensolum arrived at the Site and resampled composite soil samples CS-6 from zero (0) feet to five (5) feet bgs, CS-9 at nine (9) feet bgs, and CS-14 from five (5) feet to nine (9) feet bgs. Composite soil sample locations (CS-10 through CS-13) had PID limits exceed 5.0 ppm, which were beyond the screened limits determined in the field. The composite soil samples exhibited a range of total TPH results from 213 mg/kg to 710 mg/kg, which exceed the applicable NMOCD Closure Criteria of 100 mg/kg for ≤ 50 feet.

Based on analytical results, additional excavation activities were required.

On February 04, 2021, Ensolum arrived at the Site and resampled composite soil samples (CS-4 and CS-5) from depths ranging from zero (0) to five (5) feet bgs and composite soil sample (CS-8) at a depth of 10 feet bgs. Additionally, four (4) composite soil samples were collected from depths ranging from five (5) feet to 10 feet bgs (CS-10 and CS-13), and at a depth of 10 feet bgs (CS-11 and CS-12). The composite soil samples exhibited a range of total TPH results from 195 mg/kg to 1,330 mg/kg, which exceed the applicable NMOCD Closure Criteria of 100 mg/kg for ≤ 50 feet.

Based on analytical results, additional excavation activities were required.

On March 22, 2021, Ensolum arrived at the Site and collected an additional eight (8) composite soil samples (CS-15 through CS-22) from depths ranging from zero (0) feet to 10 feet bgs. The composite soil samples exhibited a range of total TPH results from 28.3 mg/kg to 226 mg/kg.

Due to the NMOCD Closure Criteria standards for soils impacted by a release overlying groundwater ≤ 50 feet set forth, Ensolum, Enterprise, and Marathon met to discuss installing an investigation soil boring to determine if the depth to groundwater is over 50 feet at the Site. It was determined that the investigation soil boring would be drilled to approximately 60 feet. Approval documents from the New Mexico OSE to drill the investigation soil boring are included in **Appendix G**.

On August 16, 2021, Ensolum and WTWWS arrived at the Site to drill the investigation soil boring to a maximum depth of 60 feet bgs to determine if the depth to groundwater is over 50 feet. The soil boring was left open with a steel plate covering for approximately 48 hours to allow any water to come into the boring. After 48 hours, no groundwater was present in the investigation soil boring; the boring was subsequently plugged and abandoned in accordance with the approved New Mexico OSE Well Plugging Plan of Operations document (**Appendix G**). Based upon the results concluding the investigation soil boring, the Closure Criteria for the Site was updated to limits for 50 feet - 100 feet (2,500 mg/kg for TPH), subsequently allowing for all composite soil sample results to be deemed below the acceptable NMOCD Closure Criteria.

Enterprise Field Services, LLC
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On September 2, 2021, NMOCD required 48-hour notification for final confirmation soil sampling was given via email. On September 8, 2021, Ensolum collected 26 final composite soil samples (FCS-1 through FCS-26) from depths ranging from zero (0) feet to 12 feet bgs. Additionally, Ensolum collected four (4) final composite stockpile soil samples (FSTP-1 through FSTP-4).

Based on analytical results, no further excavation was required.

Between January 14, 2021 and September 8, 2021, Ensolum collected 33 composite soil samples from 22 locations and a total of 26 final composite soil samples from 26 locations from the excavated area. Seven (7) stockpile soil samples and four (4) final stockpile soil samples were collected from the on-Site soil stockpiles. Based on the final soil sample analytical results, the final composite soil samples (FCS-1 through FCS-26) are below the applicable NMOCD Closure Criteria. Based on the final soil sample analytical results, the final soil stockpile samples (FSTP-1 through FSTP-4) were below the applicable NMOCD Closure Criteria.

All soil stockpiles staged on-Site will be utilized as backfill for the excavation.

The final impacted area measured approximately 48 feet long and 47 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 12 feet bgs.

The lithology encountered during the completion of sampling activities consisted primarily of caliche from zero (0) to half a foot (0.5) feet bgs and thickly bedded limestone with interbedded shale from half a foot (0.5) to 12 feet bgs.

Figure 3 identifies approximate composite soil sample locations and **Figure 3A** identifies approximate final composite soil sample locations and approximate dimensions of the excavation with respect to the Site (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

Ensolum's soil sampling program included the collection of 33 composite soil samples from 22 locations (CS-1 through CS-22) as well as 26 final composite soil samples from 26 locations (FCS-1 through FCS-26) from the excavation area. Seven (7) composite stockpile soil samples (STP-1 through STP-7) and four (4) final composite stockpile soil samples (FSTP-1 through FSTP-4) were also collected.

The samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to Eurofins Xenco, LLC in Carlsbad, New Mexico and/or Midland, Texas for an expedited laboratory analysis.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX utilizing Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) utilizing EPA SW-846 Method 8015M, and chloride utilizing EPA Method 300.0. Laboratory analytical results are summarized in **Table 1** and **Table 2** in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**.

6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH GRO/DRO/MRO, and chloride concentrations associated with the final composite soil samples (FCS-1 through FCS-26) and final composite stockpile soil samples (FSTP-1 through FSTP-4) to the applicable NMOCD Closure Criteria.

Enterprise Field Services, LLC
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58548OUQ Line Strike
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- Laboratory analytical results indicate benzene concentrations for the final composite soil samples and final composite stockpile soil samples are below the laboratory sample detection limits (SDLs) and/or the applicable NMOCD Closure Criteria of 10 mg/kg.
- Laboratory analytical results indicate that total BTEX concentrations for the final composite soil samples and final composite stockpile soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO concentrations for the final composite soil samples and final composite stockpile soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 1,000 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the final composite soil samples and final composite stockpile soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 2,500 mg/kg.
- Laboratory analytical results indicate chloride concentrations for the final composite soil samples and the final composite stockpile soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 10,000 mg/kg.
- The soil stockpiles will be utilized as backfill for the excavation.

Laboratory analytical results are summarized in **Table 1** and **Table 2** in **Appendix D**.

7.0 RECLAMATION AND RE-VEGETATION

During the completion of response action activities, approximately 1,003 cubic yards (cy) of impacted soil were excavated and stockpiled on-Site. Based on the results of the final composite soil stockpile results, the soil stockpiles will be utilized as backfill for the excavation. Subsequent to backfill, the excavation will be contoured to the original surrounding grade.

8.0 FINDINGS AND RECOMMENDATION

- On December 15, 2020, a line strike was reported on the Enterprise 58548OUQ Line resulting in a natural gas release due to a third-party company performing excavation activities for Marathon. The event total gas loss was reported at 1,260 MSCF. The line was isolated by Enterprise. The NMOCD considers an unauthorized release of natural gas of volumes above 500 MSCF to be a "major release" and requires notification, remediation and reporting according to NMAC 19.15.29 Releases. The impacted area was then excavated by NMR and all impacted soil was placed into stockpiles that were staged along the Site impacted area.
- On January 14, 2021, Ensolum arrived at the Site and collected eight (8) composite soil samples (CS-1 through CS-8) from depths ranging from zero (0) feet to four-and-a-half (4.5) feet below ground surface (bgs). Additionally, Ensolum collected three (3) composite soil samples from the soil stockpiles (STP-1 through STP-3). Based on analytical results, additional excavation activities were required.
- On January 21, 2021, NMR continued excavation activities. Ensolum arrived at the Site and resampled (6) composite soil samples from soil sample locations (CS-1, CS-2, CS-4 through CS-6, and CS-8) from depths ranging from zero (0) feet to five (5) feet bgs as well as a new composite soil sample (CS-9) sampled at a depth five (5) feet bgs. Ensolum collected four (4) additional composite soil stockpile samples (STP-4 through STP-7) from the stockpiles staged on-Site. Based on analytical results, additional excavation activities were required.

Enterprise Field Services, LLC
Closure Report
58548OUQ Line Strike
September 23, 2021



- On February 02, 2021, Ensolum arrived at the Site and resampled composite soil samples CS-6 from zero (0) feet to five (5) feet bgs, CS-9 at nine (9) feet bgs, and CS-14 from five (5) feet to nine (9) feet bgs. Composite soil sample locations (CS-10 through CS-13) had PID limits exceed 5.0 ppm, which were beyond the screened limits determined in the field. Based on the field screening results, additional excavation activities were required.
- On February 04, 2021, Ensolum arrived at the Site and resampled composite soil samples (CS-4 and CS-5) from depths ranging from zero (0) to five (5) feet bgs and composite soil sample (CS-8) at a depth of 10 feet bgs. Additionally, four (4) composite soil samples were collected from depths ranging from five (5) feet to 10 feet bgs (CS-10 and CS-13), and at a depth of 10 feet bgs (CS-11 and CS-12). Based on analytical results, additional excavation activities were required.
- On March 22, 2021, Ensolum arrived at the Site and collected an additional eight (8) composite soil samples (CS-15 through CS-18) from depths ranging from zero (0) feet to 10 feet bgs. Based on analytical results, additional excavation activities were required.
- Due to the NMOCD Closure Criteria standards for soils impacted by a release overlying groundwater ≤ 50 feet set forth, Ensolum, Enterprise, and Marathon met to discuss installing an investigation soil boring to determine if the depth to groundwater is over 50' at the Site. It was determined that the investigation soil boring would be drilled to approximately 60 feet. Approval documents from the New Mexico OSE to drill the investigation soil boring are included in **Appendix G**.
- On August 16, 2021, Ensolum and WTWWS arrived at the Site to drill the investigation soil boring to a maximum depth of 60 feet bgs to determine if the depth to groundwater is over 50 feet. The soil boring was left open with a steel plate covering for approximately 48 hours to allow any water to come into the boring. After 48 hours, no groundwater was present in the investigation soil boring; the boring was subsequently plugged and abandoned in accordance with the approved New Mexico OSE Well Plugging Plan of Operations document (**Appendix G**). Based upon the results concluding the investigation soil boring, the Closure Criteria for the Site was updated to limits for 50 feet - 100 feet (2,500 mg/kg for TPH), subsequently allowing for all composite soil sample results to be deemed below the acceptable NMOCD Closure Criteria.
- On September 2, 2021, NMOCD required 48-hour notification for final confirmation soil sampling was given via email. On September 8, 2021, Ensolum collected 26 final composite soil samples (FCS-1 through FCS-26) from depths ranging from zero (0) feet to 12 feet bgs. Additionally, Ensolum collected four (4) final composite stockpile soil samples (FSTP-1 through FSTP-4). Based on analytical results, no further excavation was required.
- The primary objective of the closure activities was to reduce COCs concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release and to determine the depth to groundwater bgs using the New Mexico EMNRD OCD's NMAC 19.15.29 Releases as guidance.
- A total of 33 composite soil samples from 22 locations and a total of 26 final composite soil samples from 26 locations were collected from the excavated area. Seven (7) composite stockpile soil samples and four (4) final composite stockpile soil samples were collected from the on-Site soil stockpiles. Based on the final soil sample analytical results, the final composite soil samples (FCS-1 through FCS-26) are below the applicable NMOCD Closure Criteria. Based on the final composite soil sample analytical results, the final composite soil stockpile samples (FSTP-1 through FSTP-4) were below the applicable NMOCD Closure Criteria.
- The soil stockpiles staged on-Site will be utilized as backfill for the excavation.

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

Enterprise Field Services, LLC
Closure Report
58548OUQ Line Strike
September 23, 2021



9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 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). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 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 recommendations are based solely upon data available to Ensolum at the time of these services.

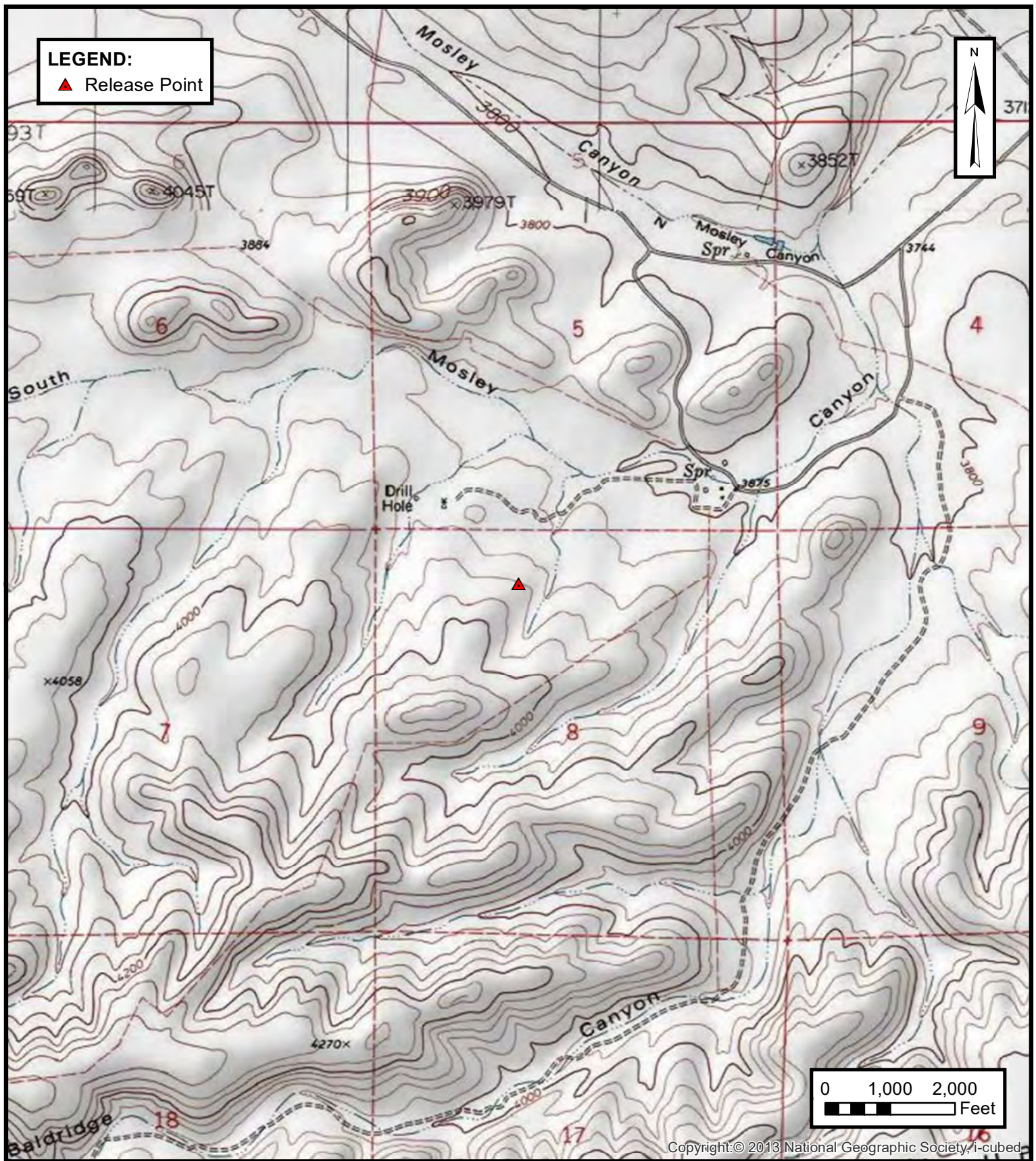
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Field Services, LLC, 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 Enterprise Field Services, LLC and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



APPENDIX A

Figures



ENSOLUM
Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W

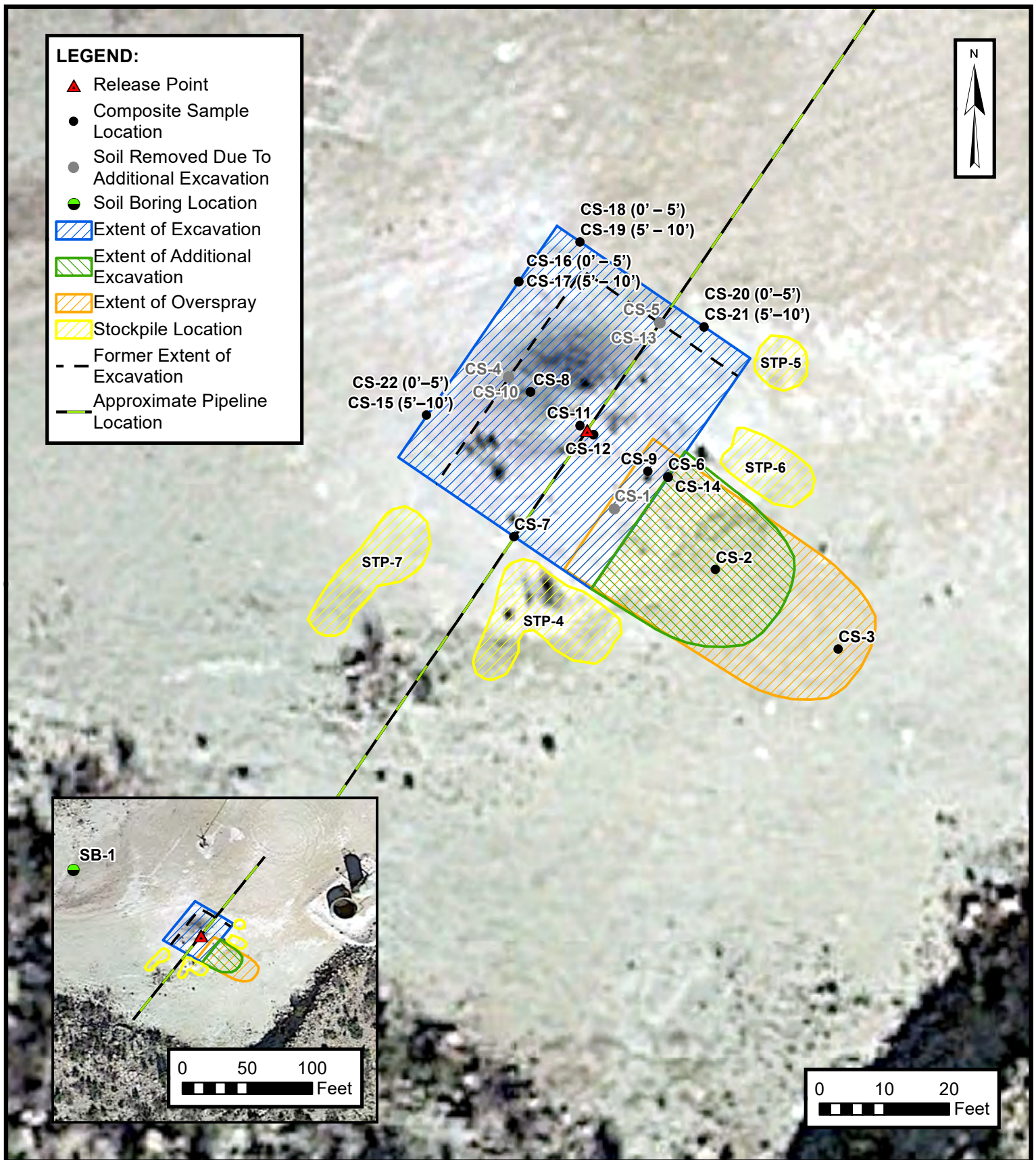
PROJECT NUMBER: 03B1226038

FIGURE
1



SITE VICINITY MAP
ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W
PROJECT NUMBER: 03B1226038

FIGURE
2

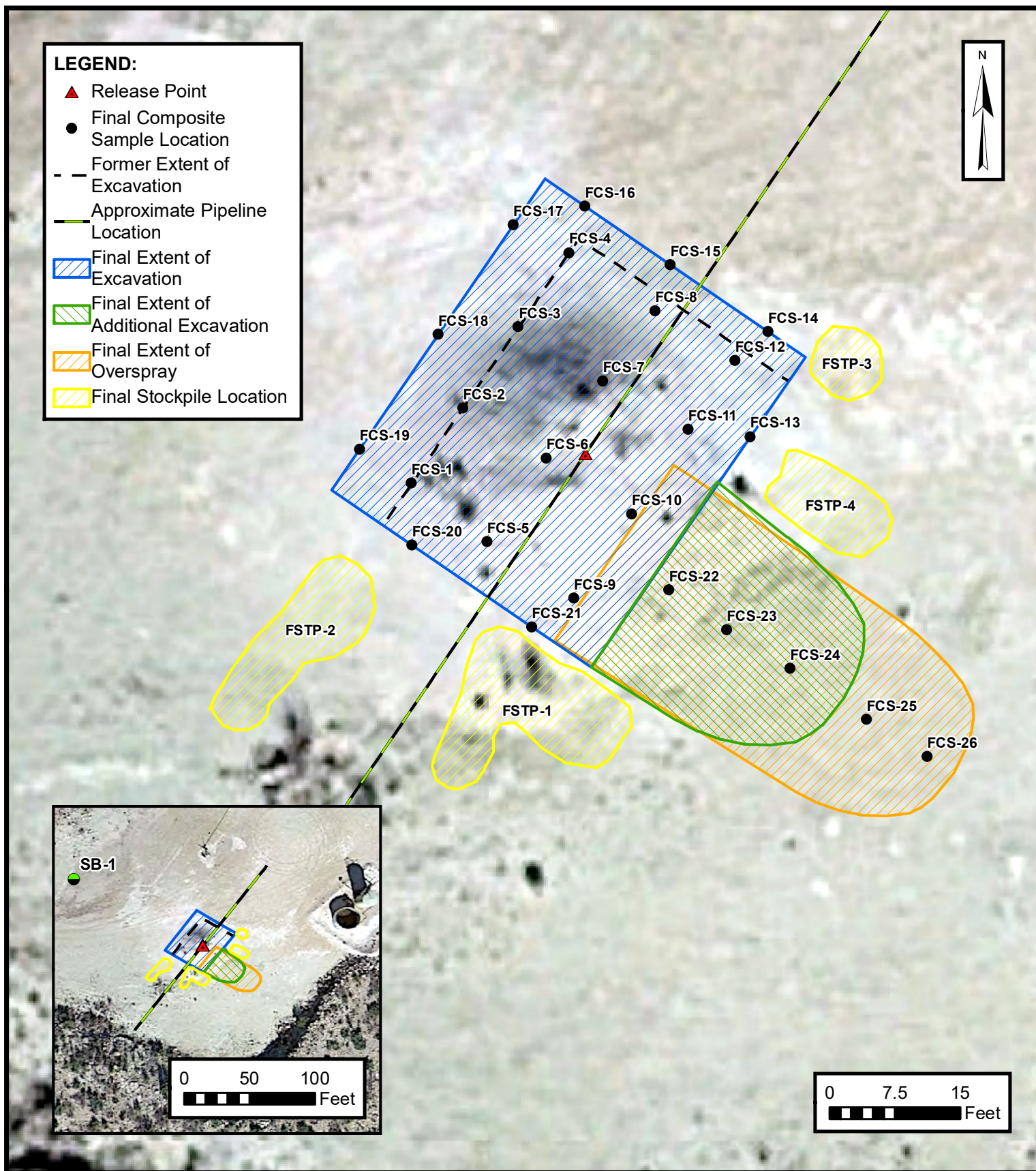


SITE MAP

ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W

PROJECT NUMBER: 03B1226038

FIGURE
3

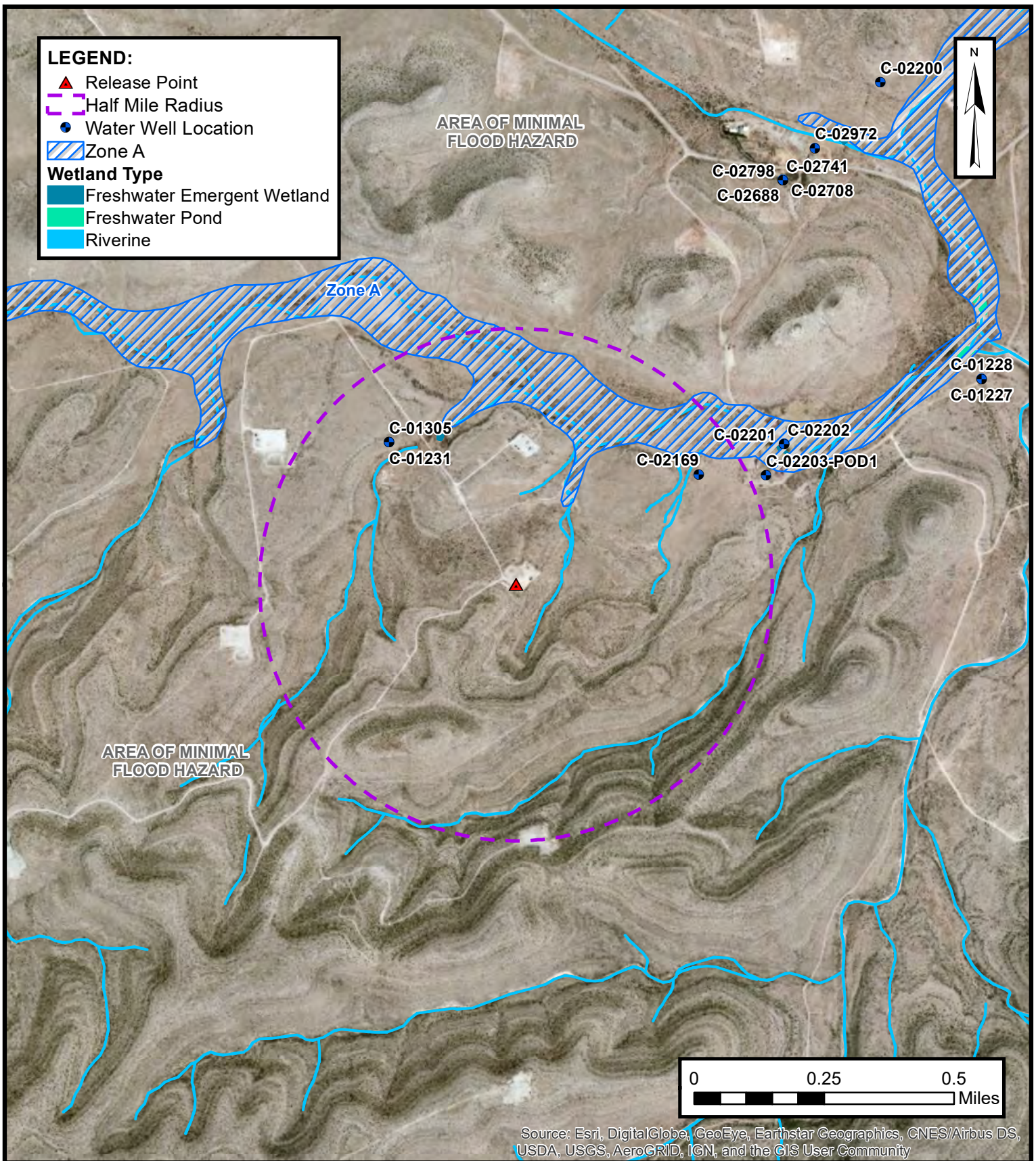


SITE MAP

ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W

PROJECT NUMBER: 03B1226038

FIGURE
3A





APPENDIX B

Supporting Documentation



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)				(NAD83 UTM in meters)			
		Q64	Q16	Q4	Sec	Tw	Rng	X	Y
	C 02169	4	2	05	24S	25E		555202	3567164



Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rev Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/15/21 8:38 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02201	4	4	05	24S	25E	555464	3567260*	

Driller License:

Driller Company:

Driller Name: WHITE

Drill Start Date:

Drill Finish Date:

12/31/1950

Plug Date:

Log File Date:

PCW Rev Date:

Source:

Artesian

Pump Type:

Pipe Discharge Size:

Estimated Yield: 16 GPM

Casing Size:

Depth Well:

20 feet

Depth Water:

15 feet

Meter Number:

9160

Meter Make:

ROCKWELL

Meter Serial Number:

22906912

Meter Multiplier:

100.0000

Number of Dials:

6

Meter Type:

Diversion

Unit of Measure:

Gallons

Return Flow Percent:

Usage Multiplier:

Reading Frequency:

Monthly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
11/28/2005	2005	177069	A	TW		0
01/01/2006	2005	180425	A	TW		1.030

**YTD Meter Amounts:

Year

Amount

2005

1.030

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/15/21 8:40 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)						(NAD83 UTM in meters)	
		(quarters are smallest to largest)							
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
C	02203 POD1	3	4	4	05	24S	25E	555408	3567162
Driller License:									
Driller Company:									
Driller Name: WHITE									
Drill Start Date:		Drill Finish Date:				Plug Date:			
Log File Date:		PCW Rev Date:				Source:			
Pump Type:		Pipe Discharge Size:				Estimated Yield: 900 GPM			
Casing Size: 8.00		Depth Well: 900 feet				Depth Water: 800 feet			

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	Tw	Rng	X	Y
	C 01231		3	3	05	24S	25E	554246	3567258*



Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rev Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

Depth Water:

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/15/21 8:35 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)			(quarters are smallest to largest)		(NAD83 UTM in meters)		
		Q64	Q16	Q4	Sec	Tw	Rng	X	Y
	C 01305		3	3	05	24S	25E	554246	3567258*

**Driller License:****Driller Company:****Driller Name:****Drill Start Date:****Drill Finish Date:****Plug Date:****Log File Date:****PCW Rev Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:****Depth Well:****Depth Water:**

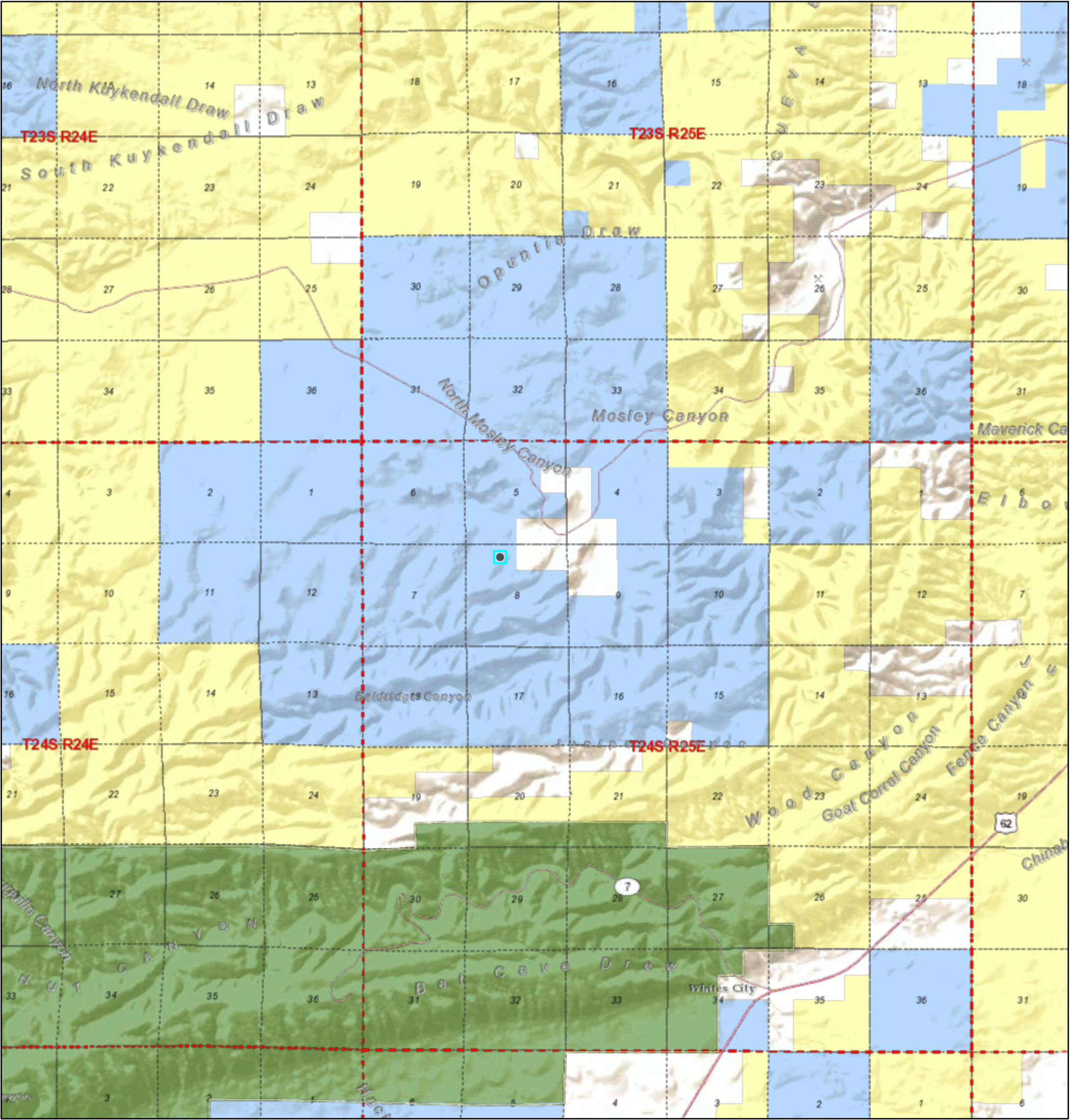
*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/15/21 8:36 AM

POINT OF DIVERSION SUMMARY

58548OUQ Line Strike Map



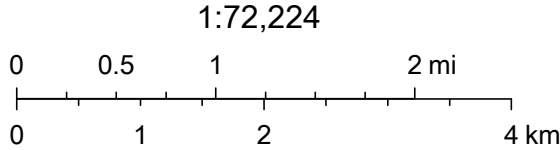
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- Township / Range
- Sections

Land Ownership

- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- National Park Service
- Private Land

- State Game and Fish
- State Land
- State Parks
- Tribal
- US Fish and Wildlife Service
- US Forest Service
- Registered Mines
 - Aggregate, Stone etc.
 - Aggregate, Stone etc.

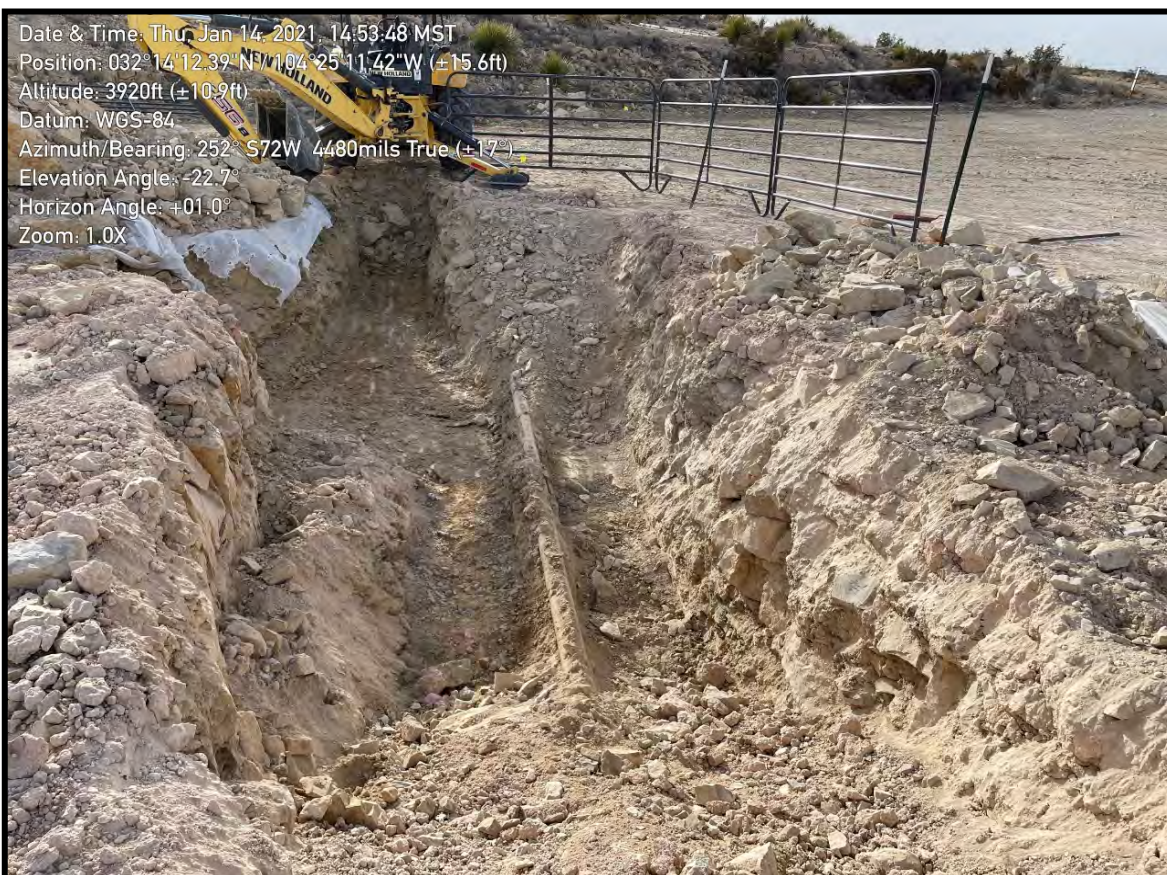


U.S. Bureau of Land Management - New Mexico State Office,
Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS



APPENDIX C

Photographic Documentation



View of pipeline during initial excavation activities, facing southwest.



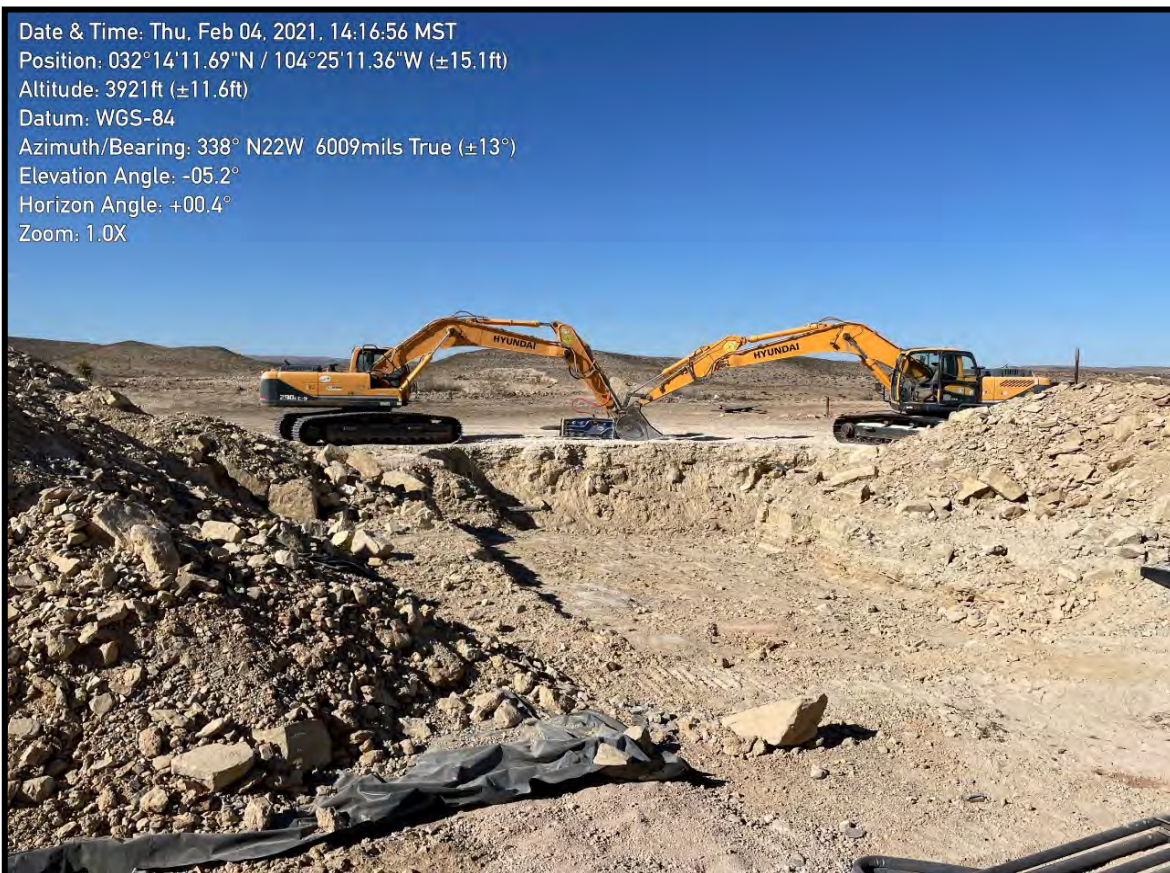
View of pipeline during initial excavation activities, facing northeast.



View of pipeline during excavation activities, facing northwest.



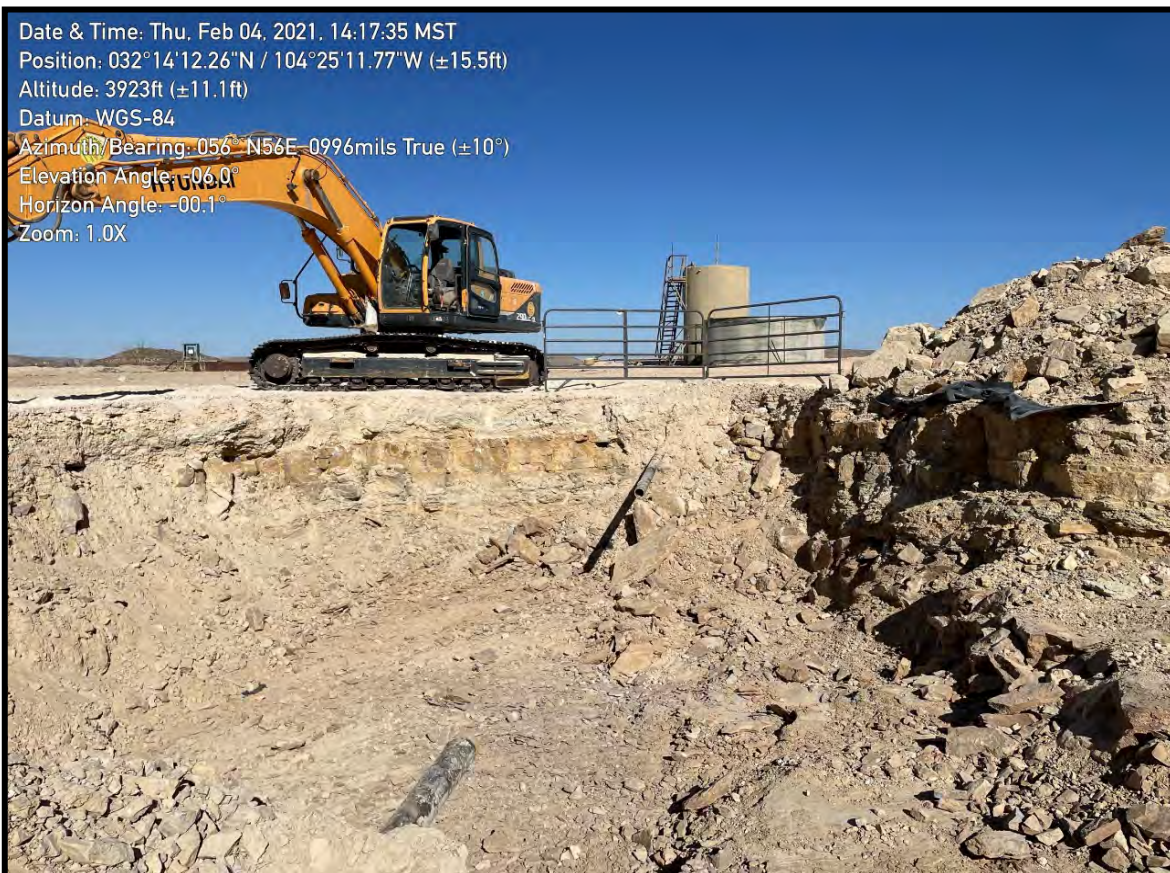
View of pipeline during excavation activities, facing southeast.



View of overspray area during excavation activities, facing northwest.



View of removed pipeline during excavation activities, facing north.



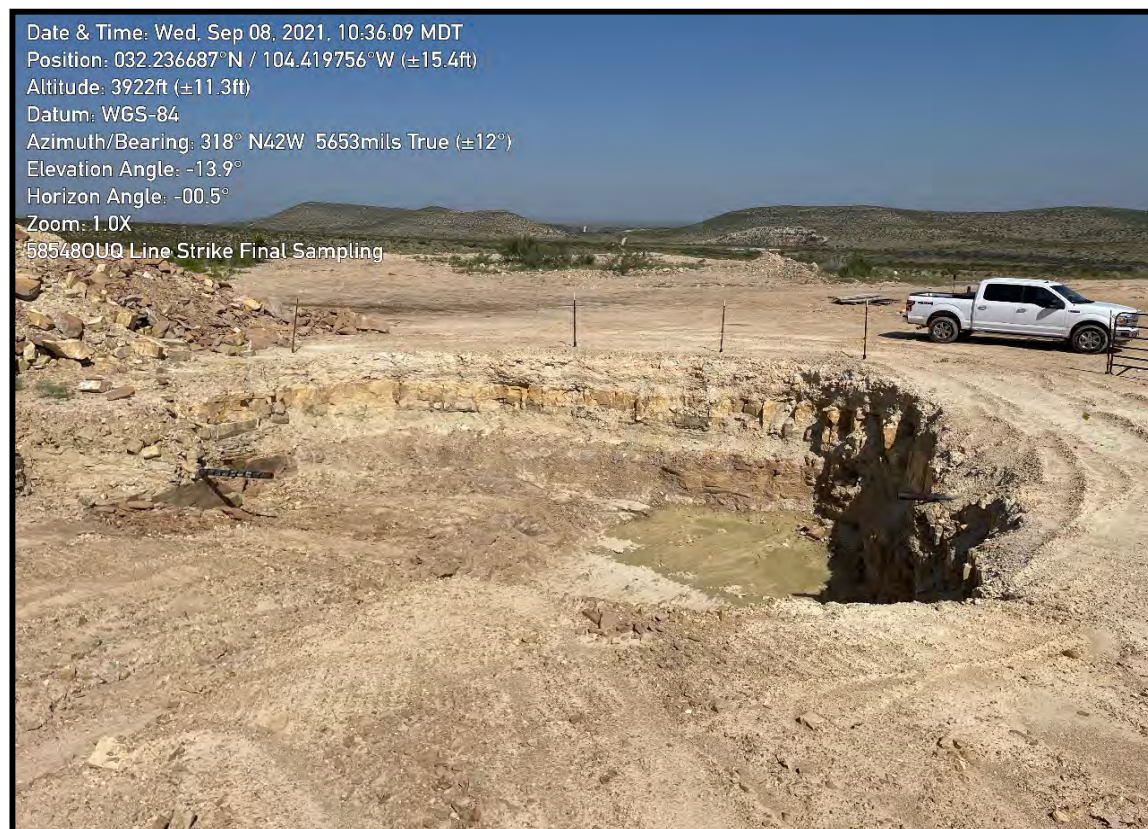
View of removed pipeline during excavation activities, facing northeast.



View of removed pipeline during excavation activities, facing southeast.



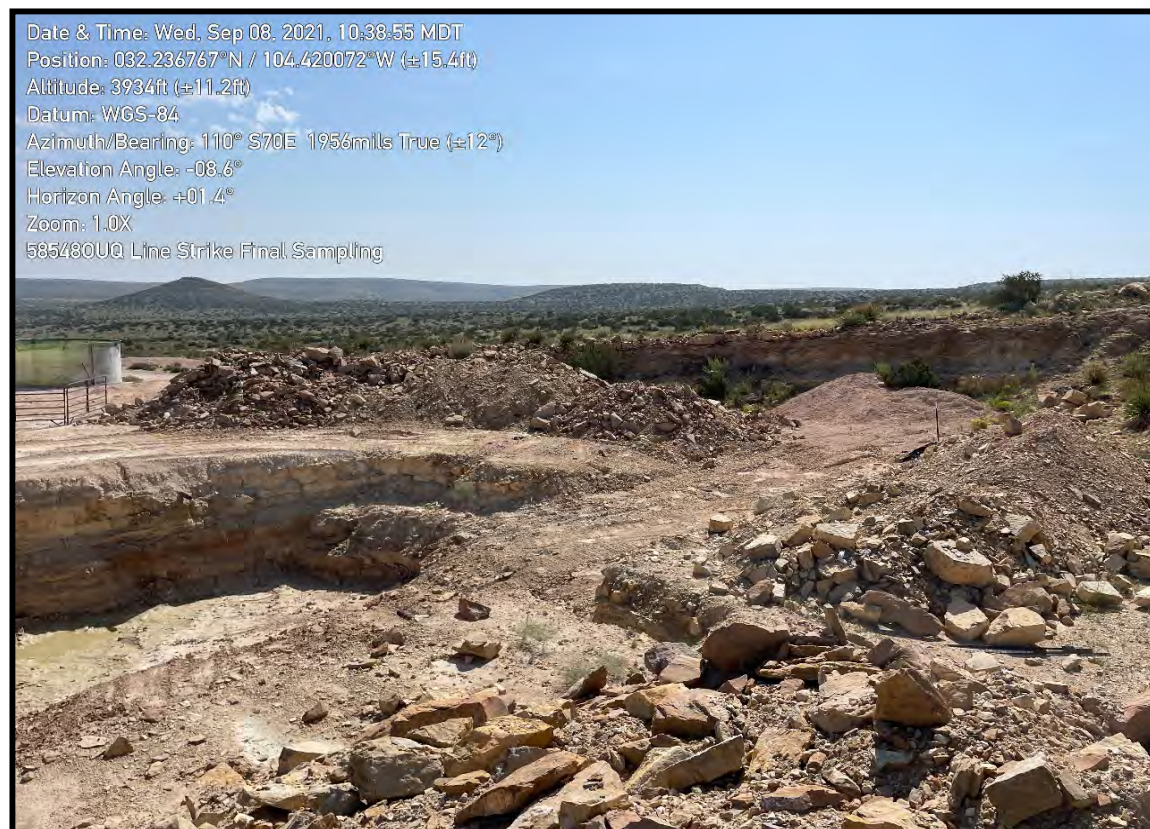
View of excavation and FSTP-1 and FSTP-2 during Final Sampling Event, facing southwest.



View of excavation during Final Sampling Event, facing northwest.



View of excavation and FSTP-3 and FSTP-4 during Final Sampling Event, facing northeast.



View of overspray area and FSTP-3 and FSTP 4 during Final Sampling Event, facing southeast.



View of completed investigation soil boring (SB-1), facing northeast.



View of completed investigation soil boring (SB-1), facing southeast.



APPENDIX D


Table

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Enterprise Field Services, LLC - 58548OU Line Strike
Eddy County, New Mexico

Ensolum Project No. 03B1226038

Sample I.D.	Sample Date	Sample Depth (inches/feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO+DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (50-100 feet)			10	NE	NE	NE	50	1,000	NE	2,500	10,000
Composite Soil Sample Analytical Results											
CS-1	1/14/2021	2"	<0.000384	0.000679 J	0.00686	0.0221	0.0296	329	51.4	380	218
	1/21/2021	6"			NS			<15.0	<15.0	<15.0	NS
CS-2	1/14/2021	2"	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	157	26.2 J	183	539
	1/21/2021	6"			NS			16.7 J	<15.0	16.7 J	NS
CS-3	1/14/2021	2"	<0.000386	<0.000457	<0.000567	0.00321	0.00321	86.1	<15.0	86.1	322
CS-4	1/14/2021	0' - 4.5'	<0.000387	<0.000458	<0.000568	0.00510	0.00510	186	<14.9	186	37.0
	1/21/2021	0' - 5'			NS			1,190	<15.0	1,190	NS
	2/4/2021	0' - 5'			NS			645	<15.0	645	NS
CS-5	1/14/2021	0' - 4.5'	<0.000384	0.0769	0.0252	0.262	0.364	2,590	19.9 J	2,610	164
	1/21/2021	0' - 5'			NS			1,450	<15.0	1,450	NS
	2/4/2021	0' - 5'			NS			1,330	<15.0	1,330	NS
CS-6	1/14/2021	0' - 4.5'	<0.000383	0.00905	0.0185	0.142	0.170	220	20.6 J	240	234
	1/21/2021	0' - 5'			NS			505	<15.0	505	NS
	2/2/2021	0' - 5'			NS			710	<15.0	710	NS
CS-7	1/14/2021	0' - 4.5'	<0.000383	0.00234	<0.000561	0.0154	0.0178	82.4	<15.0	82.4	97.0
CS-8	1/14/2021	4.5'	0.00830	0.227	0.163	0.939	1.34	309	28.1 J	337	148
	1/21/2021	5'			NS			465	<15.0	465	NS
	2/4/2021	10'			NS			356.5 J	<15.0	357	NS
CS-9	1/21/2021	5'	<0.000483	<0.000525	<0.000404	0.0120	0.0120	274	42.4 J	316	167
	2/2/2021	9'			NS			141	72.0	213	NS
CS-10	2/4/2021	5' - 10'	<0.000384	<0.000455	<0.000564	<0.000344	<0.000344	753	<15.0	753	122
CS-11	2/4/2021	10'	<0.000386	<0.000457	<0.000567	0.00104 J	0.00104 J	249	15.9 J	265	74.2
CS-12	2/4/2021	10'	<0.000386	<0.000457	<0.000566	0.00366	0.00366	167	27.8 J	195	91.6
CS-13	2/4/2021	5' - 10'	<0.000386	<0.000457	<0.000566	0.00592	0.00592	296	<15.0	296	145
CS-14	2/2/2021	5' - 9'	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	356	210	566	51.9
CS-15	3/22/2021	5' - 10'			NS			194	<14.9	194	NS
CS-16	3/22/2021	0' - 5'			NS			34.2 J	<15.0	34.2 J	NS
CS-17	3/22/2021	5' - 10'			NS			130	<15.0	130	NS
CS-18	3/22/2021	0' - 5'			NS			226	<14.9	226	NS
CS-19	3/22/2021	5' - 10'			NS			193	<15.0	193	NS
CS-20	3/22/2021	0' - 5'			NS			28.3 J	<15.1	28.3 J	NS
CS-21	3/22/2021	5' - 10'			NS			54.7	<14.9	54.7	NS
CS-22	3/22/2021	0' - 5'			NS			37.4 J	17.4 J	54.8	NS
Composite Stockpile Soil Sample Analytical Results											
STP-1	1/14/2021	NA	<0.000388	0.00475	0.00810	0.0362	0.0490	71.7	<14.9	71.7	39.4
STP-2	1/14/2021	NA	<0.000387	0.0374	0.0796	0.389	0.506	148	<15.0	148	137
STP-3	1/14/2021	NA	0.00100 J	0.0398	0.0130	0.251	0.305	1,315	15.4 J	1,330	179
STP-4	1/21/2021	NA	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	40.6 J	<14.9	40.6 J	439
STP-5	1/21/2021	NA	<0.000484	0.0459	0.0339	0.491	0.571	334	<15.0	334	104
STP-6	1/21/2021	NA	<0.000486	<0.000529	<0.000407	0.00409	0.00409	23.3 J	<15.0	23.3 J	144
STP-7	1/21/2021	NA	<0.000489	0.00442	<0.000409	0.0400	0.0444	393	<15.0	393	180

Concentrations in bold and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (50-100 feet)

 Soil Removed and/or Re-Sampled
bgs: below ground surface

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

mg/kg: milligrams per kilogram

NA: Not Applicable

NE: Not Established

NS: Not Sampled

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon



TABLE 2
FINAL SOIL SAMPLE ANALYTICAL RESULTS
Enterprise Field Services, LLC - 58548OUQ Line Strike
Eddy County, New Mexico

Ensolum Project No. 03B1226038

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO+DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (50-100 feet)			10	NE	NE	NE	50	1,000	NE	2,500	10,000
Composite Soil Sample Analytical Results											
FCS-1	9/8/2021	9'	0.000419 J	<0.000456	<0.000565	<0.00101	<0.00101	49.3 J	<14.9	49.3 J	49.1
FCS-2	9/8/2021	12'	<0.000383	0.000468 J	<0.000562	<0.00100	<0.00100	66.3	<14.9	66.3	98.3
FCS-3	9/8/2021	12'	<0.000384	0.000739 J	<0.000564	<0.00101	0.00135 J	170.8	<15.0	171	123
FCS-4	9/8/2021	12'	<0.000383	<0.000454	0.000955 J	<0.00101	<0.00101	68.5	<14.9	68.5	37.7
FCS-5	9/8/2021	9'	0.000876 J	<0.000456	<0.000565	<0.00101	<0.00101	347	26.1 J	373	44.0
FCS-6	9/8/2021	12'	<0.000386	<0.000457	<0.000566	<0.00101	<0.00101	74.0	22.2 J	96.2	53.9
FCS-7	9/8/2021	12'	0.000628 J	<0.000458	<0.000567	<0.00101	0.00119 J	65.8	<15.0	65.8	40.3
FCS-8	9/8/2021	12'	<0.000387	<0.000459	<0.000568	<0.00102	<0.00102	59.8	<14.9	59.8	52.1
FCS-9	9/8/2021	9'	<0.000388	<0.000460	<0.000570	<0.00102	<0.00102	47.6 J	<14.9	47.6 J	133
FCS-10	9/8/2021	12'	0.00101 J	<0.000461	<0.000571	<0.00102	<0.00102	25.8 J	<15.0	25.8 J	50.3
FCS-11	9/8/2021	12'	0.000447 J	<0.000455	<0.000564	<0.00101	<0.00101	40.3 J	<15.0	40.3 J	38.1
FCS-12	9/8/2021	12'	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	46.0 J	<15.0	46.0 J	50.3
FCS-13	9/8/2021	0' - 12'	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	38.9 J	<14.9	38.9 J	65.4
FCS-14	9/8/2021	0' - 12'	0.000800 J	<0.000458	0.000682 J	<0.00101	0.00148 J	<14.9	<14.9	<14.9	254
FCS-15	9/8/2021	0' - 12'	0.00121 J	<0.000455	<0.000564	<0.00101	0.00156 J	39.0 J	<15.0	39.0 J	66.1
FCS-16	9/8/2021	0' - 12'	<0.000386	<0.000457	0.000812 J	0.00159 J	0.00240 J	80.0	<15.0	80.0	82.7
FCS-17	9/8/2021	0' - 12'	0.000763 J	<0.000459	<0.000568	<0.00102	0.00122 J	14.9 J	<14.9	14.9 J	364
FCS-18	9/8/2021	0' - 12'	0.000440 J	<0.000454	<0.000563	<0.00101	0.00130 J	78.7	<14.9	78.7	206
FCS-19	9/8/2021	0' - 12'	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	37.6 J	<14.9	37.6 J	64.1
FCS-20	9/8/2021	0' - 9'	<0.000383	<0.000453	0.000731 J	<0.00100	0.00130 J	152	<15.0	152	70.5
FCS-21	9/8/2021	0' - 9'	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	492	<14.9	492	70.9
FCS-22	9/8/2021	3'	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	41.9 J	<14.9	41.9 J	102
FCS-23	9/8/2021	2'	<0.000387	0.000495 J	<0.000568	<0.00102	<0.00102	45.6 J	<15.0	45.6 J	288
FCS-24	9/8/2021	1'	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	35.7 J	<14.9	35.7 J	134
FCS-25	9/8/2021	2"	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	30.7 J	<14.9	30.7 J	450
FCS-26	9/8/2021	2"	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	62.9	19.6 J	82.5	126
Composite Stockpile Soil Sample Analytical Results											
FSTP-1	9/8/2021	NA	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	71.7	<15.0	71.7	187
FSTP-2	9/8/2021	NA	<0.000386	<0.000457	<0.000566	<0.00101	<0.00101	220	<14.9	220	388
FSTP-3	9/8/2021	NA	<0.000387	<0.000458	<0.000567	<0.00101	<0.00101	47.3 J	21.4 J	68.7	66.0
FSTP-4	9/8/2021	NA	<0.000389	<0.000461	<0.000571	<0.00102	<0.00102	70.3	<15.0	70.3	422

bgs: below ground surface

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

mg/kg: milligrams per kilogram

NE: Not Established

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

Certificate of Analysis Summary 684790



Ensolum, Dallas, TX

Project Name: Line 58548 OUQ

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Carlsbad, NM

Date Received in Lab: Fri 01.15.2021 08:21
Report Date: 01.18.2021 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684790-001	684790-002	684790-003	684790-004	684790-005	684790-006
	<i>Field Id:</i>	CS-1	CS-2	CS-3	CS-4	CS-5	CS-6
	<i>Depth:</i>	2- In	2- In	2- In	0-4.5 ft	0-4.5 ft	0-4.5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.14.2021 12:00	01.14.2021 12:10	01.14.2021 12:25	01.14.2021 13:10	01.14.2021 15:10	01.14.2021 14:20
BTEX by EPA 8021B	<i>Extracted:</i>	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00
	<i>Analyzed:</i>	01.15.2021 12:41	01.15.2021 13:02	01.15.2021 13:22	01.15.2021 13:43	01.15.2021 14:03	01.15.2021 14:24
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000384 0.00200	<0.000386 0.00200	<0.000386 0.00201	<0.000387 0.00201	<0.000384 0.00200	<0.000383 0.00199
Toluene		0.000679 JX 0.00200	<0.000457 0.00200	<0.000457 0.00201	<0.000458 0.00201	0.0769 0.00200	0.00905 0.00199
Ethylbenzene		0.00686 X 0.00200	<0.000566 0.00200	<0.000567 0.00201	<0.000568 0.00201	0.0252 0.00200	0.0185 0.00199
m,p-Xylenes		0.0157 X 0.00399	<0.00102 0.00401	<0.00102 0.00402	0.00510 0.00402	0.210 0.00399	0.111 0.00398
o-Xylene		0.00640 X 0.00200	<0.000345 0.00200	0.00321 0.00201	<0.000346 0.00201	0.0523 0.00200	0.0312 0.00199
Total Xylenes		0.0221 0.00200	<0.000345 0.00200	0.00321 0.00201	0.00510 0.00201	0.262 0.00200	0.142 0.00199
Total BTEX		0.0296 0.00200	<0.000345 0.00200	0.00321 0.00201	0.00510 0.00201	0.364 0.00200	0.170 0.00199
Chloride by EPA 300	<i>Extracted:</i>	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15
	<i>Analyzed:</i>	01.15.2021 14:31	01.15.2021 14:36	01.15.2021 14:42	01.15.2021 14:47	01.15.2021 14:52	01.15.2021 14:57
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		218 5.00	539 4.99	322 4.99	37.0 4.99	164 5.03	234 5.05
TPH by SW8015 Mod	<i>Extracted:</i>	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00
	<i>Analyzed:</i>	01.15.2021 12:59	01.15.2021 14:05	01.15.2021 14:27	01.15.2021 14:49	01.15.2021 15:11	01.15.2021 15:33
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 50.0	<15.0 50.0	<15.0 49.9	<14.9 49.8	52.5 49.9	21.8 J 49.9
Diesel Range Organics (DRO)		329 50.0	157 50.0	86.1 49.9	186 49.8	2540 49.9	198 49.9
Motor Oil Range Hydrocarbons (MRO)		51.4 50.0	26.2 J 50.0	<15.0 49.9	<14.9 49.8	19.9 J 49.9	20.6 J 49.9
Total TPH		380 50.0	183 50.0	86.1 49.9	186 49.8	2610 49.9	240 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 684790



Ensolum, Dallas, TX

Project Name: Line 58548 OUQ

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Carlsbad, NM

Date Received in Lab: Fri 01.15.2021 08:21
Report Date: 01.18.2021 16:28
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	684790-007	684790-008	684790-009	684790-010	684790-011	
	<i>Field Id:</i>	CS-7	CS-8	STP-1	STP-2	STP-3	
	<i>Depth:</i>	0-4.5 ft	4.5- ft				
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	01.14.2021 15:40	01.14.2021 15:34	01.14.2021 15:45	01.14.2021 15:50	01.14.2021 15:55	
BTEX by EPA 8021B	<i>Extracted:</i>	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00	01.15.2021 10:00	01.16.2021 10:00	
	<i>Analyzed:</i>	01.15.2021 14:44	01.15.2021 15:05	01.15.2021 15:25	01.15.2021 15:46	01.16.2021 16:49	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.000383 0.00199	0.00830 0.00201	<0.000388 0.00202	<0.000387 0.00201	0.00100 J 0.00200	
Toluene		0.00234 0.00199	0.227 0.00201	0.00475 0.00202	0.0374 0.00201	0.0398 0.00200	
Ethylbenzene		<0.000561 0.00199	0.163 0.00201	0.00810 0.00202	0.0796 0.00201	0.0130 0.00200	
m,p-Xylenes		0.0117 0.00398	0.744 0.00402	0.0286 0.00403	0.309 0.00402	0.190 0.00400	
o-Xylene		0.00374 0.00199	0.195 0.00201	0.00756 0.00202	0.0797 0.00201	0.0608 0.00200	
Total Xylenes		0.0154 0.00199	0.939 0.00201	0.0362 0.00202	0.389 0.00201	0.251 0.00200	
Total BTEX		0.0178 0.00199	1.34 0.00201	0.0490 0.00202	0.506 0.00201	0.305 0.00200	
Chloride by EPA 300	<i>Extracted:</i>	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	01.15.2021 13:15	
	<i>Analyzed:</i>	01.15.2021 15:13	01.15.2021 15:18	01.15.2021 15:34	01.15.2021 15:39	01.15.2021 15:44	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		97.0 5.04	148 4.97	39.4 4.96	137 4.99	179 4.98	
TPH by SW8015 Mod	<i>Extracted:</i>	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	01.15.2021 12:00	
	<i>Analyzed:</i>	01.15.2021 15:55	01.15.2021 16:17	01.15.2021 16:39	01.15.2021 17:01	01.15.2021 17:45	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<15.0 50.0	87.4 49.9	17.1 J 49.8	56.4 50.0	90.0 49.9	
Diesel Range Organics (DRO)		82.4 50.0	221 49.9	54.6 49.8	91.3 50.0	1220 49.9	
Motor Oil Range Hydrocarbons (MRO)		<15.0 50.0	28.1 J 49.9	<14.9 49.8	<15.0 50.0	15.4 J 49.9	
Total TPH		82.4 50.0	337 49.9	71.7 49.8	148 50.0	1330 49.9	

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Analytical Report 684790

for

Ensolum

Project Manager: Beaux Jennings

Line 58548 OUQ

03B1226038

01.18.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.18.2021

Project Manager: **Beaux Jennings****Ensolum**

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **684790****Line 58548 OUQ**

Project Address: Carlsbad, NM

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 684790. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 684790 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 684790****Ensolum, Dallas, TX**

Line 58548 OUQ

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	01.14.2021 12:00	2 In	684790-001
CS-2	S	01.14.2021 12:10	2 In	684790-002
CS-3	S	01.14.2021 12:25	2 In	684790-003
CS-4	S	01.14.2021 13:10	0 - 4.5 ft	684790-004
CS-5	S	01.14.2021 15:10	0 - 4.5 ft	684790-005
CS-6	S	01.14.2021 14:20	0 - 4.5 ft	684790-006
CS-7	S	01.14.2021 15:40	0 - 4.5 ft	684790-007
CS-8	S	01.14.2021 15:34	4.5 ft	684790-008
STP-1	S	01.14.2021 15:45		684790-009
STP-2	S	01.14.2021 15:50		684790-010
STP-3	S	01.14.2021 15:55		684790-011



CASE NARRATIVE

Client Name: Ensolum**Project Name: Line 58548 OUQ**Project ID: 03B1226038
Work Order Number(s): 684790Report Date: 01.18.2021
Date Received: 01.15.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3147994 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 684790-010,684790-008.

Lab Sample ID 684790-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Toluene, o-Xylene recovered below QC limits in the Matrix Spike. Ethylbenzene, m,p-Xylenes recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 684790-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3148028 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 684790-011.

Batch: LBA-3148031 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits . Samples affected are: 7719356-1-BKS,7719356-1-BSD,684925-001 S,684925-001 SD,684790-011.



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-1**
Lab Sample Id: 684790-001

Matrix: Soil
Date Collected: 01.14.2021 12:00

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	218	5.00	0.858	mg/kg	01.15.2021 14:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.15.2021 12:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	329	50.0	15.0	mg/kg	01.15.2021 12:59		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	51.4	50.0	15.0	mg/kg	01.15.2021 12:59		1
Total TPH	PHC635	380	50.0	15.0	mg/kg	01.15.2021 12:59		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.15.2021 12:59	
o-Terphenyl	84-15-1	112	%	70-130	01.15.2021 12:59	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-1**
Lab Sample Id: 684790-001

Matrix: Soil
Date Collected: 01.14.2021 12:00

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	01.15.2021 12:41	UX	1
Toluene	108-88-3	0.000679	0.00200	0.000455	mg/kg	01.15.2021 12:41	JX	1
Ethylbenzene	100-41-4	0.00686	0.00200	0.000564	mg/kg	01.15.2021 12:41	X	1
m,p-Xylenes	179601-23-1	0.0157	0.00399	0.00101	mg/kg	01.15.2021 12:41	X	1
o-Xylene	95-47-6	0.00640	0.00200	0.000344	mg/kg	01.15.2021 12:41	X	1
Total Xylenes	1330-20-7	0.0221	0.00200	0.000344	mg/kg	01.15.2021 12:41		1
Total BTEX		0.0296	0.00200	0.000344	mg/kg	01.15.2021 12:41		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	91	%	70-130	01.15.2021 12:41	
4-Bromofluorobenzene	460-00-4	122	%	70-130	01.15.2021 12:41	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-2**
Lab Sample Id: 684790-002

Matrix: Soil
Date Collected: 01.14.2021 12:10

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	539	4.99	0.857	mg/kg	01.15.2021 14:36		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.15.2021 14:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	157	50.0	15.0	mg/kg	01.15.2021 14:05		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	26.2	50.0	15.0	mg/kg	01.15.2021 14:05	J	1
Total TPH	PHC635	183	50.0	15.0	mg/kg	01.15.2021 14:05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.15.2021 14:05	
o-Terphenyl	84-15-1	113	%	70-130	01.15.2021 14:05	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-2**
Lab Sample Id: 684790-002

Matrix: Soil
Date Collected: 01.14.2021 12:10

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	01.15.2021 13:02	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	01.15.2021 13:02	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	01.15.2021 13:02	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	01.15.2021 13:02	U	1
o-Xylene	95-47-6	<0.000345	0.00200	0.000345	mg/kg	01.15.2021 13:02	U	1
Total Xylenes	1330-20-7	<0.000345	0.00200	0.000345	mg/kg	01.15.2021 13:02	U	1
Total BTEX		<0.000345	0.00200	0.000345	mg/kg	01.15.2021 13:02	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.15.2021 13:02	
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.15.2021 13:02	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-3**
Lab Sample Id: 684790-003

Matrix: Soil
Date Collected: 01.14.2021 12:25

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	322	4.99	0.857	mg/kg	01.15.2021 14:42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.15.2021 14:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	86.1	49.9	15.0	mg/kg	01.15.2021 14:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.15.2021 14:27	U	1
Total TPH	PHC635	86.1	49.9	15.0	mg/kg	01.15.2021 14:27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-130	01.15.2021 14:27	
o-Terphenyl	84-15-1	109	%	70-130	01.15.2021 14:27	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-3**
Lab Sample Id: 684790-003

Matrix: Soil
Date Collected: 01.14.2021 12:25

Date Received: 01.15.2021 08:21
Sample Depth: 2 In

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	01.15.2021 13:22	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	01.15.2021 13:22	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	01.15.2021 13:22	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.15.2021 13:22	U	1
o-Xylene	95-47-6	0.00321	0.00201	0.000346	mg/kg	01.15.2021 13:22		1
Total Xylenes	1330-20-7	0.00321	0.00201	0.000346	mg/kg	01.15.2021 13:22		1
Total BTEX		0.00321	0.00201	0.000346	mg/kg	01.15.2021 13:22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.15.2021 13:22			
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.15.2021 13:22			



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-4**
Lab Sample Id: 684790-004

Matrix: Soil
Date Collected: 01.14.2021 13:10

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	37.0	4.99	0.857	mg/kg	01.15.2021 14:47		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	49.8	14.9	mg/kg	01.15.2021 14:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	186	49.8	14.9	mg/kg	01.15.2021 14:49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.15.2021 14:49	U	1
Total TPH	PHC635	186	49.8	14.9	mg/kg	01.15.2021 14:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	01.15.2021 14:49	
o-Terphenyl	84-15-1	107	%	70-130	01.15.2021 14:49	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-4**
Lab Sample Id: 684790-004

Matrix: Soil
Date Collected: 01.14.2021 13:10

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	01.15.2021 13:43	U	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	01.15.2021 13:43	U	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	01.15.2021 13:43	U	1
m,p-Xylenes	179601-23-1	0.00510	0.00402	0.00102	mg/kg	01.15.2021 13:43		1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.15.2021 13:43	U	1
Total Xylenes	1330-20-7	0.00510	0.00201	0.000346	mg/kg	01.15.2021 13:43		1
Total BTEX		0.00510	0.00201	0.000346	mg/kg	01.15.2021 13:43		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.15.2021 13:43	
1,4-Difluorobenzene	540-36-3	92	%	70-130	01.15.2021 13:43	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-5**
Lab Sample Id: 684790-005

Matrix: Soil
Date Collected: 01.14.2021 15:10

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	164	5.03	0.864	mg/kg	01.15.2021 14:52		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	52.5	49.9	15.0	mg/kg	01.15.2021 15:11		1
Diesel Range Organics (DRO)	C10C28DRO	2540	49.9	15.0	mg/kg	01.15.2021 15:11		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	19.9	49.9	15.0	mg/kg	01.15.2021 15:11	J	1
Total TPH	PHC635	2610	49.9	15.0	mg/kg	01.15.2021 15:11		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-130	01.15.2021 15:11	
o-Terphenyl	84-15-1	127	%	70-130	01.15.2021 15:11	



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Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-5**
Lab Sample Id: 684790-005

Matrix: Soil
Date Collected: 01.14.2021 15:10

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	01.15.2021 14:03	U	1
Toluene	108-88-3	0.0769	0.00200	0.000455	mg/kg	01.15.2021 14:03		1
Ethylbenzene	100-41-4	0.0252	0.00200	0.000564	mg/kg	01.15.2021 14:03		1
m,p-Xylenes	179601-23-1	0.210	0.00399	0.00101	mg/kg	01.15.2021 14:03		1
o-Xylene	95-47-6	0.0523	0.00200	0.000344	mg/kg	01.15.2021 14:03		1
Total Xylenes	1330-20-7	0.262	0.00200	0.000344	mg/kg	01.15.2021 14:03		1
Total BTEX		0.364	0.00200	0.000344	mg/kg	01.15.2021 14:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.15.2021 14:03	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.15.2021 14:03	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-6**
Lab Sample Id: 684790-006

Matrix: Soil
Date Collected: 01.14.2021 14:20

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	234	5.05	0.867	mg/kg	01.15.2021 14:57		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	21.8	49.9	15.0	mg/kg	01.15.2021 15:33	J	1
Diesel Range Organics (DRO)	C10C28DRO	198	49.9	15.0	mg/kg	01.15.2021 15:33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	20.6	49.9	15.0	mg/kg	01.15.2021 15:33	J	1
Total TPH	PHC635	240	49.9	15.0	mg/kg	01.15.2021 15:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.15.2021 15:33	
o-Terphenyl	84-15-1	105	%	70-130	01.15.2021 15:33	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-6**
Lab Sample Id: 684790-006

Matrix: Soil
Date Collected: 01.14.2021 14:20

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.15.2021 14:24	U	1
Toluene	108-88-3	0.00905	0.00199	0.000454	mg/kg	01.15.2021 14:24		1
Ethylbenzene	100-41-4	0.0185	0.00199	0.000563	mg/kg	01.15.2021 14:24		1
m,p-Xylenes	179601-23-1	0.111	0.00398	0.00101	mg/kg	01.15.2021 14:24		1
o-Xylene	95-47-6	0.0312	0.00199	0.000343	mg/kg	01.15.2021 14:24		1
Total Xylenes	1330-20-7	0.142	0.00199	0.000343	mg/kg	01.15.2021 14:24		1
Total BTEX		0.170	0.00199	0.000343	mg/kg	01.15.2021 14:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.15.2021 14:24	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.15.2021 14:24	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-7**
Lab Sample Id: 684790-007

Matrix: Soil
Date Collected: 01.14.2021 15:40

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	97.0	5.04	0.865	mg/kg	01.15.2021 15:13		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.15.2021 15:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	82.4	50.0	15.0	mg/kg	01.15.2021 15:55		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.15.2021 15:55	U	1
Total TPH	PHC635	82.4	50.0	15.0	mg/kg	01.15.2021 15:55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.15.2021 15:55	
o-Terphenyl	84-15-1	106	%	70-130	01.15.2021 15:55	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-7**
Lab Sample Id: 684790-007

Matrix: Soil
Date Collected: 01.14.2021 15:40

Date Received: 01.15.2021 08:21
Sample Depth: 0 - 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.15.2021 14:44	U	1
Toluene	108-88-3	0.00234	0.00199	0.000453	mg/kg	01.15.2021 14:44		1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	01.15.2021 14:44	U	1
m,p-Xylenes	179601-23-1	0.0117	0.00398	0.00101	mg/kg	01.15.2021 14:44		1
o-Xylene	95-47-6	0.00374	0.00199	0.000342	mg/kg	01.15.2021 14:44		1
Total Xylenes	1330-20-7	0.0154	0.00199	0.000342	mg/kg	01.15.2021 14:44		1
Total BTEX		0.0178	0.00199	0.000342	mg/kg	01.15.2021 14:44		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.15.2021 14:44			
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.15.2021 14:44			



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-8**
Lab Sample Id: 684790-008

Matrix: Soil
Date Collected: 01.14.2021 15:34

Date Received: 01.15.2021 08:21
Sample Depth: 4.5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	148	4.97	0.853	mg/kg	01.15.2021 15:18		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	87.4	49.9	15.0	mg/kg	01.15.2021 16:17		1
Diesel Range Organics (DRO)	C10C28DRO	221	49.9	15.0	mg/kg	01.15.2021 16:17		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	28.1	49.9	15.0	mg/kg	01.15.2021 16:17	J	1
Total TPH	PHC635	337	49.9	15.0	mg/kg	01.15.2021 16:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.15.2021 16:17	
o-Terphenyl	84-15-1	112	%	70-130	01.15.2021 16:17	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **CS-8**
Lab Sample Id: 684790-008

Matrix: Soil
Date Collected: 01.14.2021 15:34

Date Received: 01.15.2021 08:21
Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00830	0.00201	0.000386	mg/kg	01.15.2021 15:05		1
Toluene	108-88-3	0.227	0.00201	0.000457	mg/kg	01.15.2021 15:05		1
Ethylbenzene	100-41-4	0.163	0.00201	0.000567	mg/kg	01.15.2021 15:05		1
m,p-Xylenes	179601-23-1	0.744	0.00402	0.00102	mg/kg	01.15.2021 15:05		1
o-Xylene	95-47-6	0.195	0.00201	0.000346	mg/kg	01.15.2021 15:05		1
Total Xylenes	1330-20-7	0.939	0.00201	0.000346	mg/kg	01.15.2021 15:05		1
Total BTEX		1.34	0.00201	0.000346	mg/kg	01.15.2021 15:05		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.15.2021 15:05	
4-Bromofluorobenzene	460-00-4	174	%	70-130	01.15.2021 15:05	**



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-1**
Lab Sample Id: 684790-009

Matrix: Soil
Date Collected: 01.14.2021 15:45

Date Received: 01.15.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.4	4.96	0.852	mg/kg	01.15.2021 15:34		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.1	49.8	14.9	mg/kg	01.15.2021 16:39	J	1
Diesel Range Organics (DRO)	C10C28DRO	54.6	49.8	14.9	mg/kg	01.15.2021 16:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.15.2021 16:39	U	1
Total TPH	PHC635	71.7	49.8	14.9	mg/kg	01.15.2021 16:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	01.15.2021 16:39	
o-Terphenyl	84-15-1	112	%	70-130	01.15.2021 16:39	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-1**
Lab Sample Id: 684790-009

Matrix: Soil
Date Collected: 01.14.2021 15:45

Date Received: 01.15.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	01.15.2021 15:25	U	1
Toluene	108-88-3	0.00475	0.00202	0.000459	mg/kg	01.15.2021 15:25		1
Ethylbenzene	100-41-4	0.00810	0.00202	0.000569	mg/kg	01.15.2021 15:25		1
m,p-Xylenes	179601-23-1	0.0286	0.00403	0.00102	mg/kg	01.15.2021 15:25		1
o-Xylene	95-47-6	0.00756	0.00202	0.000347	mg/kg	01.15.2021 15:25		1
Total Xylenes	1330-20-7	0.0362	0.00202	0.000347	mg/kg	01.15.2021 15:25		1
Total BTEX		0.0490	0.00202	0.000347	mg/kg	01.15.2021 15:25		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	101	%	70-130	01.15.2021 15:25	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.15.2021 15:25	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-2**
Lab Sample Id: 684790-010

Matrix: Soil
Date Collected: 01.14.2021 15:50

Date Received: 01.15.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	137	4.99	0.857	mg/kg	01.15.2021 15:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	56.4	50.0	15.0	mg/kg	01.15.2021 17:01		1
Diesel Range Organics (DRO)	C10C28DRO	91.3	50.0	15.0	mg/kg	01.15.2021 17:01		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.15.2021 17:01	U	1
Total TPH	PHC635	148	50.0	15.0	mg/kg	01.15.2021 17:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	01.15.2021 17:01	
o-Terphenyl	84-15-1	120	%	70-130	01.15.2021 17:01	



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-2**
Lab Sample Id: 684790-010

Matrix: Soil
Date Collected: 01.14.2021 15:50

Date Received: 01.15.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.15.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	01.15.2021 15:46	U	1
Toluene	108-88-3	0.0374	0.00201	0.000458	mg/kg	01.15.2021 15:46		1
Ethylbenzene	100-41-4	0.0796	0.00201	0.000568	mg/kg	01.15.2021 15:46		1
m,p-Xylenes	179601-23-1	0.309	0.00402	0.00102	mg/kg	01.15.2021 15:46		1
o-Xylene	95-47-6	0.0797	0.00201	0.000346	mg/kg	01.15.2021 15:46		1
Total Xylenes	1330-20-7	0.389	0.00201	0.000346	mg/kg	01.15.2021 15:46		1
Total BTEX		0.506	0.00201	0.000346	mg/kg	01.15.2021 15:46		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	147	%	70-130	01.15.2021 15:46	**		
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.15.2021 15:46			



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-3**
Lab Sample Id: 684790-011

Matrix: Soil
Date Collected: 01.14.2021 15:55

Date Received: 01.15.2021 08:21

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.15.2021 13:15

% Moisture:
Basis: Wet Weight

Seq Number: 3148021

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	179	4.98	0.855	mg/kg	01.15.2021 15:44		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.15.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148028

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	90.0	49.9	15.0	mg/kg	01.15.2021 17:45		1
Diesel Range Organics (DRO)	C10C28DRO	1220	49.9	15.0	mg/kg	01.15.2021 17:45		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	15.4	49.9	15.0	mg/kg	01.15.2021 17:45	J	1
Total TPH	PHC635	1330	49.9	15.0	mg/kg	01.15.2021 17:45		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.15.2021 17:45	
o-Terphenyl	84-15-1	149	%	70-130	01.15.2021 17:45	**



Certificate of Analytical Results 684790

Ensolum, Dallas, TX

Line 58548 OUQ

Sample Id: **STP-3**
Lab Sample Id: 684790-011

Matrix: Soil
Date Collected: 01.14.2021 15:55

Date Received: 01.15.2021 08:21

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.16.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148031

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00100	0.00200	0.000385	mg/kg	01.16.2021 16:49	J	1
Toluene	108-88-3	0.0398	0.00200	0.000456	mg/kg	01.16.2021 16:49		1
Ethylbenzene	100-41-4	0.0130	0.00200	0.000565	mg/kg	01.16.2021 16:49		1
m,p-Xylenes	179601-23-1	0.190	0.00400	0.00101	mg/kg	01.16.2021 16:49		1
o-Xylene	95-47-6	0.0608	0.00200	0.000344	mg/kg	01.16.2021 16:49		1
Total Xylenes	1330-20-7	0.251	0.00200	0.000344	mg/kg	01.16.2021 16:49		1
Total BTEX		0.305	0.00200	0.000344	mg/kg	01.16.2021 16:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.16.2021 16:49	
4-Bromofluorobenzene	460-00-4	175	%	70-130	01.16.2021 16:49	**



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum

Line 58548 OUQ

Analytical Method: Chloride by EPA 300

Seq Number: 3148021

MB Sample Id: 7719269-1-BLK

Matrix: Solid

LCS Sample Id: 7719269-1-BKS

Prep Method: E300P

Date Prep: 01.15.2021

LCSD Sample Id: 7719269-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	247	99	90-110	0	20	mg/kg	01.15.2021 13:34	

Analytical Method: Chloride by EPA 300

Seq Number: 3148021

Parent Sample Id: 684277-001

Matrix: Solid

MS Sample Id: 684277-001 S

Prep Method: E300P

Date Prep: 01.15.2021

MSD Sample Id: 684277-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	16.6	251	288	108	288	108	90-110	0	20	mg/kg	01.16.2021 13:09	

Analytical Method: Chloride by EPA 300

Seq Number: 3148021

Parent Sample Id: 684790-006

Matrix: Soil

MS Sample Id: 684790-006 S

Prep Method: E300P

Date Prep: 01.15.2021

MSD Sample Id: 684790-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	234	253	482	98	483	98	90-110	0	20	mg/kg	01.15.2021 15:02	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148028

MB Sample Id: 7719359-1-BLK

Matrix: Solid

LCS Sample Id: 7719359-1-BKS

Prep Method: SW8015P

Date Prep: 01.15.2021

LCSD Sample Id: 7719359-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	954	95	823	82	70-130	15	20	mg/kg	01.15.2021 12:15	
Diesel Range Organics (DRO)	<15.0	1000	916	92	910	91	70-130	1	20	mg/kg	01.15.2021 12:15	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	87		99		97		70-130	%	01.15.2021 12:15
o-Terphenyl	96		103		106		70-130	%	01.15.2021 12:15

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148028

Matrix: Solid

MB Sample Id: 7719359-1-BLK

Prep Method: SW8015P

Date Prep: 01.15.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.15.2021 11:53	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

Line 58548 OUQ

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148028

Parent Sample Id: 684790-001

Matrix: Soil

MS Sample Id: 684790-001 S

Prep Method: SW8015P

Date Prep: 01.15.2021

MSD Sample Id: 684790-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	991	99	978	98	70-130	1	20	mg/kg	01.15.2021 13:21	
Diesel Range Organics (DRO)	329	997	1270	94	1250	92	70-130	2	20	mg/kg	01.15.2021 13:21	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		112		70-130	%	01.15.2021 13:21
o-Terphenyl	118		116		70-130	%	01.15.2021 13:21

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147994

MB Sample Id: 7719262-1-BLK

Matrix: Solid

LCS Sample Id: 7719262-1-BKS

Prep Method: SW5035A

Date Prep: 01.15.2021

LCSD Sample Id: 7719262-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0983	98	0.0998	100	70-130	2	35	mg/kg	01.15.2021 09:59	
Toluene	<0.000456	0.100	0.0955	96	0.0955	96	70-130	0	35	mg/kg	01.15.2021 09:59	
Ethylbenzene	<0.000565	0.100	0.0996	100	0.0994	99	70-130	0	35	mg/kg	01.15.2021 09:59	
m,p-Xylenes	<0.00101	0.200	0.201	101	0.199	100	70-130	1	35	mg/kg	01.15.2021 09:59	
o-Xylene	<0.000344	0.100	0.0997	100	0.0988	99	70-130	1	35	mg/kg	01.15.2021 09:59	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		99		100		70-130	%	01.15.2021 09:59
4-Bromofluorobenzene	106		101		101		70-130	%	01.15.2021 09:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148031

MB Sample Id: 7719356-1-BLK

Matrix: Solid

LCS Sample Id: 7719356-1-BKS

Prep Method: SW5035A

Date Prep: 01.16.2021

LCSD Sample Id: 7719356-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.112	112	0.0990	99	70-130	12	35	mg/kg	01.16.2021 12:06	
Toluene	<0.000456	0.100	0.118	118	0.108	108	70-130	9	35	mg/kg	01.16.2021 12:06	
Ethylbenzene	<0.000565	0.100	0.114	114	0.105	105	70-130	8	35	mg/kg	01.16.2021 12:06	
m,p-Xylenes	<0.00101	0.200	0.225	113	0.211	106	70-130	6	35	mg/kg	01.16.2021 12:06	
o-Xylene	<0.000344	0.100	0.116	116	0.109	109	70-130	6	35	mg/kg	01.16.2021 12:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	75		96		97		70-130	%	01.16.2021 12:06
4-Bromofluorobenzene	115		149	**	153	**	70-130	%	01.16.2021 12:06

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

Line 58548 OUQ

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147994

Parent Sample Id: 684790-001

Matrix: Soil

MS Sample Id: 684790-001 S

Prep Method: SW5035A

Date Prep: 01.15.2021

MSD Sample Id: 684790-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.0681	68	0.0768	77	70-130	12	35	mg/kg	01.15.2021 11:00	X
Toluene	0.000679	0.0998	0.0614	61	0.0721	72	70-130	16	35	mg/kg	01.15.2021 11:00	X
Ethylbenzene	0.00686	0.0998	0.0582	51	0.0721	65	70-130	21	35	mg/kg	01.15.2021 11:00	X
m,p-Xylenes	0.0157	0.200	0.117	51	0.145	65	70-130	21	35	mg/kg	01.15.2021 11:00	X
o-Xylene	0.00640	0.0998	0.0613	55	0.0761	70	70-130	22	35	mg/kg	01.15.2021 11:00	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	99		100		70-130	%	01.15.2021 11:00
4-Bromofluorobenzene	104		105		70-130	%	01.15.2021 11:00

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148031

Parent Sample Id: 684925-001

Matrix: Soil

MS Sample Id: 684925-001 S

Prep Method: SW5035A

Date Prep: 01.16.2021

MSD Sample Id: 684925-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.102	102	0.102	102	70-130	0	35	mg/kg	01.16.2021 12:57	
Toluene	<0.000457	0.100	0.108	108	0.0918	92	70-130	16	35	mg/kg	01.16.2021 12:57	
Ethylbenzene	<0.000567	0.100	0.103	103	0.0998	100	70-130	3	35	mg/kg	01.16.2021 12:57	
m,p-Xylenes	<0.00102	0.201	0.206	102	0.201	100	70-130	2	35	mg/kg	01.16.2021 12:57	
o-Xylene	<0.000346	0.100	0.105	105	0.104	104	70-130	1	35	mg/kg	01.16.2021 12:57	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		100		70-130	%	01.16.2021 12:57
4-Bromofluorobenzene	158	**	162	**	70-130	%	01.16.2021 12:57

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 1084790

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432) 704-5440 El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296 Corsland, NM (432) 704-5440
 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000 West Palm Beach, FL (561) 689-6701

www.xenco.com Page 1 of 2

Project Manager: Beau Jennings		Bill to: (if different)	
Company Name: Ensium LLC		Company Name:	
Address: 705 W. Bradley Ave		Address:	
City, State ZIP: Midland TX 79705		City, State ZIP:	
Phone: (810) 219-8858		Email: B.jennings@ensium.com	

Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: <input type="checkbox"/>	

Project Name: Line 58548 OWA		Turn Around	
Project Number: 03B1224038		<input type="checkbox"/>	
Project Location: Catfish, NM		Rush: 24 hr	
Sampler's Name: Kelly Powers		Due Date:	
PO #: 03B1224038		Quote #:	

ANALYSIS REQUEST

BTEx 8021B
 TPH 8015M
 Chlordes 300.0

SAMPLE RECEIPT		Temp Blank: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Wet Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Temperature (°C): -3.9		Thermometer ID			
Received Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Correction Factor:			
Cooler Custody Seals: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Total Containers:			
Sample Custody Seals: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					

Preservative Codes	
MeOH: Me	
None: NO	
HNO3: HN	
H2SO4: H2	
HCL: HL	
NaOH: Na	
Zn Acetate + NaOH: Zn	
TAT starts the day received by the lab, if received by 4:00pm	

Lab ID	Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	BTEx 8021B	TPH 8015M	Chlordes 300.0	Sample Comments
CS-1		S	09/14/2021	1200	2'	1	X	X	X	
CS-2				1210	2"	1	X	X	X	
CS-3				1225	2"	1	X	X	X	
CS-4				1310	0'-4.5'	1	X	X	X	
CS-5				1510	0'-4.5'	1	X	X	X	
CS-6				1420	0'-4.5'	1	X	X	X	
CS-7				1540	0'-4.5'	1	X	X	X	
CS-8				1534	4.5'	1	X	X	X	
STP-1				1545	-	1	X	X	X	
STP-2				1550	-	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)		Received by: (Signature)		Date/Time	
Kelly Powers		[Signature]		1-5-21/2021	

Revised Date 02/26/19 Rev. 2019.1



Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 1084790

www.xenco.com

Page 2 of 2

Project Manager:	Brian Jennings	Bill to: (if different)	
Company Name:	Ensalum LLC	Company Name:	
Address:	705 W. Midland	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	(210) 219-8858	Email:	Bjennings@ensalum.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Line 58548000	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24hr	Pres. Code	
Project Number:	03B13A16038				
Project Location:	Cactus, NM	Due Date:			
Sampler's Name:	Kelly Lavery	TAT starts the day received by the lab, if received by 4:30pm			
PO #:	03B13A16038				
SAMPLE RECEIPT					
Samples Received Intact:	(Yes) No	Temp Blank:	Yes No	Wet Ice:	(Yes) No
Cooler Custody Seals:	(Yes) No	Thermometer ID:			1R8
Sample Custody Seals:	(Yes) No	Correction Factor:			-5
Total Containers:		Temperature Reading:			-3.4
		Corrected Temperature:			-3.4

Sample Identification							Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST										Preservative Codes																						
STP-3							S	01/14/2021	1555	-	C	1	X	X	X	BTEX										TPH										Chlorides									
KPC 01/15/2021																																													
24hr																																													

01/15/2021

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

Hg: 1631 / 245.1 / 7470 / 7471

24hr

Total 200.7 / 6010		200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		Hg: 1631 / 245.1 / 7470 / 7471	
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Kelly Lavery	24hr	1-15-21 9:27			
3					
5					

Date: 1/15/2021
Signature: [Signature]

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Certificate of Analysis Summary 685642



Ensolum, LLC, Houston, TX

Project Name: 58548 OUQ Line Strike

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Eddy County, New Mexico

Date Received in Lab: Thu 01.21.2021 16:39**Report Date:** 01.25.2021 15:31**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	685642-001		685642-002		685642-003		685642-004		685642-005		685642-006	
	<i>Field Id:</i>	CS-1		CS-2		CS-4		CS-5		CS-6		CS-8	
	<i>Depth:</i>	6- ft		6- ft		0-5 ft		0-5 ft		0-5 ft		5- ft	
	<i>Matrix:</i>	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	<i>Sampled:</i>	01.21.2021 14:15		01.21.2021 14:20		01.21.2021 15:25		01.21.2021 15:20		01.21.2021 15:05		01.21.2021 12:15	
TPH by SW8015 Mod SUB: T104704400-20-21	<i>Extracted:</i>	01.23.2021 10:00		01.23.2021 10:00		01.23.2021 10:00		01.23.2021 10:00		01.23.2021 10:00		01.23.2021 10:00	
	<i>Analyzed:</i>	01.23.2021 12:53		01.23.2021 14:00		01.23.2021 14:22		01.23.2021 14:44		01.23.2021 15:06		01.23.2021 15:29	
	<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	50.0	<15.0	50.0	<15.0	50.0	<15.0	49.9	<15.0	50.0	<15.0	50.0
Diesel Range Organics (DRO)		<15.0	50.0	16.7 J	50.0	1190	50.0	1450	49.9	505	50.0	465	50.0
Motor Oil Range Hydrocarbons (MRO)		<15.0	50.0	<15.0	50.0	<15.0	50.0	<15.0	49.9	<15.0	50.0	<15.0	50.0
Total TPH		<15.0	50.0	16.7 J	50.0	1190	50.0	1450	49.9	505	50.0	465	50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 685642



Ensolum, LLC, Houston, TX

Project Name: 58548 OUQ Line Strike

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Eddy County, New Mexico

Date Received in Lab: Thu 01.21.2021 16:39**Report Date:** 01.25.2021 15:31**Project Manager:** Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	685642-007	685642-008	685642-009	685642-010	685642-011	
	<i>Field Id:</i>	CS-9	STP- 4	STP- 5	STP- 6	STP- 7	
	<i>Depth:</i>	5- ft					
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	
	<i>Sampled:</i>	01.21.2021 15:10	01.21.2021 14:40	01.21.2021 14:45	01.21.2021 14:50	01.21.2021 15:40	
BTEX by EPA 8021B	<i>Extracted:</i>	01.21.2021 17:00	01.21.2021 17:00	01.21.2021 17:00	01.21.2021 17:00	01.21.2021 17:00	
	<i>Analyzed:</i>	01.22.2021 08:53	01.22.2021 09:15	01.22.2021 09:38	01.22.2021 10:00	01.22.2021 10:23	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Benzene		<0.000483 0.00199	<0.000485 0.00200	<0.000484 0.00199	<0.000486 0.00200	<0.000489 0.00202	
Toluene		<0.000525 0.00199	<0.000527 0.00200	0.0459 0.00199	<0.000529 0.00200	0.00442 0.00202	
Ethylbenzene		<0.000404 0.00199	<0.000405 0.00200	0.0339 0.00199	<0.000407 0.00200	<0.000409 0.00202	
m,p-Xylenes		0.00907 0.00398	<0.000752 0.00399	0.376 0.00398	0.00409 0.00401	0.0306 0.00403	
o-Xylene		0.00294 0.00199	<0.000402 0.00200	0.115 0.00199	<0.000404 0.00200	0.00941 0.00202	
Total Xylenes		0.0120 0.00199	<0.000402 0.00200	0.491 0.00199	0.00409 0.00200	0.0400 0.00202	
Total BTEX		0.0120 0.00199	<0.000402 0.00200	0.571 0.00199	0.00409 0.00200	0.0444 0.00202	
Chloride by EPA 300	<i>Extracted:</i>	01.21.2021 17:30	01.21.2021 17:30	01.21.2021 17:30	01.21.2021 17:30	01.21.2021 17:30	
	<i>Analyzed:</i>	01.22.2021 00:26	01.22.2021 00:43	01.22.2021 00:49	01.22.2021 01:06	01.22.2021 01:11	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Chloride		167 9.92	439 10.1	104 10.6	144 10.1	180 9.90	
TPH by SW8015 Mod SUB: T104704400-20-21	<i>Extracted:</i>	01.23.2021 10:00	01.23.2021 10:00	01.23.2021 10:00	01.23.2021 10:00	01.23.2021 10:00	
	<i>Analyzed:</i>	01.23.2021 15:50	01.23.2021 16:12	01.23.2021 16:34	01.23.2021 16:55	01.23.2021 17:38	
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	
Gasoline Range Hydrocarbons (GRO)		<15.0 50.0	15.1 J 49.8	29.1 J 49.9	<15.0 50.0	<15.0 50.0	
Diesel Range Organics (DRO)		274 50.0	25.5 J 49.8	305 49.9	23.3 J 50.0	393 50.0	
Motor Oil Range Hydrocarbons (MRO)		42.4 J 50.0	<14.9 49.8	<15.0 49.9	<15.0 50.0	<15.0 50.0	
Total TPH		316 50.0	40.6 J 49.8	334 49.9	23.3 J 50.0	393 50.0	

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 685642

for

Ensolum, LLC

Project Manager: Beaux Jennings

58548 OUQ Line Strike

03B1226038

01.25.2021

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.25.2021

Project Manager: **Beaux Jennings****Ensolum, LLC**

10333 Harwin Drive, Suite 470

Houston, TX 77036

Reference: Eurofins Xenco, LLC Report No(s): **685642****58548 OUQ Line Strike**

Project Address: Eddy County, New Mexico

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 685642. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 685642 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 685642****Ensolum, LLC, Houston, TX**

58548 OUQ Line Strike

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	01.21.2021 14:15	6 ft	685642-001
CS-2	S	01.21.2021 14:20	6 ft	685642-002
CS-4	S	01.21.2021 15:25	0 - 5 ft	685642-003
CS-5	S	01.21.2021 15:20	0 - 5 ft	685642-004
CS-6	S	01.21.2021 15:05	0 - 5 ft	685642-005
CS-8	S	01.21.2021 12:15	5 ft	685642-006
CS-9	S	01.21.2021 15:10	5 ft	685642-007
STP- 4	S	01.21.2021 14:40		685642-008
STP- 5	S	01.21.2021 14:45		685642-009
STP- 6	S	01.21.2021 14:50		685642-010
STP- 7	S	01.21.2021 15:40		685642-011

**CASE NARRATIVE****Client Name: Ensolum, LLC****Project Name: 58548 OUQ Line Strike**Project ID: 03B1226038
Work Order Number(s): 685642Report Date: 01.25.2021
Date Received: 01.21.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3148785 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7719887-1-BLK.



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX 58548 OUQ Line Strike

Sample Id: **CS-1**
Lab Sample Id: 685642-001

Matrix: Soil
Date Collected: 01.21.2021 14:15

Date Received: 01.21.2021 16:39
Sample Depth: 6 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 12:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.23.2021 12:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 12:53	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.23.2021 12:53	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	101	%	70-130	01.23.2021 12:53			
o-Terphenyl	84-15-1	111	%	70-130	01.23.2021 12:53			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-2**
Lab Sample Id: 685642-002

Matrix: Soil
Date Collected: 01.21.2021 14:20

Date Received: 01.21.2021 16:39
Sample Depth: 6 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 14:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	16.7	50.0	15.0	mg/kg	01.23.2021 14:00	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 14:00	U	1
Total TPH	PHC635	16.7	50.0	15.0	mg/kg	01.23.2021 14:00	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	110	%	70-130	01.23.2021 14:00			
o-Terphenyl	84-15-1	122	%	70-130	01.23.2021 14:00			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-4**
Lab Sample Id: 685642-003

Matrix: Soil
Date Collected: 01.21.2021 15:25

Date Received: 01.21.2021 16:39
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 14:22	U	1
Diesel Range Organics (DRO)	C10C28DRO	1190	50.0	15.0	mg/kg	01.23.2021 14:22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 14:22	U	1
Total TPH	PHC635	1190	50.0	15.0	mg/kg	01.23.2021 14:22		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	111	%	70-130	01.23.2021 14:22			
o-Terphenyl	84-15-1	129	%	70-130	01.23.2021 14:22			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-5**
Lab Sample Id: 685642-004

Matrix: Soil
Date Collected: 01.21.2021 15:20

Date Received: 01.21.2021 16:39
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.23.2021 14:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	1450	49.9	15.0	mg/kg	01.23.2021 14:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.23.2021 14:44	U	1
Total TPH	PHC635	1450	49.9	15.0	mg/kg	01.23.2021 14:44		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	106	%	70-130	01.23.2021 14:44			
o-Terphenyl	84-15-1	127	%	70-130	01.23.2021 14:44			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-6**
Lab Sample Id: 685642-005

Matrix: Soil
Date Collected: 01.21.2021 15:05

Date Received: 01.21.2021 16:39
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 15:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	505	50.0	15.0	mg/kg	01.23.2021 15:06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 15:06	U	1
Total TPH	PHC635	505	50.0	15.0	mg/kg	01.23.2021 15:06		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	105	%	70-130	01.23.2021 15:06			
o-Terphenyl	84-15-1	119	%	70-130	01.23.2021 15:06			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-8**
Lab Sample Id: 685642-006

Matrix: Soil
Date Collected: 01.21.2021 12:15

Date Received: 01.21.2021 16:39
Sample Depth: 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 15:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	465	50.0	15.0	mg/kg	01.23.2021 15:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 15:29	U	1
Total TPH	PHC635	465	50.0	15.0	mg/kg	01.23.2021 15:29		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	106	%	70-130	01.23.2021 15:29			
o-Terphenyl	84-15-1	120	%	70-130	01.23.2021 15:29			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-9**
Lab Sample Id: 685642-007

Matrix: Soil
Date Collected: 01.21.2021 15:10

Date Received: 01.21.2021 16:39
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148608

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	167	9.92	0.351	mg/kg	01.22.2021 00:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 15:50	U	1
Diesel Range Organics (DRO)	C10C28DRO	274	50.0	15.0	mg/kg	01.23.2021 15:50		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	42.4	50.0	15.0	mg/kg	01.23.2021 15:50	J	1
Total TPH	PHC635	316	50.0	15.0	mg/kg	01.23.2021 15:50		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-130	01.23.2021 15:50	
o-Terphenyl	84-15-1	113	%	70-130	01.23.2021 15:50	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **CS-9**
Lab Sample Id: 685642-007

Matrix: Soil
Date Collected: 01.21.2021 15:10

Date Received: 01.21.2021 16:39
Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148600

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000483	0.00199	0.000483	mg/kg	01.22.2021 08:53	U	1
Toluene	108-88-3	<0.000525	0.00199	0.000525	mg/kg	01.22.2021 08:53	U	1
Ethylbenzene	100-41-4	<0.000404	0.00199	0.000404	mg/kg	01.22.2021 08:53	U	1
m,p-Xylenes	179601-23-1	0.00907	0.00398	0.000749	mg/kg	01.22.2021 08:53		1
o-Xylene	95-47-6	0.00294	0.00199	0.000401	mg/kg	01.22.2021 08:53		1
Total Xylenes	1330-20-7	0.0120	0.00199	0.000401	mg/kg	01.22.2021 08:53		1
Total BTEX		0.0120	0.00199	0.000401	mg/kg	01.22.2021 08:53		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.22.2021 08:53	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.22.2021 08:53	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 4**
Lab Sample Id: 685642-008

Matrix: Soil
Date Collected: 01.21.2021 14:40

Date Received: 01.21.2021 16:39

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148608

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	439	10.1	0.356	mg/kg	01.22.2021 00:43		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.1	49.8	14.9	mg/kg	01.23.2021 16:12	J	1
Diesel Range Organics (DRO)	C10C28DRO	25.5	49.8	14.9	mg/kg	01.23.2021 16:12	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.23.2021 16:12	U	1
Total TPH	PHC635	40.6	49.8	14.9	mg/kg	01.23.2021 16:12	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-130	01.23.2021 16:12	
o-Terphenyl	84-15-1	114	%	70-130	01.23.2021 16:12	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 4**
Lab Sample Id: 685642-008

Matrix: Soil
Date Collected: 01.21.2021 14:40

Date Received: 01.21.2021 16:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148600

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	01.22.2021 09:15	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	01.22.2021 09:15	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	01.22.2021 09:15	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	01.22.2021 09:15	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	01.22.2021 09:15	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	01.22.2021 09:15	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	01.22.2021 09:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	125	%	70-130	01.22.2021 09:15			
1,4-Difluorobenzene	540-36-3	106	%	70-130	01.22.2021 09:15			



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 5**
Lab Sample Id: 685642-009

Matrix: Soil
Date Collected: 01.21.2021 14:45

Date Received: 01.21.2021 16:39

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148608

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	104	10.6	0.377	mg/kg	01.22.2021 00:49		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	29.1	49.9	15.0	mg/kg	01.23.2021 16:34	J	1
Diesel Range Organics (DRO)	C10C28DRO	305	49.9	15.0	mg/kg	01.23.2021 16:34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.23.2021 16:34	U	1
Total TPH	PHC635	334	49.9	15.0	mg/kg	01.23.2021 16:34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-130	01.23.2021 16:34	
o-Terphenyl	84-15-1	116	%	70-130	01.23.2021 16:34	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 5**
Lab Sample Id: 685642-009

Matrix: Soil
Date Collected: 01.21.2021 14:45

Date Received: 01.21.2021 16:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148600

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	01.22.2021 09:38	U	1
Toluene	108-88-3	0.0459	0.00199	0.000526	mg/kg	01.22.2021 09:38		1
Ethylbenzene	100-41-4	0.0339	0.00199	0.000405	mg/kg	01.22.2021 09:38		1
m,p-Xylenes	179601-23-1	0.376	0.00398	0.000751	mg/kg	01.22.2021 09:38		1
o-Xylene	95-47-6	0.115	0.00199	0.000401	mg/kg	01.22.2021 09:38		1
Total Xylenes	1330-20-7	0.491	0.00199	0.000401	mg/kg	01.22.2021 09:38		1
Total BTEX		0.571	0.00199	0.000401	mg/kg	01.22.2021 09:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.22.2021 09:38	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.22.2021 09:38	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 6**
Lab Sample Id: 685642-010

Matrix: Soil
Date Collected: 01.21.2021 14:50

Date Received: 01.21.2021 16:39

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148608

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	144	10.1	0.356	mg/kg	01.22.2021 01:06		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 16:55	U	1
Diesel Range Organics (DRO)	C10C28DRO	23.3	50.0	15.0	mg/kg	01.23.2021 16:55	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 16:55	U	1
Total TPH	PHC635	23.3	50.0	15.0	mg/kg	01.23.2021 16:55	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-130	01.23.2021 16:55	
o-Terphenyl	84-15-1	109	%	70-130	01.23.2021 16:55	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 6**
Lab Sample Id: 685642-010

Matrix: Soil
Date Collected: 01.21.2021 14:50

Date Received: 01.21.2021 16:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148600

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.22.2021 10:00	U	1
Toluene	108-88-3	<0.000529	0.00200	0.000529	mg/kg	01.22.2021 10:00	U	1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	01.22.2021 10:00	U	1
m,p-Xylenes	179601-23-1	0.00409	0.00401	0.000755	mg/kg	01.22.2021 10:00		1
o-Xylene	95-47-6	<0.000404	0.00200	0.000404	mg/kg	01.22.2021 10:00	U	1
Total Xylenes	1330-20-7	0.00409	0.00200	0.000404	mg/kg	01.22.2021 10:00		1
Total BTEX		0.00409	0.00200	0.000404	mg/kg	01.22.2021 10:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.22.2021 10:00	
4-Bromofluorobenzene	460-00-4	130	%	70-130	01.22.2021 10:00	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 7**
Lab Sample Id: 685642-011

Matrix: Soil
Date Collected: 01.21.2021 15:40

Date Received: 01.21.2021 16:39

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:30

% Moisture:
Basis: Wet Weight

Seq Number: 3148608

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	180	9.90	0.350	mg/kg	01.22.2021 01:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.23.2021 10:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3148785

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.23.2021 17:38	U	1
Diesel Range Organics (DRO)	C10C28DRO	393	50.0	15.0	mg/kg	01.23.2021 17:38		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.23.2021 17:38	U	1
Total TPH	PHC635	393	50.0	15.0	mg/kg	01.23.2021 17:38		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.23.2021 17:38	
o-Terphenyl	84-15-1	117	%	70-130	01.23.2021 17:38	



Certificate of Analytical Results 685642

Ensolum, LLC, Houston, TX

58548 OUQ Line Strike

Sample Id: **STP- 7**
Lab Sample Id: 685642-011

Matrix: Soil
Date Collected: 01.21.2021 15:40

Date Received: 01.21.2021 16:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.21.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3148600

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000489	0.00202	0.000489	mg/kg	01.22.2021 10:23	U	1
Toluene	108-88-3	0.00442	0.00202	0.000532	mg/kg	01.22.2021 10:23		1
Ethylbenzene	100-41-4	<0.000409	0.00202	0.000409	mg/kg	01.22.2021 10:23	U	1
m,p-Xylenes	179601-23-1	0.0306	0.00403	0.000760	mg/kg	01.22.2021 10:23		1
o-Xylene	95-47-6	0.00941	0.00202	0.000406	mg/kg	01.22.2021 10:23		1
Total Xylenes	1330-20-7	0.0400	0.00202	0.000406	mg/kg	01.22.2021 10:23		1
Total BTEX		0.0444	0.00202	0.000406	mg/kg	01.22.2021 10:23		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.22.2021 10:23			
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.22.2021 10:23			



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum, LLC
58548 OUQ Line Strike

Analytical Method: Chloride by EPA 300

Seq Number: 3148608

MB Sample Id: 7719771-1-BLK

Matrix: Solid

LCS Sample Id: 7719771-1-BKS

Prep Method: E300P

Date Prep: 01.21.2021

LCSD Sample Id: 7719771-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	200	215	108	211	106	90-110	2	20	mg/kg	01.21.2021 22:55	

Analytical Method: Chloride by EPA 300

Seq Number: 3148608

Parent Sample Id: 685637-001

Matrix: Soil

MS Sample Id: 685637-001 S

Prep Method: E300P

Date Prep: 01.21.2021

MSD Sample Id: 685637-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1440	201	1620	90	1650	106	90-110	2	20	mg/kg	01.21.2021 23:12	

Analytical Method: Chloride by EPA 300

Seq Number: 3148608

Parent Sample Id: 685642-007

Matrix: Soil

MS Sample Id: 685642-007 S

Prep Method: E300P

Date Prep: 01.21.2021

MSD Sample Id: 685642-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	167	200	383	108	387	109	90-110	1	20	mg/kg	01.22.2021 00:32	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148785

MB Sample Id: 7719887-1-BLK

Matrix: Solid

LCS Sample Id: 7719887-1-BKS

Prep Method: SW8015P

Date Prep: 01.23.2021

LCSD Sample Id: 7719887-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1070	107	1050	105	70-130	2	20	mg/kg	01.23.2021 11:42	
Diesel Range Organics (DRO)	<15.0	1000	1150	115	1140	114	70-130	1	20	mg/kg	01.23.2021 11:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		120		112		70-130	%	01.23.2021 11:42
o-Terphenyl	134	**	125		120		70-130	%	01.23.2021 11:42

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148785

Matrix: Solid

MB Sample Id: 7719887-1-BLK

Prep Method: SW8015P

Date Prep: 01.23.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.23.2021 11:20	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum, LLC
58548 OUQ Line Strike

Analytical Method: TPH by SW8015 Mod

Seq Number: 3148785

Parent Sample Id: 685642-001

Matrix: Soil

MS Sample Id: 685642-001 S

Prep Method: SW8015P

Date Prep: 01.23.2021

MSD Sample Id: 685642-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	1030	103	1140	114	70-130	10	20	mg/kg	01.23.2021 13:15	
Diesel Range Organics (DRO)	<15.0	997	1090	109	1100	110	70-130	1	20	mg/kg	01.23.2021 13:15	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		109		70-130	%	01.23.2021 13:15
o-Terphenyl	114		113		70-130	%	01.23.2021 13:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148600

MB Sample Id: 7719770-1-BLK

Matrix: Solid

LCS Sample Id: 7719770-1-BKS

Prep Method: SW5035A

Date Prep: 01.21.2021

LCSD Sample Id: 7719770-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.0974	97	0.0939	94	70-130	4	35	mg/kg	01.22.2021 06:26	
Toluene	<0.000528	0.100	0.0899	90	0.0885	89	70-130	2	35	mg/kg	01.22.2021 06:26	
Ethylbenzene	<0.000406	0.100	0.0933	93	0.0910	91	71-129	2	35	mg/kg	01.22.2021 06:26	
m,p-Xylenes	<0.000754	0.200	0.189	95	0.185	93	70-135	2	35	mg/kg	01.22.2021 06:26	
o-Xylene	<0.000403	0.100	0.0950	95	0.0925	93	71-133	3	35	mg/kg	01.22.2021 06:26	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		106		100		70-130	%	01.22.2021 06:26
4-Bromofluorobenzene	107		111		107		70-130	%	01.22.2021 06:26

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148600

Parent Sample Id: 685637-001

Matrix: Soil

MS Sample Id: 685637-001 S

Prep Method: SW5035A

Date Prep: 01.21.2021

MSD Sample Id: 685637-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000484	0.0996	0.0988	99	0.0971	97	70-130	2	35	mg/kg	01.22.2021 07:11	
Toluene	<0.000526	0.0996	0.0873	88	0.0877	88	70-130	0	35	mg/kg	01.22.2021 07:11	
Ethylbenzene	<0.000405	0.0996	0.0871	87	0.0918	92	71-129	5	35	mg/kg	01.22.2021 07:11	
m,p-Xylenes	<0.000751	0.199	0.175	88	0.185	93	70-135	6	35	mg/kg	01.22.2021 07:11	
o-Xylene	<0.000401	0.0996	0.0898	90	0.0913	91	71-133	2	35	mg/kg	01.22.2021 07:11	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		101		70-130	%	01.22.2021 07:11
4-Bromofluorobenzene	113		109		70-130	%	01.22.2021 07:11

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 1085642

www.xenco.com Page 1 of 2

Project Manager:	Beaux Jennings	Bill to: (if different)	
Company Name:	Ensulum UT	Company Name:	
Address:	705 W. Madley Ave	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	(810) 219 8858	Email:	B.jennings@ensulum.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

Project Name:	58548 OUA Line Strike	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24 hr	Pres. Code	
Project Number:	03B 1224038	Due Date:			
Project Location:	Edhy Canty, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Kelly Leary				
P.O. #:	03B 1224038				
SAMPLE RECEIPT					
Samples Received In tact:	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Thermometer ID:			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:			
Total Containers:	1	Temperature Reading:	9.0/8.8		
		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters
CS-1	S	6/21/21	1415	6"	C	1	BTEx 802B
CS-2							TPH 8015M
CS-4							Chlorides 300.0
CS-5							
CS-6							
CS-8							
CS-9							
STP-4							
STP-5							
STP-6							

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SIO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>Kelly Leary</u>	<u>Care Guste</u>	1-21-21 16:39			



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3333
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: 685642

www.xenco.com Page 2 of 2

Project Manager:	Brau, Jennifer	Bill to: (if different)	
Company Name:	Ensslum LLC	Company Name:	
Address:	705 N Midway Ave	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	(810) 214 8858	Email:	Jennifer@ensslum.com

Work Order Comments	
Program:	<input type="checkbox"/> UST/PST <input type="checkbox"/> PIP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:

[illegible]

Sample Identification							Sample Comments
Matrix	Date Sampled	Time Sampled	Depth	Grab Comp	# of Cont		
STP-7	S	01/11/21	15410	-	C	1	X X X X
<p style="text-align: center;">NFG 01/21/2021 KL</p>							
							24 hr

Total 2007 / 6010	2008 / 6020c	8RCRA 13PPM Texas T1	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn	
Circle Method(s) and Metal(s) to be analyzed																															
TCLP / SPLP 6010 ; 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U																															
Hg: 1631 / 2451 / 7470 / 7471																															

Notice: Signature of this document and reimbursement of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Muller J</i>			2		
3 <i>Joe Dufre</i>		1-21-16 39	4		
5			6		

Inter-Office Shipment

IOS Number : **76894**

Date/Time: 01.22.2021

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
685642-001	S	CS-1	01.21.2021 14:15	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-002	S	CS-2	01.21.2021 14:20	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-003	S	CS-4	01.21.2021 15:25	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-004	S	CS-5	01.21.2021 15:20	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-005	S	CS-6	01.21.2021 15:05	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-006	S	CS-8	01.21.2021 12:15	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-007	S	CS-9	01.21.2021 15:10	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-008	S	STP- 4	01.21.2021 14:40	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-009	S	STP- 5	01.21.2021 14:45	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-010	S	STP- 6	01.21.2021 14:50	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	
685642-011	S	STP- 7	01.21.2021 15:40	SW8015MOD_NM	TPH by SW8015 Mod	01.22.2021	02.04.2021	JKR	PHCC10C28 PHCC28C3:	

Inter Office Shipment or Sample Comments:

Relinquished By:



Cloe Clifton

Date Relinquished: 01.22.2021

Received By:



Jessica Kramer

Date Received: 01.22.2021

Cooler Temperature: 1.5

Inter Office Report- Sample Receipt Checklist

Sent To: Midland

IOS #: 76894

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

Sent By: Cloe Clifton

Date Sent: 01.22.2021 09.59 AM

Received By: Jessica Kramer

Date Received: 01.22.2021 02.07 PM

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received with appropriate temperature?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 *Custody Seals Signed and dated for Containers/coolers	Yes
#6 *IOS present?	Yes
#7 Any missing/extra samples?	No
#8 IOS agrees with sample label(s)/matrix?	Yes
#9 Sample matrix/ properties agree with IOS?	Yes
#10 Samples in proper container/ bottle?	Yes
#11 Samples properly preserved?	Yes
#12 Sample container(s) intact?	Yes
#13 Sufficient sample amount for indicated test(s)?	Yes
#14 All samples received within hold time?	Yes

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

NonConformance:

Corrective Action Taken:

Nonconformance Documentation

Contact: _____ Contacted by : _____ Date: _____

Checklist reviewed by:

Jessica Kramer

Jessica Kramer

Date: 01.22.2021

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Ensolum, LLC

Date/ Time Received: 01.21.2021 04.39.00 PM

Work Order #: 685642

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	8.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	N/A

Samples recieved in bulk containers.

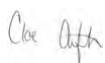
TPH sent to Midland.

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 01.22.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.22.2021

Certificate of Analysis Summary 687102



Ensolum, Dallas, TX

Project Name: 585 4800Q Line Strike

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Eddy Co, NM

Date Received in Lab: Wed 02.03.2021 10:48
Report Date: 02.04.2021 16:06
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	687102-001	687102-002	687102-003			
	Field Id:	CS-9	CS-6	CS-14			
	Depth:	9- ft	0-5 ft	5-9 ft			
	Matrix:	SOIL	SOIL	SOIL			
	Sampled:	02.02.2021 12:10	02.02.2021 12:45	02.02.2021 12:50			
BTEX by EPA 8021B	Extracted:			02.03.2021 16:00			
	Analyzed:			02.04.2021 01:51			
	Units/RL:			mg/kg RL			
	Benzene			<0.000386 0.00201			
	Toluene			<0.000457 0.00201			
	Ethylbenzene			<0.000567 0.00201			
	m,p-Xylenes			<0.00102 0.00402			
	o-Xylene			<0.000346 0.00201			
Chloride by EPA 300	Extracted:			02.03.2021 14:00			
	Analyzed:			02.03.2021 15:41			
	Units/RL:			mg/kg RL			
	Chloride			51.9 5.03			
TPH by SW8015 Mod	Extracted:	02.03.2021 12:00	02.03.2021 12:00	02.03.2021 12:00			
	Analyzed:	02.03.2021 20:03	02.03.2021 20:24	02.03.2021 20:46			
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL			
	Gasoline Range Hydrocarbons (GRO)	<15.0 49.9	<15.0 49.9	<14.9 49.8			
	Diesel Range Organics (DRO)	141 F 49.9	710 F 49.9	356 F 49.8			
	Motor Oil Range Hydrocarbons (MRO)	72.0 49.9	<15.0 49.9	210 49.8			
	Total TPH	213 49.9	710 49.9	566 49.8			

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 687102

for

Ensolum

Project Manager: Beaux Jennings

585 4800Q Line Strike

03B1226038

02.04.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.04.2021

Project Manager: **Beaux Jennings**

Ensolum

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **687102**

585 4800Q Line Strike

Project Address: Eddy Co, NM

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687102. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687102 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 687102

Ensolum, Dallas, TX

585 4800Q Line Strike

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-9	S	02.02.2021 12:10	9 ft	687102-001
CS-6	S	02.02.2021 12:45	0 - 5 ft	687102-002
CS-14	S	02.02.2021 12:50	5 - 9 ft	687102-003

**CASE NARRATIVE****Client Name: Ensolum****Project Name: 585 4800Q Line Strike**Project ID: 03B1226038
Work Order Number(s): 687102Report Date: 02.04.2021
Date Received: 02.03.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3149943 BTEX by EPA 8021B

Lab Sample ID 687102-003 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 687102-003.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 687102-003

Surrogate 4-Bromofluorobenzene recovered above QC limits Data Samples affected are: 7720750-1-BSD,687102-003 S,687102-003 SD,687102-003.

Batch: LBA-3149994 TPH by SW8015 Mod

Diesel Range Organics (DRO), Gasoline Range Hydrocarbons (GRO) RPD was outside laboratory control limits.

Samples in the analytical batch are: 687102-001, -002, -003



Certificate of Analytical Results 687102

Ensolum, Dallas, TX

585 4800Q Line Strike

Sample Id: **CS-9**
Lab Sample Id: 687102-001

Matrix: Soil
Date Collected: 02.02.2021 12:10

Date Received: 02.03.2021 10:48
Sample Depth: 9 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.03.2021 20:03	UF	1
Diesel Range Organics (DRO)	C10C28DRO	141	49.9	15.0	mg/kg	02.03.2021 20:03	F	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	72.0	49.9	15.0	mg/kg	02.03.2021 20:03		1
Total TPH	PHC635	213	49.9	15.0	mg/kg	02.03.2021 20:03		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	104	%	70-130	02.03.2021 20:03			
o-Terphenyl	84-15-1	111	%	70-130	02.03.2021 20:03			



Certificate of Analytical Results 687102

Ensolum, Dallas, TX

585 4800Q Line Strike

Sample Id: **CS-6**
Lab Sample Id: 687102-002

Matrix: Soil
Date Collected: 02.02.2021 12:45

Date Received: 02.03.2021 10:48
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.03.2021 20:24	UF	1
Diesel Range Organics (DRO)	C10C28DRO	710	49.9	15.0	mg/kg	02.03.2021 20:24	F	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.03.2021 20:24	U	1
Total TPH	PHC635	710	49.9	15.0	mg/kg	02.03.2021 20:24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	103	%	70-130	02.03.2021 20:24			
o-Terphenyl	84-15-1	121	%	70-130	02.03.2021 20:24			



Certificate of Analytical Results 687102

Ensolum, Dallas, TX

585 4800Q Line Strike

Sample Id: **CS-14**
Lab Sample Id: 687102-003

Matrix: Soil
Date Collected: 02.02.2021 12:50

Date Received: 02.03.2021 10:48
Sample Depth: 5 - 9 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.03.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149967

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	51.9	5.03	0.864	mg/kg	02.03.2021 15:41		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.03.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149994

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	49.8	14.9	mg/kg	02.03.2021 20:46	UF	1
Diesel Range Organics (DRO)	C10C28DRO	356	49.8	14.9	mg/kg	02.03.2021 20:46	F	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	210	49.8	14.9	mg/kg	02.03.2021 20:46		1
Total TPH	PHC635	566	49.8	14.9	mg/kg	02.03.2021 20:46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	115	%	70-130	02.03.2021 20:46	
o-Terphenyl	84-15-1	120	%	70-130	02.03.2021 20:46	



Certificate of Analytical Results 687102

Ensolum, Dallas, TX

585 4800Q Line Strike

Sample Id: **CS-14**
Lab Sample Id: 687102-003

Matrix: Soil
Date Collected: 02.02.2021 12:50

Date Received: 02.03.2021 10:48
Sample Depth: 5 - 9 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.03.2021 16:00

% Moisture:
Basis: Wet Weight

Seq Number: 3149943

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.04.2021 01:51	UXF	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.04.2021 01:51	UXF	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.04.2021 01:51	UXF	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	02.04.2021 01:51	UXF	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 01:51	UXF	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	02.04.2021 01:51	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	02.04.2021 01:51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	85	%	70-130	02.04.2021 01:51			
4-Bromofluorobenzene	460-00-4	134	%	70-130	02.04.2021 01:51	**		



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum

585 4800Q Line Strike

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

MB Sample Id: 7720702-1-BLK

Matrix: Solid

LCS Sample Id: 7720702-1-BKS

Prep Method: E300P

Date Prep: 02.03.2021

LCSD Sample Id: 7720702-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	254	102	249	100	90-110	2	20	mg/kg	02.03.2021 13:42	

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

Parent Sample Id: 687095-001

Matrix: Soil

MS Sample Id: 687095-001 S

Prep Method: E300P

Date Prep: 02.03.2021

MSD Sample Id: 687095-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1020	252	1260	95	1250	91	90-110	1	20	mg/kg	02.03.2021 13:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3149967

Parent Sample Id: 687098-010

Matrix: Soil

MS Sample Id: 687098-010 S

Prep Method: E300P

Date Prep: 02.03.2021

MSD Sample Id: 687098-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1560	1250	2880	106	2860	104	90-110	1	20	mg/kg	02.03.2021 15:10	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149994

MB Sample Id: 7720753-1-BLK

Matrix: Solid

LCS Sample Id: 7720753-1-BKS

Prep Method: SW8015P

Date Prep: 02.03.2021

LCSD Sample Id: 7720753-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	866	87	1080	108	70-130	22	20	mg/kg	02.03.2021 12:01	F
Diesel Range Organics (DRO)	<15.0	1000	871	87	1070	107	70-130	21	20	mg/kg	02.03.2021 12:01	F

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		96		116		70-130	%	02.03.2021 12:01
o-Terphenyl	102		99		121		70-130	%	02.03.2021 12:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149994

Matrix: Solid

MB Sample Id: 7720753-1-BLK

Prep Method: SW8015P

Date Prep: 02.03.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	02.03.2021 11:40	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

585 4800Q Line Strike

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149994

Parent Sample Id: 686563-021

Matrix: Soil

MS Sample Id: 686563-021 S

Prep Method: SW8015P

Date Prep: 02.03.2021

MSD Sample Id: 686563-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	979	98	1020	102	70-130	4	20	mg/kg	02.03.2021 13:06	
Diesel Range Organics (DRO)	<15.0	997	965	97	1020	102	70-130	6	20	mg/kg	02.03.2021 13:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		108		70-130	%	02.03.2021 13:06
o-Terphenyl	109		113		70-130	%	02.03.2021 13:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149943

MB Sample Id: 7720750-1-BLK

Matrix: Solid

LCS Sample Id: 7720750-1-BKS

Prep Method: SW5035A

Date Prep: 02.03.2021

LCSD Sample Id: 7720750-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.106	106	0.103	103	70-130	3	35	mg/kg	02.03.2021 22:53	
Toluene	<0.000456	0.100	0.106	106	0.104	104	70-130	2	35	mg/kg	02.03.2021 22:53	
Ethylbenzene	<0.000565	0.100	0.106	106	0.105	105	70-130	1	35	mg/kg	02.03.2021 22:53	
m,p-Xylenes	<0.00101	0.200	0.218	109	0.219	110	70-130	0	35	mg/kg	02.03.2021 22:53	
o-Xylene	<0.000344	0.100	0.107	107	0.110	110	70-130	3	35	mg/kg	02.03.2021 22:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	82		96		106		70-130	%	02.03.2021 22:53
4-Bromofluorobenzene	87		126		141	**	70-130	%	02.03.2021 22:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3149943

Parent Sample Id: 687102-003

Matrix: Soil

MS Sample Id: 687102-003 S

Prep Method: SW5035A

Date Prep: 02.03.2021

MSD Sample Id: 687102-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0764	76	0.0498	50	70-130	42	35	mg/kg	02.03.2021 23:44	XF
Toluene	<0.000457	0.100	0.0745	75	0.0519	52	70-130	36	35	mg/kg	02.03.2021 23:44	XF
Ethylbenzene	<0.000567	0.100	0.0708	71	0.0457	46	70-130	43	35	mg/kg	02.03.2021 23:44	XF
m,p-Xylenes	<0.00102	0.201	0.144	72	0.0924	46	70-130	44	35	mg/kg	02.03.2021 23:44	XF
o-Xylene	<0.000346	0.100	0.0724	72	0.0469	47	70-130	43	35	mg/kg	02.03.2021 23:44	XF

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		106		70-130	%	02.03.2021 23:44
4-Bromofluorobenzene	142	**	133	**	70-130	%	02.03.2021 23:44

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-333-
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: 001102

www.xenco.com Page _____ of _____



Project Manager:	Breaux Jennings		Bill to: (if different)	
Company Name:	Ensolum LLC		Company Name:	
Address:	705 W. Medley Ave		Address:	
City, State ZIP:	Midland, TX 79705		City, State ZIP:	
Phone:	(210) 219-8858	Email:	Bjennings@ensolum.com	

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

[illegible][illegible]

Total 200.7 / 6010	200.8 / 6020:	
8RCRA 13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCPL / SPLP 6010 : 8RCRA 5b As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xeno. A minimum charge of \$35.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xeno.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		2/3/21 1048	2		
3			4		
5			6		

Date: 02/02/2021
Signature: [Handwritten Signature]

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Certificate of Analysis Summary 687429



Ensolum, Dallas, TX

Project Name: 58548OUQ Line Strike

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Eddy County, NM

Date Received in Lab: Fri 02.05.2021 08:04
Report Date: 02.08.2021 18:38
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	687429-001	687429-002	687429-003	687429-004	687429-005	687429-006
	<i>Field Id:</i>	CS-4	CS-10	CS-5	CS-13	CS-8	CS-11
	<i>Depth:</i>	0-5 ft	5-10 ft	0-5 ft	5-10 ft	10- ft	10- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	02.04.2021 13:10	02.04.2021 13:15	02.04.2021 13:25	02.04.2021 13:35	02.04.2021 13:45	02.04.2021 13:55
BTEX by EPA 8021B	<i>Extracted:</i>		02.05.2021 11:00		02.05.2021 11:00		02.05.2021 11:00
	<i>Analyzed:</i>		02.05.2021 16:58		02.05.2021 17:18		02.05.2021 18:41
	<i>Units/RL:</i>		mg/kg RL		mg/kg RL		mg/kg RL
Benzene			<0.000384 0.00200		<0.000386 0.00200		<0.000386 0.00201
Toluene			<0.000455 0.00200		<0.000457 0.00200		<0.000457 0.00201
Ethylbenzene			<0.000564 0.00200		<0.000566 0.00200		<0.000567 0.00201
m,p-Xylenes			<0.00101 0.00399		<0.00102 0.00401		0.00104 J 0.00402
o-Xylene			<0.000344 0.00200		0.00592 0.00200		<0.000346 0.00201
Total Xylenes			<0.000344 0.00200		0.00592 0.00200		0.00104 J 0.00201
Total BTEX			<0.000344 0.00200		0.00592 0.00200		0.00104 J 0.00201
Chloride by EPA 300	<i>Extracted:</i>		02.05.2021 12:00		02.05.2021 12:00		02.05.2021 12:00
	<i>Analyzed:</i>		02.05.2021 13:26		02.05.2021 13:31		02.05.2021 13:37
	<i>Units/RL:</i>		mg/kg RL		mg/kg RL		mg/kg RL
Chloride			122 5.00		145 4.99		74.2 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00	02.06.2021 09:00
	<i>Analyzed:</i>	02.06.2021 22:44	02.06.2021 23:49	02.07.2021 00:09	02.07.2021 00:30	02.07.2021 00:51	02.07.2021 01:12
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		26.2 J 50.0	28.4 J 50.0	21.9 J 49.9	21.1 J 50.0	26.5 J 50.0	26.9 J 50.0
Diesel Range Organics (DRO)		619 50.0	725 50.0	1310 49.9	275 50.0	330 50.0	222 50.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 50.0	<15.0 50.0	<15.0 49.9	<15.0 50.0	<15.0 50.0	15.9 J 50.0
Total TPH		645 50.0	753 50.0	1330 49.9	296 50.0	357 50.0	265 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 687429

Ensolum, Dallas, TX

Project Name: 58548OUQ Line Strike

Project Id: 03B1226038
Contact: Beaux Jennings
Project Location: Eddy County, NM

Date Received in Lab: Fri 02.05.2021 08:04
Report Date: 02.08.2021 18:38
Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 687429-007 Field Id: CS-12 Depth: 10- ft Matrix: SOIL Sampled: 02.04.2021 14:05					
BTEX by EPA 8021B	Extracted: 02.05.2021 11:00 Analyzed: 02.05.2021 19:01 Units/RL: mg/kg RL					
Benzene	<0.000386 0.00200					
Toluene	<0.000457 0.00200					
Ethylbenzene	<0.000566 0.00200					
m,p-Xylenes	<0.00102 0.00401					
o-Xylene	0.00366 0.00200					
Total Xylenes	0.00366 0.00200					
Total BTEX	0.00366 0.00200					
Chloride by EPA 300	Extracted: 02.05.2021 12:00 Analyzed: 02.05.2021 13:42 Units/RL: mg/kg RL					
Chloride	91.6 5.02					
TPH by SW8015 Mod	Extracted: 02.06.2021 09:00 Analyzed: 02.07.2021 01:33 Units/RL: mg/kg RL					
Gasoline Range Hydrocarbons (GRO)	24.3 J 50.0					
Diesel Range Organics (DRO)	143 50.0					
Motor Oil Range Hydrocarbons (MRO)	27.8 J 50.0					
Total TPH	195 50.0					

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 687429

for

Ensolum

Project Manager: Beaux Jennings

58548OUQ Line Strike

03B1226038

02.08.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.08.2021

Project Manager: **Beaux Jennings**

Ensolum

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **687429**

58548OUQ Line Strike

Project Address: Eddy County, NM

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 687429. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 687429 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 687429****Ensolum, Dallas, TX**

58548OUQ Line Strike

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-4	S	02.04.2021 13:10	0 - 5 ft	687429-001
CS-10	S	02.04.2021 13:15	5 - 10 ft	687429-002
CS-5	S	02.04.2021 13:25	0 - 5 ft	687429-003
CS-13	S	02.04.2021 13:35	5 - 10 ft	687429-004
CS-8	S	02.04.2021 13:45	10 ft	687429-005
CS-11	S	02.04.2021 13:55	10 ft	687429-006
CS-12	S	02.04.2021 14:05	10 ft	687429-007

**CASE NARRATIVE****Client Name: Ensolum****Project Name: 58548OUQ Line Strike**Project ID: 03B1226038
Work Order Number(s): 687429Report Date: 02.08.2021
Date Received: 02.05.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3150325 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7721013-1-BLK.



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-4**
Lab Sample Id: 687429-001

Matrix: Soil
Date Collected: 02.04.2021 13:10

Date Received: 02.05.2021 08:04
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	26.2	50.0	15.0	mg/kg	02.06.2021 22:44	J	1
Diesel Range Organics (DRO)	C10C28DRO	619	50.0	15.0	mg/kg	02.06.2021 22:44		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.06.2021 22:44	U	1
Total TPH	PHC635	645	50.0	15.0	mg/kg	02.06.2021 22:44		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	86	%	70-130	02.06.2021 22:44			
o-Terphenyl	84-15-1	112	%	70-130	02.06.2021 22:44			



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-10**
Lab Sample Id: 687429-002

Matrix: Soil
Date Collected: 02.04.2021 13:15

Date Received: 02.05.2021 08:04
Sample Depth: 5 - 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150262

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	122	5.00	0.858	mg/kg	02.05.2021 13:26		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	28.4	50.0	15.0	mg/kg	02.06.2021 23:49	J	1
Diesel Range Organics (DRO)	C10C28DRO	725	50.0	15.0	mg/kg	02.06.2021 23:49		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.06.2021 23:49	U	1
Total TPH	PHC635	753	50.0	15.0	mg/kg	02.06.2021 23:49		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-130	02.06.2021 23:49	
o-Terphenyl	84-15-1	122	%	70-130	02.06.2021 23:49	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-10**
Lab Sample Id: 687429-002

Matrix: Soil
Date Collected: 02.04.2021 13:15

Date Received: 02.05.2021 08:04
Sample Depth: 5 - 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150227

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	02.05.2021 16:58	U	1
Toluene	108-88-3	<0.000455	0.00200	0.000455	mg/kg	02.05.2021 16:58	U	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	02.05.2021 16:58	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	02.05.2021 16:58	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	02.05.2021 16:58	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	02.05.2021 16:58	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	02.05.2021 16:58	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	110	%	70-130	02.05.2021 16:58			
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.05.2021 16:58			



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-5**
Lab Sample Id: 687429-003

Matrix: Soil
Date Collected: 02.04.2021 13:25

Date Received: 02.05.2021 08:04
Sample Depth: 0 - 5 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	21.9	49.9	15.0	mg/kg	02.07.2021 00:09	J	1
Diesel Range Organics (DRO)	C10C28DRO	1310	49.9	15.0	mg/kg	02.07.2021 00:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.07.2021 00:09	U	1
Total TPH	PHC635	1330	49.9	15.0	mg/kg	02.07.2021 00:09		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	93	%	70-130	02.07.2021 00:09			
o-Terphenyl	84-15-1	124	%	70-130	02.07.2021 00:09			



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-13**
Lab Sample Id: 687429-004

Matrix: Soil
Date Collected: 02.04.2021 13:35

Date Received: 02.05.2021 08:04
Sample Depth: 5 - 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150262

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	145	4.99	0.857	mg/kg	02.05.2021 13:31		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	21.1	50.0	15.0	mg/kg	02.07.2021 00:30	J	1
Diesel Range Organics (DRO)	C10C28DRO	275	50.0	15.0	mg/kg	02.07.2021 00:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.07.2021 00:30	U	1
Total TPH	PHC635	296	50.0	15.0	mg/kg	02.07.2021 00:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-130	02.07.2021 00:30	
o-Terphenyl	84-15-1	127	%	70-130	02.07.2021 00:30	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-13**
Lab Sample Id: 687429-004

Matrix: Soil
Date Collected: 02.04.2021 13:35

Date Received: 02.05.2021 08:04
Sample Depth: 5 - 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150227

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	02.05.2021 17:18	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	02.05.2021 17:18	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	02.05.2021 17:18	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	02.05.2021 17:18	U	1
o-Xylene	95-47-6	0.00592	0.00200	0.000345	mg/kg	02.05.2021 17:18		1
Total Xylenes	1330-20-7	0.00592	0.00200	0.000345	mg/kg	02.05.2021 17:18		1
Total BTEX		0.00592	0.00200	0.000345	mg/kg	02.05.2021 17:18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.05.2021 17:18	
4-Bromofluorobenzene	460-00-4	105	%	70-130	02.05.2021 17:18	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-8**
Lab Sample Id: 687429-005

Matrix: Soil
Date Collected: 02.04.2021 13:45

Date Received: 02.05.2021 08:04
Sample Depth: 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	26.5	50.0	15.0	mg/kg	02.07.2021 00:51	J	1
Diesel Range Organics (DRO)	C10C28DRO	330	50.0	15.0	mg/kg	02.07.2021 00:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.07.2021 00:51	U	1
Total TPH	PHC635	357	50.0	15.0	mg/kg	02.07.2021 00:51		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	89	%	70-130	02.07.2021 00:51			
o-Terphenyl	84-15-1	124	%	70-130	02.07.2021 00:51			



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-11**
Lab Sample Id: 687429-006

Matrix: Soil
Date Collected: 02.04.2021 13:55

Date Received: 02.05.2021 08:04
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150262

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	74.2	5.00	0.858	mg/kg	02.05.2021 13:37		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	26.9	50.0	15.0	mg/kg	02.07.2021 01:12	J	1
Diesel Range Organics (DRO)	C10C28DRO	222	50.0	15.0	mg/kg	02.07.2021 01:12		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	15.9	50.0	15.0	mg/kg	02.07.2021 01:12	J	1
Total TPH	PHC635	265	50.0	15.0	mg/kg	02.07.2021 01:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	83	%	70-130	02.07.2021 01:12	
o-Terphenyl	84-15-1	115	%	70-130	02.07.2021 01:12	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-11**
Lab Sample Id: 687429-006

Matrix: Soil
Date Collected: 02.04.2021 13:55

Date Received: 02.05.2021 08:04
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150227

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	02.05.2021 18:41	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	02.05.2021 18:41	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	02.05.2021 18:41	U	1
m,p-Xylenes	179601-23-1	0.00104	0.00402	0.00102	mg/kg	02.05.2021 18:41	J	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	02.05.2021 18:41	U	1
Total Xylenes	1330-20-7	0.00104	0.00201	0.000346	mg/kg	02.05.2021 18:41	J	1
Total BTEX		0.00104	0.00201	0.000346	mg/kg	02.05.2021 18:41	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.05.2021 18:41	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.05.2021 18:41	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-12**
Lab Sample Id: 687429-007

Matrix: Soil
Date Collected: 02.04.2021 14:05

Date Received: 02.05.2021 08:04
Sample Depth: 10 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 02.05.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150262

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	91.6	5.02	0.862	mg/kg	02.05.2021 13:42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.06.2021 09:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150325

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	24.3	50.0	15.0	mg/kg	02.07.2021 01:33	J	1
Diesel Range Organics (DRO)	C10C28DRO	143	50.0	15.0	mg/kg	02.07.2021 01:33		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	27.8	50.0	15.0	mg/kg	02.07.2021 01:33	J	1
Total TPH	PHC635	195	50.0	15.0	mg/kg	02.07.2021 01:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	87	%	70-130	02.07.2021 01:33	
o-Terphenyl	84-15-1	122	%	70-130	02.07.2021 01:33	



Certificate of Analytical Results 687429

Ensolum, Dallas, TX

58548OUQ Line Strike

Sample Id: **CS-12**
Lab Sample Id: 687429-007

Matrix: Soil
Date Collected: 02.04.2021 14:05

Date Received: 02.05.2021 08:04
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.05.2021 11:00

% Moisture:
Basis: Wet Weight

Seq Number: 3150227

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	02.05.2021 19:01	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	02.05.2021 19:01	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	02.05.2021 19:01	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	02.05.2021 19:01	U	1
o-Xylene	95-47-6	0.00366	0.00200	0.000345	mg/kg	02.05.2021 19:01		1
Total Xylenes	1330-20-7	0.00366	0.00200	0.000345	mg/kg	02.05.2021 19:01		1
Total BTEX		0.00366	0.00200	0.000345	mg/kg	02.05.2021 19:01		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	112	%	70-130	02.05.2021 19:01	
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.05.2021 19:01	



Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum 58548OUQ Line Strike

Analytical Method: Chloride by EPA 300

Seq Number: 3150262

MB Sample Id: 7720872-1-BLK

Matrix: Solid

LCS Sample Id: 7720872-1-BKS

Prep Method: E300P

Date Prep: 02.05.2021

LCSD Sample Id: 7720872-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	264	106	255	102	90-110	3	20	mg/kg	02.05.2021 12:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3150262

Parent Sample Id: 687404-001

Matrix: Sludge

MS Sample Id: 687404-001 S

Prep Method: E300P

Date Prep: 02.05.2021

MSD Sample Id: 687404-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13300	5050	18600	105	18400	101	90-110	1	20	mg/kg	02.05.2021 12:45	

Analytical Method: Chloride by EPA 300

Seq Number: 3150262

Parent Sample Id: 687430-002

Matrix: Soil

MS Sample Id: 687430-002 S

Prep Method: E300P

Date Prep: 02.05.2021

MSD Sample Id: 687430-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2510	2500	5100	104	5090	103	90-110	0	20	mg/kg	02.05.2021 13:57	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150325

MB Sample Id: 7721013-1-BLK

Matrix: Solid

LCS Sample Id: 7721013-1-BKS

Prep Method: SW8015P

Date Prep: 02.06.2021

LCSD Sample Id: 7721013-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1030	103	1060	106	70-130	3	20	mg/kg	02.06.2021 22:01	
Diesel Range Organics (DRO)	<15.0	1000	979	98	1000	100	70-130	2	20	mg/kg	02.06.2021 22:01	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		102		114		70-130	%	02.06.2021 22:01
o-Terphenyl	138	**	124		127		70-130	%	02.06.2021 22:01

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150325

Matrix: Solid

MB Sample Id: 7721013-1-BLK

Prep Method: SW8015P

Date Prep: 02.06.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	02.06.2021 21:39	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

58548OUQ Line Strike

Analytical Method: TPH by SW8015 Mod

Seq Number: 3150325

Parent Sample Id: 687429-001

Matrix: Soil

MS Sample Id: 687429-001 S

Prep Method: SW8015P

Date Prep: 02.06.2021

MSD Sample Id: 687429-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	26.2	997	996	97	1030	100	70-130	3	20	mg/kg	02.06.2021 23:06	
Diesel Range Organics (DRO)	619	997	1540	92	1570	95	70-130	2	20	mg/kg	02.06.2021 23:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	98		100		70-130	%	02.06.2021 23:06
o-Terphenyl	100		101		70-130	%	02.06.2021 23:06

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150227

MB Sample Id: 7720936-1-BLK

Matrix: Solid

LCS Sample Id: 7720936-1-BKS

Prep Method: SW5035A

Date Prep: 02.05.2021

LCSD Sample Id: 7720936-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.112	112	0.107	107	70-130	5	35	mg/kg	02.05.2021 11:53	
Toluene	<0.000456	0.100	0.105	105	0.101	101	70-130	4	35	mg/kg	02.05.2021 11:53	
Ethylbenzene	<0.000565	0.100	0.108	108	0.105	105	70-130	3	35	mg/kg	02.05.2021 11:53	
m,p-Xylenes	<0.00101	0.200	0.216	108	0.209	105	70-130	3	35	mg/kg	02.05.2021 11:53	
o-Xylene	<0.000344	0.100	0.105	105	0.102	102	70-130	3	35	mg/kg	02.05.2021 11:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	89		103		101		70-130	%	02.05.2021 11:53
4-Bromofluorobenzene	100		99		100		70-130	%	02.05.2021 11:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3150227

Parent Sample Id: 687291-005

Matrix: Soil

MS Sample Id: 687291-005 S

Prep Method: SW5035A

Date Prep: 02.05.2021

MSD Sample Id: 687291-005 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0102	10	0.00714	7	70-130	35	35	mg/kg	02.05.2021 12:34	X
Toluene	0.00411	0.100	0.00547	1	0.00467	1	70-130	16	35	mg/kg	02.05.2021 12:34	X
Ethylbenzene	<0.000565	0.100	0.00442	4	0.00370	4	70-130	18	35	mg/kg	02.05.2021 12:34	X
m,p-Xylenes	<0.00101	0.200	0.00878	4	0.00782	4	70-130	12	35	mg/kg	02.05.2021 12:34	X
o-Xylene	<0.000344	0.100	0.00533	5	0.00501	5	70-130	6	35	mg/kg	02.05.2021 12:34	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		95		70-130	%	02.05.2021 12:34
4-Bromofluorobenzene	102		108		70-130	%	02.05.2021 12:34

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Environment Testing Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

687429

www.xenco.com Page 1 of 1

Project Manager:	Beux Jennings	Bill to: (if different)	
Company Name:	Ensolum LLC	Company Name:	
Address:	705 W Midway Ave	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	(210) 219-8858	Email:	Bjennings@ensolum.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> Adapt <input type="checkbox"/> Other: <input type="checkbox"/>

Project Name:	58548000 Line Stake	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24hr	Pres. Code																							
Project Number:	03B1226038																										
Project Location:	Edley County, NH	Due Date:																									
Sample's Name:	Kelly Leary	TAT starts the day received by the lab, if received by 4:30pm																									
PO #:	03B12260380																										
<table border="1"> <tr> <td rowspan="5">SAMPLE RECEIPT</td> <td>Temp Blank:</td> <td>Yes No</td> <td>Wet Ice:</td> <td>Yes No</td> <td rowspan="5">Parameters</td> </tr> <tr> <td>Samples Received Intact:</td> <td>Yes No</td> <td>Thermometer ID:</td> <td></td> </tr> <tr> <td>Cooler Custody Seals:</td> <td>Yes No N/A</td> <td>Correction Factor:</td> <td></td> </tr> <tr> <td>Sample Custody Seals:</td> <td>Yes No N/A</td> <td>Temperature Reading:</td> <td></td> </tr> <tr> <td>Total Containers:</td> <td></td> <td>Corrected Temperature:</td> <td></td> </tr> </table>						SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No	Parameters	Samples Received Intact:	Yes No	Thermometer ID:		Cooler Custody Seals:	Yes No N/A	Correction Factor:		Sample Custody Seals:	Yes No N/A	Temperature Reading:		Total Containers:		Corrected Temperature:	
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No	Parameters																						
	Samples Received Intact:	Yes No	Thermometer ID:																								
	Cooler Custody Seals:	Yes No N/A	Correction Factor:																								
	Sample Custody Seals:	Yes No N/A	Temperature Reading:																								
	Total Containers:		Corrected Temperature:																								


Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST													
CS-4	S	03/04/21	1310	0'-5'	C	1	X	X	X											
CS-10			1315	5'-10'		1	X	X	X											
CS-5			1335	0'-5'		1	X	X	X											
CS-13			1335	5'-10'		1	X	X	X											
CS-8			1345	10'		1	X	X	X											
CS-11			1355	10'		1	X	X	X											
CS-12			1405	10'		1	X	X	X											
NTG		03/04/2021	KL																	

Total 200.7 / 6010 2008 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		2/5/18:04			
3					
5					

CUSTODY SEAL



ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 09/05/2021
Signature: [Handwritten Signature]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Ensolum

Date/ Time Received: 02.05.2021 08.04.00 AM

Work Order #: 687429

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 02.05.2021

Checklist reviewed by:



Jessica Kramer

Date: 02.08.2021



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-563-1

Laboratory Sample Delivery Group: Eddy County NM
Client Project/Site: 5854800Q Line Strike
Revision: 1

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "J. Kramer".

Authorized for release by:
3/29/2021 9:07:42 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: 5854800Q Line Strike

Laboratory Job ID: 880-563-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Job ID: 880-563-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-563-1

REVISION

The report being provided is a revision of the original report sent on 3/25/2021. The report (revision 1) is being revised due to Per Client email, corrected CS-14 to CS-22.

Report revision history

Receipt

The samples were received on 3/23/2021 8:46 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 2.0°C

GC Semi VOA

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

Detection Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-22

Lab Sample ID: 880-563-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	54.8	b	50.0	15.0 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	37.4	J b	50.0	15.0 mg/Kg	1		8015B NM	Total/NA
Oil Range Organics (Over C28-C36)	17.4	J	50.0	15.0 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-15

Lab Sample ID: 880-563-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	194	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	194	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-16

Lab Sample ID: 880-563-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	34.2	J b	50.0	15.0 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	34.2	J b	50.0	15.0 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-17

Lab Sample ID: 880-563-4

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	130	b	49.9	15.0 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	130	b	49.9	15.0 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-18

Lab Sample ID: 880-563-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	226	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	226	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-19

Lab Sample ID: 880-563-6

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	193	b	50.1	15.0 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	193	b	50.1	15.0 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-20

Lab Sample ID: 880-563-7

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	28.3	J b	50.2	15.1 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	28.3	J b	50.2	15.1 mg/Kg	1		8015B NM	Total/NA

Client Sample ID: CS-21

Lab Sample ID: 880-563-8

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Total TPH	54.7	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA
Diesel Range Organics (Over C10-C28)	54.7	b	49.8	14.9 mg/Kg	1		8015B NM	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-22

Lab Sample ID: 880-563-1

Date Collected: 03/22/21 12:20

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:00	1
Total TPH	54.8	b	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:00	1
Diesel Range Organics (Over C10-C28)	37.4	J b	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:00	1
Oil Range Organics (Over C28-C36)	17.4	J	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	X	70 - 130			03/23/21 11:07	03/24/21 14:00	1
o-Terphenyl	62	X	70 - 130			03/23/21 11:07	03/24/21 14:00	1

Client Sample ID: CS-15

Lab Sample ID: 880-563-2

Date Collected: 03/22/21 12:35

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 14:21	1
Total TPH	194	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 14:21	1
Diesel Range Organics (Over C10-C28)	194	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 14:21	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			03/23/21 11:07	03/24/21 14:21	1
o-Terphenyl	81		70 - 130			03/23/21 11:07	03/24/21 14:21	1

Client Sample ID: CS-16

Lab Sample ID: 880-563-3

Date Collected: 03/22/21 12:45

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:43	1
Total TPH	34.2	J b	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:43	1
Diesel Range Organics (Over C10-C28)	34.2	J b	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:43	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			03/23/21 11:07	03/24/21 14:43	1
o-Terphenyl	72		70 - 130			03/23/21 11:07	03/24/21 14:43	1

Client Sample ID: CS-17

Lab Sample ID: 880-563-4

Date Collected: 03/22/21 12:55

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	49.9	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:04	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-17

Date Collected: 03/22/21 12:55

Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-4

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	130	b	49.9	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:04	1
Diesel Range Organics (Over C10-C28)	130	b	49.9	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:04	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			03/23/21 11:07	03/24/21 15:04	1
o-Terphenyl	88		70 - 130			03/23/21 11:07	03/24/21 15:04	1

Client Sample ID: CS-18

Date Collected: 03/22/21 13:05

Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-5

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 15:25	1
Total TPH	226	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 15:25	1
Diesel Range Organics (Over C10-C28)	226	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 15:25	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 15:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			03/23/21 11:07	03/24/21 15:25	1
o-Terphenyl	87		70 - 130			03/23/21 11:07	03/24/21 15:25	1

Client Sample ID: CS-19

Date Collected: 03/22/21 13:20

Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-6

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.1	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:46	1
Total TPH	193	b	50.1	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:46	1
Diesel Range Organics (Over C10-C28)	193	b	50.1	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:46	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.1	15.0 mg/Kg		03/23/21 11:07	03/24/21 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			03/23/21 11:07	03/24/21 15:46	1
o-Terphenyl	79		70 - 130			03/23/21 11:07	03/24/21 15:46	1

Client Sample ID: CS-20

Date Collected: 03/22/21 15:10

Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-7

Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.1	U	50.2	15.1 mg/Kg		03/23/21 11:07	03/24/21 16:08	1
Total TPH	28.3	J b	50.2	15.1 mg/Kg		03/23/21 11:07	03/24/21 16:08	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-20

Lab Sample ID: 880-563-7

Date Collected: 03/22/21 15:10

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	28.3	J b	50.2	15.1 mg/Kg		03/23/21 11:07	03/24/21 16:08	1
OII Range Organics (Over C28-C36)	<15.1	U	50.2	15.1 mg/Kg		03/23/21 11:07	03/24/21 16:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			03/23/21 11:07	03/24/21 16:08	1
o-Terphenyl	78		70 - 130			03/23/21 11:07	03/24/21 16:08	1

Client Sample ID: CS-21

Lab Sample ID: 880-563-8

Date Collected: 03/22/21 15:15

Matrix: Solid

Date Received: 03/23/21 08:46

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 16:29	1
Total TPH	54.7	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 16:29	1
Diesel Range Organics (Over C10-C28)	54.7	b	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 16:29	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		03/23/21 11:07	03/24/21 16:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			03/23/21 11:07	03/24/21 16:29	1
o-Terphenyl	86		70 - 130			03/23/21 11:07	03/24/21 16:29	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)**Matrix: Solid****Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-563-1	CS-22	67 X	62 X
880-563-2	CS-15	83	81
880-563-3	CS-16	75	72
880-563-4	CS-17	87	88
880-563-5	CS-18	88	87
880-563-6	CS-19	80	79
880-563-7	CS-20	81	78
880-563-8	CS-21	87	86
LCS 880-749/2-A	Lab Control Sample	101	94
LCSD 880-749/3-A	Lab Control Sample Dup	90	81
MB 880-749/1-A	Method Blank	103	102

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-749/1-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 749

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 11:31	1
Total TPH	15.25	J	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 11:31	1
Diesel Range Organics (Over C10-C28)	15.25	J	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 11:31	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		03/23/21 11:07	03/24/21 11:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	03/23/21 11:07	03/24/21 11:31	1
o-Terphenyl	102		70 - 130	03/23/21 11:07	03/24/21 11:31	1

Lab Sample ID: LCS 880-749/2-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1183		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1052		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: LCSD 880-749/3-A

Matrix: Solid

Analysis Batch: 792

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 749

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1107		mg/Kg		111	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	963.5		mg/Kg		96	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	81		70 - 130

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

GC Semi VOA

Prep Batch: 749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-563-1	CS-22	Total/NA	Solid	8015NM Prep	
880-563-2	CS-15	Total/NA	Solid	8015NM Prep	
880-563-3	CS-16	Total/NA	Solid	8015NM Prep	
880-563-4	CS-17	Total/NA	Solid	8015NM Prep	
880-563-5	CS-18	Total/NA	Solid	8015NM Prep	
880-563-6	CS-19	Total/NA	Solid	8015NM Prep	
880-563-7	CS-20	Total/NA	Solid	8015NM Prep	
880-563-8	CS-21	Total/NA	Solid	8015NM Prep	
MB 880-749/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-749/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-749/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-563-1	CS-22	Total/NA	Solid	8015B NM	749
880-563-2	CS-15	Total/NA	Solid	8015B NM	749
880-563-3	CS-16	Total/NA	Solid	8015B NM	749
880-563-4	CS-17	Total/NA	Solid	8015B NM	749
880-563-5	CS-18	Total/NA	Solid	8015B NM	749
880-563-6	CS-19	Total/NA	Solid	8015B NM	749
880-563-7	CS-20	Total/NA	Solid	8015B NM	749
880-563-8	CS-21	Total/NA	Solid	8015B NM	749
MB 880-749/1-A	Method Blank	Total/NA	Solid	8015B NM	749
LCS 880-749/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	749
LCSD 880-749/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	749

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-22

Lab Sample ID: 880-563-1

Date Collected: 03/22/21 12:20

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 14:00	AJ	XM

Client Sample ID: CS-15

Lab Sample ID: 880-563-2

Date Collected: 03/22/21 12:35

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 14:21	AJ	XM

Client Sample ID: CS-16

Lab Sample ID: 880-563-3

Date Collected: 03/22/21 12:45

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 14:43	AJ	XM

Client Sample ID: CS-17

Lab Sample ID: 880-563-4

Date Collected: 03/22/21 12:55

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 15:04	AJ	XM

Client Sample ID: CS-18

Lab Sample ID: 880-563-5

Date Collected: 03/22/21 13:05

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 15:25	AJ	XM

Client Sample ID: CS-19

Lab Sample ID: 880-563-6

Date Collected: 03/22/21 13:20

Matrix: Solid

Date Received: 03/23/21 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 15:46	AJ	XM

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Client Sample ID: CS-20
Date Collected: 03/22/21 15:10
Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 16:08	AJ	XM

Client Sample ID: CS-21
Date Collected: 03/22/21 15:15
Date Received: 03/23/21 08:46

Lab Sample ID: 880-563-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			749	03/23/21 11:07	DM	XM
Total/NA	Analysis	8015B NM		1	792	03/24/21 16:29	AJ	XM

Laboratory References:
XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH

Eurofins Xenco, Midland

Method Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Method	Method Description	Protocol	Laboratory
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
8015NM Prep	Microextraction	SW846	XM

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Ensolum
Project/Site: 5854800Q Line Strike

Job ID: 880-563-1
SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
880-563-1	CS-22	Solid	03/22/21 12:20	03/23/21 08:46	
880-563-2	CS-15	Solid	03/22/21 12:35	03/23/21 08:46	
880-563-3	CS-16	Solid	03/22/21 12:45	03/23/21 08:46	
880-563-4	CS-17	Solid	03/22/21 12:55	03/23/21 08:46	
880-563-5	CS-18	Solid	03/22/21 13:05	03/23/21 08:46	
880-563-6	CS-19	Solid	03/22/21 13:20	03/23/21 08:46	
880-563-7	CS-20	Solid	03/22/21 15:10	03/23/21 08:46	
880-563-8	CS-21	Solid	03/22/21 15:15	03/23/21 08:46	

Eurofins Xenco, Midland



Environment Testing

Houston, TX
Midland, TX (4)
El Paso, TX (1)
Hobbs, NM (1)



880-563 Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Beux Jennings	Bill to: (if different)	
Company Name:	Ensburn LLC	Company Name:	
Address:	705 W. Midway Ave	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	210 219 8858	Email:	Bjennings@ensburn.com

Work Order Comments	
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting Level:	Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name:	58548002 Line Strike	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24hr	Pres. Code	
Project Number:	03B1226038	Due Date:			
Project Location:	Eddy County, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Kelly Longm				
PO #:	03B1226038				
SAMPLE RECEIPT					
Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	4.5		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading:	15		
Total Containers:		Corrected Temperature:	20		


Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
CS-14	S	03/22/21	1220	0'-5'	C	1	X		None NO	DI Water H ₂ O
CS-15	S	03/22/21	1235	5'-10'	C	1	X		Cool: Cool	MeOH Me
CS-16	S	03/22/21	1245	0'-5'	C	1	X		HCL: HC	HNO ₃ HN
CS-17	S	03/22/21	1255	5'-10'	C	1	X		H ₂ SO ₄ : H ₂	NaOH: Na
CS-18	S	03/22/21	1305	0'-5'	C	1	X		H ₃ PO ₄ : HP	
CS-19	S	03/22/21	1320	5'-10'	C	1	X		NaHSO ₄ : NABIS	
CS-20	S	03/22/21	1510	0'-5'	C	1	X		Na ₂ S ₂ O ₃ : NaSO ₃	
CS-21	S	03/22/21	1515	5'-10'	C	1	X		Zn Acetate+NaOH Zn	
									NaOH+Ascorbic Acid SAPC	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/22/21
		617

1393990
eurofins | Environment Testing
TestAmerica

Custody Seal
DATE 3/22/21
SIGNATURE 

1393990
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TestAmerica

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-563-1

SDG Number: Eddy County NM

Login Number: 563**List Number: 1****Creator: Teel, Brianna****List Source: Eurofins Midland**

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").	N/A	



Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-5902-1

Laboratory Sample Delivery Group: Eddy County
Client Project/Site: 58548OUQ Line Strike
Revision: 1

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "Jessica Kramer".

Authorized for release by:
9/14/2021 12:52:49 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Laboratory Job ID: 880-5902-1
SDG: Eddy County

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Definitions/Glossary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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

Eurofins Xenco, Midland

Case Narrative

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Job ID: 880-5902-1

Laboratory: Eurofins Xenco, Midland

Narrative

Job Narrative 880-5902-1

REVISION

The report being provided is a revision of the original report sent on 9/10/2021. The report (revision 1) is being revised due to Corrected project name to match COC.

Report revision history

Receipt

The samples were received on 9/9/2021 9:09 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 2.5°C

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for Benzene were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-7696 and analytical batch 880-7711 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-7691 and analytical batch 880-7689 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance 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
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-1

Lab Sample ID: 880-5902-1

Date Collected: 09/08/21 11:41

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 9'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000419	J F1	0.00200	0.000385 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
Toluene	<0.000456	U F1	0.00200	0.000456 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
Ethylbenzene	<0.000565	U	0.00200	0.000565 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
m-Xylene & p-Xylene	<0.00101	U F1	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
o-Xylene	0.000535	J	0.00200	0.000344 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
Xylenes, Total	<0.00101	U F1	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:55	1
Total BTEX	<0.00101	U F2 F1	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/09/21 11:55	09/09/21 19:55	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/09/21 11:55	09/09/21 19:55	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U F1	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 12:46	1
Diesel Range Organics (Over C10-C28)	49.3	J F1	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 12:46	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 12:46	1
Total TPH	49.3	J F1	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 12:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	09/09/21 09:55	09/09/21 12:46	1
o-Terphenyl	81		70 - 130	09/09/21 09:55	09/09/21 12:46	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.1		5.05	0.867 mg/Kg			09/09/21 21:15	1

Client Sample ID: FCS-2

Lab Sample ID: 880-5902-2

Date Collected: 09/08/21 11:46

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
Toluene	0.000468	J	0.00199	0.000453 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
Ethylbenzene	<0.000562	U	0.00199	0.000562 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
o-Xylene	0.000476	J	0.00199	0.000342 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
Xylenes, Total	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/09/21 20:15	1
Total BTEX	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/09/21 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/09/21 11:55	09/09/21 20:15	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	09/09/21 11:55	09/09/21 20:15	1

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Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-2

Lab Sample ID: 880-5902-2

Date Collected: 09/08/21 11:46

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.8	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 13:50	1
Diesel Range Organics (Over C10-C28)	49.5	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 13:50	1
OII Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 13:50	1
Total TPH	66.3		49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 13:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	09/09/21 09:55	09/09/21 13:50	1
o-Terphenyl	99		70 - 130	09/09/21 09:55	09/09/21 13:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.3		4.98	0.855 mg/Kg			09/09/21 21:31	1

Client Sample ID: FCS-3

Lab Sample ID: 880-5902-3

Date Collected: 09/08/21 11:49

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
Toluene	0.000739	J	0.00200	0.000455 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
Ethylbenzene	<0.000564	U	0.00200	0.000564 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
o-Xylene	0.000606	J	0.00200	0.000343 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
Xylenes, Total	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:35	1
Total BTEX	0.00135	J	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/09/21 11:55	09/09/21 20:35	1
1,4-Difluorobenzene (Surr)	82		70 - 130	09/09/21 11:55	09/09/21 20:35	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.8	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 14:11	1
Diesel Range Organics (Over C10-C28)	150		49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 14:11	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 14:11	1
Total TPH	171		49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/09/21 09:55	09/09/21 14:11	1
o-Terphenyl	108		70 - 130	09/09/21 09:55	09/09/21 14:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	123		4.95	0.850 mg/Kg			09/09/21 21:37	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-4

Lab Sample ID: 880-5902-4

Date Collected: 09/08/21 11:58

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
Toluene	<0.000454	U	0.00199	0.000454 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
Ethylbenzene	0.000955	J	0.00199	0.000563 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
o-Xylene	<0.000343	U	0.00199	0.000343 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
Xylenes, Total	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:56	1
Total BTEX	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/09/21 20:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/09/21 11:55	09/09/21 20:56	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/09/21 11:55	09/09/21 20:56	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.9	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:33	1
Diesel Range Organics (Over C10-C28)	44.6	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:33	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:33	1
Total TPH	68.5		49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	09/09/21 09:55	09/09/21 14:33	1
o-Terphenyl	95		70 - 130	09/09/21 09:55	09/09/21 14:33	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.7		5.00	0.858 mg/Kg			09/09/21 21:43	1

Client Sample ID: FCS-5

Lab Sample ID: 880-5902-5

Date Collected: 09/08/21 12:00

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 9'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000876	J	0.00200	0.000385 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
Toluene	<0.000456	U	0.00200	0.000456 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
Ethylbenzene	<0.000565	U	0.00200	0.000565 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
o-Xylene	<0.000344	U	0.00200	0.000344 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
Xylenes, Total	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:16	1
Total BTEX	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/09/21 11:55	09/09/21 21:16	1
1,4-Difluorobenzene (Surr)	111		70 - 130	09/09/21 11:55	09/09/21 21:16	1

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Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-5

Lab Sample ID: 880-5902-5

Date Collected: 09/08/21 12:00

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 9'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:54	1
Diesel Range Organics (Over C10-C28)	347		49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:54	1
Oil Range Organics (Over C28-C36)	26.1 J		49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:54	1
Total TPH	373		49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 14:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	09/09/21 09:55	09/09/21 14:54	1
o-Terphenyl	82		70 - 130	09/09/21 09:55	09/09/21 14:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.0		4.97	0.853 mg/Kg			09/09/21 21:48	1

Client Sample ID: FCS-6

Lab Sample ID: 880-5902-6

Date Collected: 09/08/21 12:03

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
Toluene	<0.000457	U	0.00200	0.000457 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
Ethylbenzene	<0.000566	U	0.00200	0.000566 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
o-Xylene	0.000530 J		0.00200	0.000345 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
Xylenes, Total	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:37	1
Total BTEX	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/09/21 11:55	09/09/21 21:37	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/21 11:55	09/09/21 21:37	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.2 J		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:15	1
Diesel Range Organics (Over C10-C28)	57.8		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:15	1
Oil Range Organics (Over C28-C36)	22.2 J		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:15	1
Total TPH	96.2		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	09/09/21 09:55	09/09/21 15:15	1
o-Terphenyl	91		70 - 130	09/09/21 09:55	09/09/21 15:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.9		4.95	0.850 mg/Kg			09/09/21 22:05	1

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Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-7

Lab Sample ID: 880-5902-7

Date Collected: 09/08/21 12:07

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000628	J	0.00201	0.000387 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
Toluene	<0.000458	U	0.00201	0.000458 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
Ethylbenzene	<0.000567	U	0.00201	0.000567 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
o-Xylene	0.000559	J	0.00201	0.000345 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
Xylenes, Total	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:57	1
Total BTEX	0.00119	J	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/09/21 11:55	09/09/21 21:57	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/09/21 11:55	09/09/21 21:57	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.3	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:37	1
Diesel Range Organics (Over C10-C28)	46.5	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:37	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:37	1
Total TPH	65.8		49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	09/09/21 09:55	09/09/21 15:37	1
o-Terphenyl	96		70 - 130	09/09/21 09:55	09/09/21 15:37	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.3		4.95	0.850 mg/Kg			09/09/21 22:11	1

Client Sample ID: FCS-8

Lab Sample ID: 880-5902-8

Date Collected: 09/08/21 12:09

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
Toluene	<0.000459	U	0.00201	0.000459 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
Ethylbenzene	<0.000568	U	0.00201	0.000568 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
o-Xylene	<0.000346	U	0.00201	0.000346 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
Xylenes, Total	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:17	1
Total BTEX	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/09/21 11:55	09/09/21 22:17	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/21 11:55	09/09/21 22:17	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-8

Lab Sample ID: 880-5902-8

Date Collected: 09/08/21 12:09

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.7	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 15:58	1
Diesel Range Organics (Over C10-C28)	33.1	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 15:58	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 15:58	1
Total TPH	59.8		49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/09/21 09:55	09/09/21 15:58	1
o-Terphenyl	108		70 - 130	09/09/21 09:55	09/09/21 15:58	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52.1		5.04	0.865 mg/Kg			09/09/21 22:16	1

Client Sample ID: FCS-9

Lab Sample ID: 880-5902-9

Date Collected: 09/08/21 12:19

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 9'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
Toluene	<0.000460	U	0.00202	0.000460 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
Ethylbenzene	<0.000570	U	0.00202	0.000570 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
o-Xylene	0.000869	J	0.00202	0.000347 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
Xylenes, Total	<0.00102	U	0.00403	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:38	1
Total BTEX	<0.00102	U	0.00403	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	09/09/21 11:55	09/09/21 22:38	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/09/21 11:55	09/09/21 22:38	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.4	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 16:19	1
Diesel Range Organics (Over C10-C28)	26.2	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 16:19	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 16:19	1
Total TPH	47.6	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	09/09/21 09:55	09/09/21 16:19	1
o-Terphenyl	89		70 - 130	09/09/21 09:55	09/09/21 16:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		5.05	0.867 mg/Kg			09/09/21 22:22	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-10

Lab Sample ID: 880-5902-10

Date Collected: 09/08/21 12:22

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00101	J	0.00202	0.000389 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
Toluene	<0.000461	U	0.00202	0.000461 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
Ethylbenzene	<0.000571	U	0.00202	0.000571 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
o-Xylene	<0.000347	U	0.00202	0.000347 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
Xylenes, Total	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:58	1
Total BTEX	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:55	09/09/21 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/09/21 11:55	09/09/21 22:58	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/09/21 11:55	09/09/21 22:58	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 16:40	1
Diesel Range Organics (Over C10-C28)	25.8	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 16:40	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 16:40	1
Total TPH	25.8	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	09/09/21 09:55	09/09/21 16:40	1
o-Terphenyl	89		70 - 130	09/09/21 09:55	09/09/21 16:40	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.3		5.00	0.858 mg/Kg			09/09/21 22:27	1

Client Sample ID: FCS-11

Lab Sample ID: 880-5902-11

Date Collected: 09/08/21 12:25

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000447	J	0.00200	0.000384 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
Toluene	<0.000455	U	0.00200	0.000455 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
Ethylbenzene	<0.000564	U	0.00200	0.000564 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
o-Xylene	<0.000343	U	0.00200	0.000343 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
Xylenes, Total	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 00:48	1
Total BTEX	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 00:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/09/21 11:55	09/10/21 00:48	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/09/21 11:55	09/10/21 00:48	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-11

Lab Sample ID: 880-5902-11

Date Collected: 09/08/21 12:25

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.4	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:23	1
Diesel Range Organics (Over C10-C28)	22.9	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:23	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:23	1
Total TPH	40.3	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/09/21 09:55	09/09/21 17:23	1
o-Terphenyl	101		70 - 130	09/09/21 09:55	09/09/21 17:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.1		4.98	0.855 mg/Kg			09/09/21 22:33	1

Client Sample ID: FCS-12

Lab Sample ID: 880-5902-12

Date Collected: 09/08/21 12:28

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
Toluene	<0.000454	U	0.00199	0.000454 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
Ethylbenzene	<0.000563	U	0.00199	0.000563 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
o-Xylene	0.000499	J	0.00199	0.000343 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
Xylenes, Total	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:08	1
Total BTEX	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	09/09/21 11:55	09/10/21 01:08	1
1,4-Difluorobenzene (Surr)	71		70 - 130	09/09/21 11:55	09/10/21 01:08	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	16.4	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:44	1
Diesel Range Organics (Over C10-C28)	29.6	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:44	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:44	1
Total TPH	46.0	J	49.9	15.0 mg/Kg		09/09/21 09:55	09/09/21 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	09/09/21 09:55	09/09/21 17:44	1
o-Terphenyl	92		70 - 130	09/09/21 09:55	09/09/21 17:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.3		5.00	0.858 mg/Kg			09/09/21 22:50	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-13

Lab Sample ID: 880-5902-13

Date Collected: 09/08/21 12:31

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
Toluene	<0.000453	U	0.00199	0.000453 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
Ethylbenzene	<0.000562	U	0.00199	0.000562 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
o-Xylene	<0.000342	U	0.00199	0.000342 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
Xylenes, Total	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 01:28	1
Total BTEX	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/09/21 11:55	09/10/21 01:28	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09/09/21 11:55	09/10/21 01:28	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.5	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:05	1
Diesel Range Organics (Over C10-C28)	23.4	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:05	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:05	1
Total TPH	38.9	J	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	09/09/21 09:55	09/09/21 18:05	1
o-Terphenyl	93		70 - 130	09/09/21 09:55	09/09/21 18:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.4		4.95	0.850 mg/Kg			09/09/21 22:55	1

Client Sample ID: FCS-14

Lab Sample ID: 880-5902-14

Date Collected: 09/08/21 12:45

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000800	J	0.00201	0.000387 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
Toluene	<0.000458	U	0.00201	0.000458 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
Ethylbenzene	0.000682	J	0.00201	0.000567 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
o-Xylene	<0.000345	U	0.00201	0.000345 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
Xylenes, Total	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:49	1
Total BTEX	0.00148	J	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/10/21 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/09/21 11:55	09/10/21 01:49	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/09/21 11:55	09/10/21 01:49	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-14

Lab Sample ID: 880-5902-14

Date Collected: 09/08/21 12:45

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:26	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:26	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:26	1
Total TPH	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	09/09/21 09:55	09/09/21 18:26	1
o-Terphenyl	101		70 - 130	09/09/21 09:55	09/09/21 18:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	254		5.01	0.860 mg/Kg			09/09/21 23:12	1

Client Sample ID: FCS-15

Lab Sample ID: 880-5902-15

Date Collected: 09/08/21 12:48

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00121	J	0.00200	0.000384 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
Toluene	<0.000455	U	0.00200	0.000455 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
Ethylbenzene	<0.000564	U	0.00200	0.000564 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
o-Xylene	0.000352	J	0.00200	0.000343 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
Xylenes, Total	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:09	1
Total BTEX	0.00156	J	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/09/21 11:55	09/10/21 02:09	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/09/21 11:55	09/10/21 02:09	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 18:47	1
Diesel Range Organics (Over C10-C28)	39.0	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 18:47	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 18:47	1
Total TPH	39.0	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	09/09/21 09:55	09/09/21 18:47	1
o-Terphenyl	86		70 - 130	09/09/21 09:55	09/09/21 18:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.1		5.03	0.863 mg/Kg			09/09/21 23:18	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-16

Lab Sample ID: 880-5902-16

Date Collected: 09/08/21 12:51

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
Toluene	<0.000457	U	0.00200	0.000457 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
Ethylbenzene	0.000812	J	0.00200	0.000566 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
m-Xylene & p-Xylene	0.00103	J	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
o-Xylene	0.000561	J	0.00200	0.000345 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
Xylenes, Total	0.00159	J	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:30	1
Total BTEX	0.00240	J	0.00401	0.00101 mg/Kg		09/09/21 11:55	09/10/21 02:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	09/09/21 11:55	09/10/21 02:30	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/09/21 11:55	09/10/21 02:30	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.9	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 19:08	1
Diesel Range Organics (Over C10-C28)	59.1		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 19:08	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 19:08	1
Total TPH	80.0		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/09/21 09:55	09/09/21 19:08	1
o-Terphenyl	103		70 - 130	09/09/21 09:55	09/09/21 19:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.7		4.98	0.855 mg/Kg			09/09/21 23:24	1

Client Sample ID: FCS-17

Lab Sample ID: 880-5902-17

Date Collected: 09/08/21 12:53

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000763	J	0.00201	0.000387 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
Toluene	<0.000459	U	0.00201	0.000459 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
Ethylbenzene	<0.000568	U	0.00201	0.000568 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
o-Xylene	0.000455	J	0.00201	0.000346 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
Xylenes, Total	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/10/21 02:50	1
Total BTEX	0.00122	J	0.00402	0.00102 mg/Kg		09/09/21 11:55	09/10/21 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/09/21 11:55	09/10/21 02:50	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/21 11:55	09/10/21 02:50	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-17

Lab Sample ID: 880-5902-17

Date Collected: 09/08/21 12:53

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	14.9	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:29	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:29	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:29	1
Total TPH	14.9	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	09/09/21 09:55	09/09/21 19:29	1
o-Terphenyl	89		70 - 130	09/09/21 09:55	09/09/21 19:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	364		5.05	0.867 mg/Kg			09/09/21 23:29	1

Client Sample ID: FCS-18

Lab Sample ID: 880-5902-18

Date Collected: 09/08/21 12:55

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000440	J	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
Toluene	<0.000454	U	0.00199	0.000454 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
Ethylbenzene	<0.000563	U	0.00199	0.000563 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
o-Xylene	0.000860	J	0.00199	0.000343 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
Xylenes, Total	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:11	1
Total BTEX	0.00130	J	0.00398	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/09/21 11:55	09/10/21 03:11	1
1,4-Difluorobenzene (Surr)	73		70 - 130	09/09/21 11:55	09/10/21 03:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:50	1
Diesel Range Organics (Over C10-C28)	78.7		49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:50	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:50	1
Total TPH	78.7		49.7	14.9 mg/Kg		09/09/21 09:55	09/09/21 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/09/21 09:55	09/09/21 19:50	1
o-Terphenyl	104		70 - 130	09/09/21 09:55	09/09/21 19:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	206		5.02	0.862 mg/Kg			09/09/21 23:35	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-19

Lab Sample ID: 880-5902-19

Date Collected: 09/08/21 12:59

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 12'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
Toluene	<0.000455	U	0.00200	0.000455 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
Ethylbenzene	<0.000564	U	0.00200	0.000564 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
o-Xylene	0.000429	J	0.00200	0.000343 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
Xylenes, Total	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:31	1
Total BTEX	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:55	09/10/21 03:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/09/21 11:55	09/10/21 03:31	1
1,4-Difluorobenzene (Surr)	91		70 - 130	09/09/21 11:55	09/10/21 03:31	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.7	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 20:11	1
Diesel Range Organics (Over C10-C28)	19.9	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 20:11	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 20:11	1
Total TPH	37.6	J	49.8	14.9 mg/Kg		09/09/21 09:55	09/09/21 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/09/21 09:55	09/09/21 20:11	1
o-Terphenyl	113		70 - 130	09/09/21 09:55	09/09/21 20:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.1		4.98	0.855 mg/Kg			09/09/21 23:40	1

Client Sample ID: FCS-20

Lab Sample ID: 880-5902-20

Date Collected: 09/08/21 13:01

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 9'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
Toluene	<0.000453	U	0.00199	0.000453 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
Ethylbenzene	0.000731	J	0.00199	0.000562 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
o-Xylene	0.000565	J	0.00199	0.000342 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
Xylenes, Total	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 03:51	1
Total BTEX	0.00130	J	0.00398	0.00100 mg/Kg		09/09/21 11:55	09/10/21 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/09/21 11:55	09/10/21 03:51	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/09/21 11:55	09/10/21 03:51	1

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Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-20

Lab Sample ID: 880-5902-20

Date Collected: 09/08/21 13:01

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 9'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.4	J	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 20:32	1
Diesel Range Organics (Over C10-C28)	134		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 20:32	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 20:32	1
Total TPH	152		50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/09/21 09:55	09/09/21 20:32	1
o-Terphenyl	101		70 - 130	09/09/21 09:55	09/09/21 20:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.5		4.95	0.850 mg/Kg			09/09/21 23:46	1

Client Sample ID: FCS-21

Lab Sample ID: 880-5902-21

Date Collected: 09/08/21 13:05

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 0' - 9'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U F1	0.00199	0.000383 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
Toluene	<0.000454	U F1	0.00199	0.000454 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
Ethylbenzene	<0.000563	U F1	0.00199	0.000563 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
m-Xylene & p-Xylene	<0.00101	U F1	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
o-Xylene	0.000444	J F1	0.00199	0.000343 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
Xylenes, Total	<0.00101	U F1	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:10	1
Total BTEX	<0.00101	U F1	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	09/09/21 11:58	09/10/21 00:10	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/09/21 11:58	09/10/21 00:10	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.0	J	49.8	14.9 mg/Kg		09/09/21 13:31	09/09/21 23:20	1
Diesel Range Organics (Over C10-C28)	464		49.8	14.9 mg/Kg		09/09/21 13:31	09/09/21 23:20	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 13:31	09/09/21 23:20	1
Total TPH	492		49.8	14.9 mg/Kg		09/09/21 13:31	09/09/21 23:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	09/09/21 13:31	09/09/21 23:20	1
o-Terphenyl	124		70 - 130	09/09/21 13:31	09/09/21 23:20	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.9		4.99	0.857 mg/Kg			09/09/21 19:17	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-22

Lab Sample ID: 880-5902-22

Date Collected: 09/08/21 13:07

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 3'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
Toluene	<0.000458	U	0.00201	0.000458 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
Ethylbenzene	<0.000567	U	0.00201	0.000567 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
o-Xylene	<0.000345	U	0.00201	0.000345 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
Xylenes, Total	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:30	1
Total BTEX	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 00:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	09/09/21 11:58	09/10/21 00:30	1
1,4-Difluorobenzene (Surr)	72		70 - 130	09/09/21 11:58	09/10/21 00:30	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.7	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/09/21 22:17	1
Diesel Range Organics (Over C10-C28)	15.2	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/09/21 22:17	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 13:31	09/09/21 22:17	1
Total TPH	41.9	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/09/21 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	09/09/21 13:31	09/09/21 22:17	1
o-Terphenyl	88		70 - 130	09/09/21 13:31	09/09/21 22:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	102		4.97	0.853 mg/Kg			09/09/21 19:22	1

Client Sample ID: FCS-23

Lab Sample ID: 880-5902-23

Date Collected: 09/08/21 13:12

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
Toluene	0.000495	J	0.00201	0.000459 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
Ethylbenzene	<0.000568	U	0.00201	0.000568 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
o-Xylene	<0.000346	U	0.00201	0.000346 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
Xylenes, Total	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:58	09/10/21 00:50	1
Total BTEX	<0.00102	U	0.00402	0.00102 mg/Kg		09/09/21 11:58	09/10/21 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	09/09/21 11:58	09/10/21 00:50	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/09/21 11:58	09/10/21 00:50	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-23

Lab Sample ID: 880-5902-23

Date Collected: 09/08/21 13:12

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 2'

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.9	J	49.9	15.0 mg/Kg		09/09/21 13:31	09/09/21 23:41	1
Diesel Range Organics (Over C10-C28)	25.7	J	49.9	15.0 mg/Kg		09/09/21 13:31	09/09/21 23:41	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 13:31	09/09/21 23:41	1
Total TPH	45.6	J	49.9	15.0 mg/Kg		09/09/21 13:31	09/09/21 23:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	09/09/21 13:31	09/09/21 23:41	1
o-Terphenyl	108		70 - 130	09/09/21 13:31	09/09/21 23:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	288		4.95	0.850 mg/Kg			09/09/21 19:39	1

Client Sample ID: FCS-24

Lab Sample ID: 880-5902-24

Date Collected: 09/08/21 13:17

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
Toluene	<0.000453	U	0.00199	0.000453 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
Ethylbenzene	<0.000562	U	0.00199	0.000562 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
o-Xylene	<0.000342	U	0.00199	0.000342 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
Xylenes, Total	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 01:11	1
Total BTEX	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/09/21 11:58	09/10/21 01:11	1
1,4-Difluorobenzene (Surr)	61	S1-	70 - 130	09/09/21 11:58	09/10/21 01:11	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.0	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:02	1
Diesel Range Organics (Over C10-C28)	15.7	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:02	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:02	1
Total TPH	35.7	J	49.7	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/09/21 13:31	09/10/21 00:02	1
o-Terphenyl	103		70 - 130	09/09/21 13:31	09/10/21 00:02	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		4.97	0.853 mg/Kg			09/09/21 19:45	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-25

Lab Sample ID: 880-5902-25

Date Collected: 09/08/21 13:22

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 2"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
Toluene	<0.000455	U	0.00200	0.000455 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
Ethylbenzene	<0.000564	U	0.00200	0.000564 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
o-Xylene	<0.000343	U	0.00200	0.000343 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
Xylenes, Total	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:31	1
Total BTEX	<0.00101	U	0.00399	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130	09/09/21 11:58	09/10/21 01:31	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/09/21 11:58	09/10/21 01:31	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:23	1
Diesel Range Organics (Over C10-C28)	30.7	J	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:23	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:23	1
Total TPH	30.7	J	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/09/21 13:31	09/10/21 00:23	1
o-Terphenyl	108		70 - 130	09/09/21 13:31	09/10/21 00:23	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		4.95	0.850 mg/Kg			09/09/21 20:02	1

Client Sample ID: FCS-26

Lab Sample ID: 880-5902-26

Date Collected: 09/08/21 13:25

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 2"

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
Toluene	<0.000454	U	0.00199	0.000454 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
Ethylbenzene	<0.000563	U	0.00199	0.000563 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
o-Xylene	<0.000343	U	0.00199	0.000343 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
Xylenes, Total	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:52	1
Total BTEX	<0.00101	U	0.00398	0.00101 mg/Kg		09/09/21 11:58	09/10/21 01:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	09/09/21 11:58	09/10/21 01:52	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/09/21 11:58	09/10/21 01:52	1

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Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-26

Lab Sample ID: 880-5902-26

Date Collected: 09/08/21 13:25

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: 2"

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	15.8	J	50.0	15.0 mg/Kg		09/09/21 13:31	09/10/21 00:44	1
Diesel Range Organics (Over C10-C28)	47.1	J	50.0	15.0 mg/Kg		09/09/21 13:31	09/10/21 00:44	1
Oil Range Organics (Over C28-C36)	19.6	J	50.0	15.0 mg/Kg		09/09/21 13:31	09/10/21 00:44	1
Total TPH	82.5		50.0	15.0 mg/Kg		09/09/21 13:31	09/10/21 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/09/21 13:31	09/10/21 00:44	1
o-Terphenyl	118		70 - 130	09/09/21 13:31	09/10/21 00:44	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		5.00	0.858 mg/Kg			09/09/21 20:07	1

Client Sample ID: FSTP-1

Lab Sample ID: 880-5902-27

Date Collected: 09/08/21 13:46

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: -

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
Toluene	<0.000453	U	0.00199	0.000453 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
Ethylbenzene	<0.000562	U	0.00199	0.000562 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
o-Xylene	<0.000342	U	0.00199	0.000342 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
Xylenes, Total	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 02:12	1
Total BTEX	<0.00100	U	0.00398	0.00100 mg/Kg		09/09/21 11:58	09/10/21 02:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	09/09/21 11:58	09/10/21 02:12	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/09/21 11:58	09/10/21 02:12	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	20.5	J	49.9	15.0 mg/Kg		09/09/21 13:31	09/10/21 01:05	1
Diesel Range Organics (Over C10-C28)	51.2		49.9	15.0 mg/Kg		09/09/21 13:31	09/10/21 01:05	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0 mg/Kg		09/09/21 13:31	09/10/21 01:05	1
Total TPH	71.7		49.9	15.0 mg/Kg		09/09/21 13:31	09/10/21 01:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/09/21 13:31	09/10/21 01:05	1
o-Terphenyl	113		70 - 130	09/09/21 13:31	09/10/21 01:05	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		5.00	0.858 mg/Kg			09/09/21 20:13	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FSTP-2

Lab Sample ID: 880-5902-28

Date Collected: 09/08/21 13:48

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: -

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
Toluene	<0.000457	U	0.00200	0.000457 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
Ethylbenzene	<0.000566	U	0.00200	0.000566 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
o-Xylene	<0.000345	U	0.00200	0.000345 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
Xylenes, Total	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:32	1
Total BTEX	<0.00101	U	0.00401	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	09/09/21 11:58	09/10/21 02:32	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/21 11:58	09/10/21 02:32	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	27.3	J	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 01:26	1
Diesel Range Organics (Over C10-C28)	193		49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 01:26	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 01:26	1
Total TPH	220		49.8	14.9 mg/Kg		09/09/21 13:31	09/10/21 01:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	09/09/21 13:31	09/10/21 01:26	1
o-Terphenyl	106		70 - 130	09/09/21 13:31	09/10/21 01:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	388		4.99	0.857 mg/Kg			09/09/21 20:18	1

Client Sample ID: FSTP-3

Lab Sample ID: 880-5902-29

Date Collected: 09/08/21 13:53

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: -

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
Toluene	<0.000458	U	0.00201	0.000458 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
Ethylbenzene	<0.000567	U	0.00201	0.000567 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
o-Xylene	<0.000345	U	0.00201	0.000345 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
Xylenes, Total	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:53	1
Total BTEX	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:58	09/10/21 02:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	09/09/21 11:58	09/10/21 02:53	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/09/21 11:58	09/10/21 02:53	1

Eurofins Xenco, Midland

Client Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FSTP-3

Lab Sample ID: 880-5902-29

Date Collected: 09/08/21 13:53

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: -

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.9	U	49.8	14.9 mg/Kg		09/09/21 13:32	09/10/21 01:47	1
Diesel Range Organics (Over C10-C28)	47.3	J	49.8	14.9 mg/Kg		09/09/21 13:32	09/10/21 01:47	1
Oil Range Organics (Over C28-C36)	21.4	J	49.8	14.9 mg/Kg		09/09/21 13:32	09/10/21 01:47	1
Total TPH	68.7		49.8	14.9 mg/Kg		09/09/21 13:32	09/10/21 01:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			09/09/21 13:32	09/10/21 01:47	1
o-Terphenyl	104		70 - 130			09/09/21 13:32	09/10/21 01:47	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.0		4.95	0.850 mg/Kg			09/09/21 20:24	1

Client Sample ID: FSTP-4

Lab Sample ID: 880-5902-30

Date Collected: 09/08/21 13:55

Matrix: Solid

Date Received: 09/09/21 09:09

Sample Depth: -

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
Toluene	<0.000461	U	0.00202	0.000461 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
Ethylbenzene	<0.000571	U	0.00202	0.000571 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
o-Xylene	<0.000347	U	0.00202	0.000347 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
Xylenes, Total	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
Total BTEX	<0.00102	U	0.00404	0.00102 mg/Kg		09/09/21 11:58	09/10/21 03:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			09/09/21 11:58	09/10/21 03:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130			09/09/21 11:58	09/10/21 03:13	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:32	09/10/21 02:08	1
Diesel Range Organics (Over C10-C28)	70.3		50.0	15.0 mg/Kg		09/09/21 13:32	09/10/21 02:08	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:32	09/10/21 02:08	1
Total TPH	70.3		50.0	15.0 mg/Kg		09/09/21 13:32	09/10/21 02:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			09/09/21 13:32	09/10/21 02:08	1
o-Terphenyl	103		70 - 130			09/09/21 13:32	09/10/21 02:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	422		4.95	0.850 mg/Kg			09/09/21 20:30	1

Eurofins Xenco, Midland

Surrogate Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-5902-1	FCS-1	104	104
880-5902-1 MS	FCS-1	109	88
880-5902-1 MSD	FCS-1	114	83
880-5902-2	FCS-2	102	68 S1-
880-5902-3	FCS-3	101	82
880-5902-4	FCS-4	106	95
880-5902-5	FCS-5	107	111
880-5902-6	FCS-6	98	98
880-5902-7	FCS-7	116	95
880-5902-8	FCS-8	106	98
880-5902-9	FCS-9	124	78
880-5902-10	FCS-10	116	96
880-5902-11	FCS-11	105	104
880-5902-12	FCS-12	85	71
880-5902-13	FCS-13	99	84
880-5902-14	FCS-14	112	95
880-5902-15	FCS-15	108	100
880-5902-16	FCS-16	118	97
880-5902-17	FCS-17	114	98
880-5902-18	FCS-18	96	73
880-5902-19	FCS-19	111	91
880-5902-20	FCS-20	105	89
880-5902-21	FCS-21	138 S1+	92
880-5902-21 MS	FCS-21	138 S1+	84
880-5902-21 MSD	FCS-21	129	88
880-5902-22	FCS-22	128	72
880-5902-23	FCS-23	134 S1+	97
880-5902-24	FCS-24	111	61 S1-
880-5902-25	FCS-25	141 S1+	100
880-5902-26	FCS-26	130	95
880-5902-27	FSTP-1	125	97
880-5902-28	FSTP-2	122	98
880-5902-29	FSTP-3	127	98
880-5902-30	FSTP-4	116	97
LCS 880-7696/1-A	Lab Control Sample	100	96
LCS 880-7698/1-A	Lab Control Sample	114	104
LCSD 880-7696/2-A	Lab Control Sample Dup	101	96
LCSD 880-7698/2-A	Lab Control Sample Dup	111	102
MB 880-7677/5-A	Method Blank	109	99
MB 880-7696/5-A	Method Blank	128	100
MB 880-7698/5-A	Method Blank	111	95

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Xenco, Midland

Surrogate Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-5902-1	FCS-1	76	81
880-5902-1 MS	FCS-1	74	72
880-5902-1 MSD	FCS-1	87	85
880-5902-2	FCS-2	94	99
880-5902-3	FCS-3	99	108
880-5902-4	FCS-4	87	95
880-5902-5	FCS-5	75	82
880-5902-6	FCS-6	84	91
880-5902-7	FCS-7	90	96
880-5902-8	FCS-8	99	108
880-5902-9	FCS-9	83	89
880-5902-10	FCS-10	86	89
880-5902-11	FCS-11	96	101
880-5902-12	FCS-12	84	92
880-5902-13	FCS-13	85	93
880-5902-14	FCS-14	91	101
880-5902-15	FCS-15	82	86
880-5902-16	FCS-16	97	103
880-5902-17	FCS-17	83	89
880-5902-18	FCS-18	99	104
880-5902-19	FCS-19	101	113
880-5902-20	FCS-20	98	101
880-5902-21	FCS-21	118	124
880-5902-22	FCS-22	86	88
880-5902-22 MS	FCS-22	110	104
880-5902-22 MSD	FCS-22	111	105
880-5902-23	FCS-23	106	108
880-5902-24	FCS-24	95	103
880-5902-25	FCS-25	103	108
880-5902-26	FCS-26	110	118
880-5902-27	FSTP-1	107	113
880-5902-28	FSTP-2	99	106
880-5902-29	FSTP-3	104	104
880-5902-30	FSTP-4	97	103
LCS 880-7691/2-A	Lab Control Sample	100	104
LCS 880-7705/2-A	Lab Control Sample	98	100
LCSD 880-7691/3-A	Lab Control Sample Dup	94	97
LCSD 880-7705/3-A	Lab Control Sample Dup	96	104
MB 880-7691/1-A	Method Blank	102	117
MB 880-7705/1-A	Method Blank	110	127

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-7677/5-A

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7677

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
Toluene	<0.000456	U	0.00200	0.000456 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
Ethylbenzene	<0.000565	U	0.00200	0.000565 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
o-Xylene	<0.000344	U	0.00200	0.000344 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
Xylenes, Total	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 08:23	09/09/21 12:36	1
Total BTEX	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 08:23	09/09/21 12:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/09/21 08:23	09/09/21 12:36	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/09/21 08:23	09/09/21 12:36	1

Lab Sample ID: MB 880-7696/5-A

Matrix: Solid

Analysis Batch: 7711

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7696

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
Toluene	<0.000458	U	0.00201	0.000458 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
Ethylbenzene	<0.000567	U	0.00201	0.000567 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
o-Xylene	<0.000345	U	0.00201	0.000345 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
Xylenes, Total	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:26	1
Total BTEX	<0.00101	U	0.00402	0.00101 mg/Kg		09/09/21 11:55	09/09/21 19:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	09/09/21 11:55	09/09/21 19:26	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/09/21 11:55	09/09/21 19:26	1

Lab Sample ID: LCS 880-7696/1-A

Matrix: Solid

Analysis Batch: 7711

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7696

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1021		mg/Kg		102	70 - 130
Toluene	0.100	0.1052		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1077		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.1972		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09778		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-7696/2-A

Matrix: Solid

Analysis Batch: 7711

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7696

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09851		mg/Kg		99	70 - 130	4	35
Toluene	0.100	0.1047		mg/Kg		105	70 - 130	0	35
Ethylbenzene	0.100	0.1081		mg/Kg		108	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1963		mg/Kg		98	70 - 130	0	35
o-Xylene	0.100	0.09571		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-5902-1 MS

Matrix: Solid

Analysis Batch: 7711

Client Sample ID: FCS-1

Prep Type: Total/NA

Prep Batch: 7696

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000419	J F1	0.0998	0.07381		mg/Kg		74	70 - 130		
Toluene	<0.000456	U F1	0.0998	0.08932		mg/Kg		89	70 - 130		
Ethylbenzene	<0.000565	U	0.0998	0.09233		mg/Kg		93	70 - 130		
m-Xylene & p-Xylene	<0.00101	U F1	0.200	0.1714		mg/Kg		86	70 - 130		
o-Xylene	0.000535	J	0.0998	0.08669		mg/Kg		86	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-5902-1 MSD

Matrix: Solid

Analysis Batch: 7711

Client Sample ID: FCS-1

Prep Type: Total/NA

Prep Batch: 7696

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.000419	J F1	0.100	0.05948	F1	mg/Kg		59	70 - 130	21	35
Toluene	<0.000456	U F1	0.100	0.06873	F1	mg/Kg		69	70 - 130	26	35
Ethylbenzene	<0.000565	U	0.100	0.07467		mg/Kg		75	70 - 130	21	35
m-Xylene & p-Xylene	<0.00101	U F1	0.200	0.1351	F1	mg/Kg		67	70 - 130	24	35
o-Xylene	0.000535	J	0.100	0.07349		mg/Kg		73	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

Lab Sample ID: MB 880-7698/5-A

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7698

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg	09/09/21 11:58	09/09/21 23:48	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg	09/09/21 11:58	09/09/21 23:48	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg	09/09/21 11:58	09/09/21 23:48	1

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

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

Lab Sample ID: MB 880-7698/5-A

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7698

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:58	09/09/21 23:48	1
o-Xylene	<0.000344	U	0.00200	0.000344 mg/Kg		09/09/21 11:58	09/09/21 23:48	1
Xylenes, Total	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:58	09/09/21 23:48	1
Total BTEX	<0.00101	U	0.00400	0.00101 mg/Kg		09/09/21 11:58	09/09/21 23:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/09/21 11:58	09/09/21 23:48	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/09/21 11:58	09/09/21 23:48	1

Lab Sample ID: LCS 880-7698/1-A

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.08971		mg/Kg		90	70 - 130
Toluene	0.100	0.08453		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08606		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1811		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09017		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-7698/2-A

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7698

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.08407		mg/Kg		84	70 - 130	6	35
Toluene	0.100	0.07976		mg/Kg		80	70 - 130	6	35
Ethylbenzene	0.100	0.07964		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1663		mg/Kg		83	70 - 130	9	35
o-Xylene	0.100	0.08340		mg/Kg		83	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-5902-21 MS

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: FCS-21

Prep Type: Total/NA

Prep Batch: 7698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.000383	U F1	0.0998	0.02869	F1	mg/Kg		29	70 - 130
Toluene	<0.000454	U F1	0.0998	0.03475	F1	mg/Kg		35	70 - 130
Ethylbenzene	<0.000563	U F1	0.0998	0.03551	F1	mg/Kg		36	70 - 130
m-Xylene & p-Xylene	<0.00101	U F1	0.200	0.07596	F1	mg/Kg		38	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

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

Lab Sample ID: 880-5902-21 MS

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: FCS-21

Prep Type: Total/NA

Prep Batch: 7698

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	0.000444	J F1	0.0998	0.04000	F1	mg/Kg		40	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130						
1,4-Difluorobenzene (Surr)	84		70 - 130						

Lab Sample ID: 880-5902-21 MSD

Matrix: Solid

Analysis Batch: 7678

Client Sample ID: FCS-21

Prep Type: Total/NA

Prep Batch: 7698

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	<0.000383	U F1	0.101	0.02284	F1	mg/Kg		23	70 - 130	23	35
Toluene	<0.000454	U F1	0.101	0.03327	F1	mg/Kg		33	70 - 130	4	35
Ethylbenzene	<0.000563	U F1	0.101	0.03229	F1	mg/Kg		32	70 - 130	10	35
m-Xylene & p-Xylene	<0.00101	U F1	0.202	0.06718	F1	mg/Kg		33	70 - 130	12	35
o-Xylene	0.000444	J F1	0.101	0.03739	F1	mg/Kg		37	70 - 130	7	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	129		70 - 130								
1,4-Difluorobenzene (Surr)	88		70 - 130								

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-7691/1-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7691

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 11:43	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 11:43	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 11:43	1
Total TPH	<15.0	U	50.0	15.0 mg/Kg		09/09/21 09:55	09/09/21 11:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	102		70 - 130	09/09/21 09:55	09/09/21 11:43	1		
o-Terphenyl	117		70 - 130	09/09/21 09:55	09/09/21 11:43	1		

Lab Sample ID: LCS 880-7691/2-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7691

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	804.1		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	919.3		mg/Kg		92	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-7691/2-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7691

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: LCSD 880-7691/3-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7691

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	851.6		mg/Kg		85	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	963.7		mg/Kg		96	70 - 130	5	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 880-5902-1 MS

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: FCS-1

Prep Type: Total/NA

Prep Batch: 7691

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<14.9	U F1	997	581.1	F1	mg/Kg		58	70 - 130		
Diesel Range Organics (Over C10-C28)	49.3	J F1	997	684.6	F1	mg/Kg		64	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	72		70 - 130

Lab Sample ID: 880-5902-1 MSD

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: FCS-1

Prep Type: Total/NA

Prep Batch: 7691

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<14.9	U F1	999	702.3		mg/Kg		70	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	49.3	J F1	999	826.0		mg/Kg		78	70 - 130	19	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	85		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-7705/1-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 7705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:31	09/09/21 21:14	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:31	09/09/21 21:14	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:31	09/09/21 21:14	1
Total TPH	<15.0	U	50.0	15.0 mg/Kg		09/09/21 13:31	09/09/21 21:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/09/21 13:31	09/09/21 21:14	1
o-Terphenyl	127		70 - 130	09/09/21 13:31	09/09/21 21:14	1

Lab Sample ID: LCS 880-7705/2-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 7705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.0		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1018		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-7705/3-A

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 7705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	767.5		mg/Kg		77	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	908.7		mg/Kg		91	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 880-5902-22 MS

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: FCS-22

Prep Type: Total/NA

Prep Batch: 7705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	26.7	J	997	944.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	15.2	J	997	1149		mg/Kg		114	70 - 130

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 880-5902-22 MS

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: FCS-22

Prep Type: Total/NA

Prep Batch: 7705

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 880-5902-22 MSD

Matrix: Solid

Analysis Batch: 7689

Client Sample ID: FCS-22

Prep Type: Total/NA

Prep Batch: 7705

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	26.7	J	999	1046		mg/Kg		102	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	15.2	J	999	1186		mg/Kg		117	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	105		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-7639/1-A

Matrix: Solid

Analysis Batch: 7682

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858 mg/Kg			09/09/21 17:47	1

Lab Sample ID: LCS 880-7639/2-A

Matrix: Solid

Analysis Batch: 7682

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	253.0		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-7639/3-A

Matrix: Solid

Analysis Batch: 7682

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	253.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-5902-22 MS

Matrix: Solid

Analysis Batch: 7682

Client Sample ID: FCS-22

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	102		249	361.3		mg/Kg		104	90 - 110

Eurofins Xenco, Midland

QC Sample Results

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-5902-22 MSD

Matrix: Solid

Analysis Batch: 7682

Client Sample ID: FCS-22

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	102		249	362.7		mg/Kg		105	90 - 110	0	20

Lab Sample ID: MB 880-7692/1-A

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.858	U	5.00	0.858	mg/Kg			09/09/21 20:58	1

Lab Sample ID: LCS 880-7692/2-A

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride		250	253.8		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-7692/3-A

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride		250	254.1		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-5902-1 MS

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: FCS-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	49.1		253	306.9		mg/Kg		102	90 - 110		

Lab Sample ID: 880-5902-1 MSD

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: FCS-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	49.1		253	307.6		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-5902-11 MS

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: FCS-11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	38.1		249	293.4		mg/Kg		103	90 - 110		

Lab Sample ID: 880-5902-11 MSD

Matrix: Solid

Analysis Batch: 7709

Client Sample ID: FCS-11

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	38.1		249	294.7		mg/Kg		103	90 - 110	0	20

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

GC VOA

Prep Batch: 7677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-7677/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 7678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-21	FCS-21	Total/NA	Solid	8021B	7698
880-5902-22	FCS-22	Total/NA	Solid	8021B	7698
880-5902-23	FCS-23	Total/NA	Solid	8021B	7698
880-5902-24	FCS-24	Total/NA	Solid	8021B	7698
880-5902-25	FCS-25	Total/NA	Solid	8021B	7698
880-5902-26	FCS-26	Total/NA	Solid	8021B	7698
880-5902-27	FSTP-1	Total/NA	Solid	8021B	7698
880-5902-28	FSTP-2	Total/NA	Solid	8021B	7698
880-5902-29	FSTP-3	Total/NA	Solid	8021B	7698
880-5902-30	FSTP-4	Total/NA	Solid	8021B	7698
MB 880-7677/5-A	Method Blank	Total/NA	Solid	8021B	7677
MB 880-7698/5-A	Method Blank	Total/NA	Solid	8021B	7698
LCS 880-7698/1-A	Lab Control Sample	Total/NA	Solid	8021B	7698
LCSD 880-7698/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7698
880-5902-21 MS	FCS-21	Total/NA	Solid	8021B	7698
880-5902-21 MSD	FCS-21	Total/NA	Solid	8021B	7698

Prep Batch: 7696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Total/NA	Solid	5035	
880-5902-2	FCS-2	Total/NA	Solid	5035	
880-5902-3	FCS-3	Total/NA	Solid	5035	
880-5902-4	FCS-4	Total/NA	Solid	5035	
880-5902-5	FCS-5	Total/NA	Solid	5035	
880-5902-6	FCS-6	Total/NA	Solid	5035	
880-5902-7	FCS-7	Total/NA	Solid	5035	
880-5902-8	FCS-8	Total/NA	Solid	5035	
880-5902-9	FCS-9	Total/NA	Solid	5035	
880-5902-10	FCS-10	Total/NA	Solid	5035	
880-5902-11	FCS-11	Total/NA	Solid	5035	
880-5902-12	FCS-12	Total/NA	Solid	5035	
880-5902-13	FCS-13	Total/NA	Solid	5035	
880-5902-14	FCS-14	Total/NA	Solid	5035	
880-5902-15	FCS-15	Total/NA	Solid	5035	
880-5902-16	FCS-16	Total/NA	Solid	5035	
880-5902-17	FCS-17	Total/NA	Solid	5035	
880-5902-18	FCS-18	Total/NA	Solid	5035	
880-5902-19	FCS-19	Total/NA	Solid	5035	
880-5902-20	FCS-20	Total/NA	Solid	5035	
MB 880-7696/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7696/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7696/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5902-1 MS	FCS-1	Total/NA	Solid	5035	
880-5902-1 MSD	FCS-1	Total/NA	Solid	5035	

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QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

GC VOA

Prep Batch: 7698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-21	FCS-21	Total/NA	Solid	5035	
880-5902-22	FCS-22	Total/NA	Solid	5035	
880-5902-23	FCS-23	Total/NA	Solid	5035	
880-5902-24	FCS-24	Total/NA	Solid	5035	
880-5902-25	FCS-25	Total/NA	Solid	5035	
880-5902-26	FCS-26	Total/NA	Solid	5035	
880-5902-27	FSTP-1	Total/NA	Solid	5035	
880-5902-28	FSTP-2	Total/NA	Solid	5035	
880-5902-29	FSTP-3	Total/NA	Solid	5035	
880-5902-30	FSTP-4	Total/NA	Solid	5035	
MB 880-7698/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-7698/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-7698/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-5902-21 MS	FCS-21	Total/NA	Solid	5035	
880-5902-21 MSD	FCS-21	Total/NA	Solid	5035	

Analysis Batch: 7711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Total/NA	Solid	8021B	7696
880-5902-2	FCS-2	Total/NA	Solid	8021B	7696
880-5902-3	FCS-3	Total/NA	Solid	8021B	7696
880-5902-4	FCS-4	Total/NA	Solid	8021B	7696
880-5902-5	FCS-5	Total/NA	Solid	8021B	7696
880-5902-6	FCS-6	Total/NA	Solid	8021B	7696
880-5902-7	FCS-7	Total/NA	Solid	8021B	7696
880-5902-8	FCS-8	Total/NA	Solid	8021B	7696
880-5902-9	FCS-9	Total/NA	Solid	8021B	7696
880-5902-10	FCS-10	Total/NA	Solid	8021B	7696
880-5902-11	FCS-11	Total/NA	Solid	8021B	7696
880-5902-12	FCS-12	Total/NA	Solid	8021B	7696
880-5902-13	FCS-13	Total/NA	Solid	8021B	7696
880-5902-14	FCS-14	Total/NA	Solid	8021B	7696
880-5902-15	FCS-15	Total/NA	Solid	8021B	7696
880-5902-16	FCS-16	Total/NA	Solid	8021B	7696
880-5902-17	FCS-17	Total/NA	Solid	8021B	7696
880-5902-18	FCS-18	Total/NA	Solid	8021B	7696
880-5902-19	FCS-19	Total/NA	Solid	8021B	7696
880-5902-20	FCS-20	Total/NA	Solid	8021B	7696
MB 880-7696/5-A	Method Blank	Total/NA	Solid	8021B	7696
LCS 880-7696/1-A	Lab Control Sample	Total/NA	Solid	8021B	7696
LCSD 880-7696/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	7696
880-5902-1 MS	FCS-1	Total/NA	Solid	8021B	7696
880-5902-1 MSD	FCS-1	Total/NA	Solid	8021B	7696

GC Semi VOA

Analysis Batch: 7689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Total/NA	Solid	8015B NM	7691
880-5902-2	FCS-2	Total/NA	Solid	8015B NM	7691
880-5902-3	FCS-3	Total/NA	Solid	8015B NM	7691

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 7689 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-4	FCS-4	Total/NA	Solid	8015B NM	7691
880-5902-5	FCS-5	Total/NA	Solid	8015B NM	7691
880-5902-6	FCS-6	Total/NA	Solid	8015B NM	7691
880-5902-7	FCS-7	Total/NA	Solid	8015B NM	7691
880-5902-8	FCS-8	Total/NA	Solid	8015B NM	7691
880-5902-9	FCS-9	Total/NA	Solid	8015B NM	7691
880-5902-10	FCS-10	Total/NA	Solid	8015B NM	7691
880-5902-11	FCS-11	Total/NA	Solid	8015B NM	7691
880-5902-12	FCS-12	Total/NA	Solid	8015B NM	7691
880-5902-13	FCS-13	Total/NA	Solid	8015B NM	7691
880-5902-14	FCS-14	Total/NA	Solid	8015B NM	7691
880-5902-15	FCS-15	Total/NA	Solid	8015B NM	7691
880-5902-16	FCS-16	Total/NA	Solid	8015B NM	7691
880-5902-17	FCS-17	Total/NA	Solid	8015B NM	7691
880-5902-18	FCS-18	Total/NA	Solid	8015B NM	7691
880-5902-19	FCS-19	Total/NA	Solid	8015B NM	7691
880-5902-20	FCS-20	Total/NA	Solid	8015B NM	7691
880-5902-21	FCS-21	Total/NA	Solid	8015B NM	7705
880-5902-22	FCS-22	Total/NA	Solid	8015B NM	7705
880-5902-23	FCS-23	Total/NA	Solid	8015B NM	7705
880-5902-24	FCS-24	Total/NA	Solid	8015B NM	7705
880-5902-25	FCS-25	Total/NA	Solid	8015B NM	7705
880-5902-26	FCS-26	Total/NA	Solid	8015B NM	7705
880-5902-27	FSTP-1	Total/NA	Solid	8015B NM	7705
880-5902-28	FSTP-2	Total/NA	Solid	8015B NM	7705
880-5902-29	FSTP-3	Total/NA	Solid	8015B NM	7705
880-5902-30	FSTP-4	Total/NA	Solid	8015B NM	7705
MB 880-7691/1-A	Method Blank	Total/NA	Solid	8015B NM	7691
MB 880-7705/1-A	Method Blank	Total/NA	Solid	8015B NM	7705
LCS 880-7691/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7691
LCS 880-7705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	7705
LCSD 880-7691/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7691
LCSD 880-7705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	7705
880-5902-1 MS	FCS-1	Total/NA	Solid	8015B NM	7691
880-5902-1 MSD	FCS-1	Total/NA	Solid	8015B NM	7691
880-5902-22 MS	FCS-22	Total/NA	Solid	8015B NM	7705
880-5902-22 MSD	FCS-22	Total/NA	Solid	8015B NM	7705

Prep Batch: 7691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Total/NA	Solid	8015NM Prep	
880-5902-2	FCS-2	Total/NA	Solid	8015NM Prep	
880-5902-3	FCS-3	Total/NA	Solid	8015NM Prep	
880-5902-4	FCS-4	Total/NA	Solid	8015NM Prep	
880-5902-5	FCS-5	Total/NA	Solid	8015NM Prep	
880-5902-6	FCS-6	Total/NA	Solid	8015NM Prep	
880-5902-7	FCS-7	Total/NA	Solid	8015NM Prep	
880-5902-8	FCS-8	Total/NA	Solid	8015NM Prep	
880-5902-9	FCS-9	Total/NA	Solid	8015NM Prep	
880-5902-10	FCS-10	Total/NA	Solid	8015NM Prep	
880-5902-11	FCS-11	Total/NA	Solid	8015NM Prep	

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

GC Semi VOA (Continued)

Prep Batch: 7691 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-12	FCS-12	Total/NA	Solid	8015NM Prep	
880-5902-13	FCS-13	Total/NA	Solid	8015NM Prep	
880-5902-14	FCS-14	Total/NA	Solid	8015NM Prep	
880-5902-15	FCS-15	Total/NA	Solid	8015NM Prep	
880-5902-16	FCS-16	Total/NA	Solid	8015NM Prep	
880-5902-17	FCS-17	Total/NA	Solid	8015NM Prep	
880-5902-18	FCS-18	Total/NA	Solid	8015NM Prep	
880-5902-19	FCS-19	Total/NA	Solid	8015NM Prep	
880-5902-20	FCS-20	Total/NA	Solid	8015NM Prep	
MB 880-7691/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7691/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7691/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5902-1 MS	FCS-1	Total/NA	Solid	8015NM Prep	
880-5902-1 MSD	FCS-1	Total/NA	Solid	8015NM Prep	

Prep Batch: 7705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-21	FCS-21	Total/NA	Solid	8015NM Prep	
880-5902-22	FCS-22	Total/NA	Solid	8015NM Prep	
880-5902-23	FCS-23	Total/NA	Solid	8015NM Prep	
880-5902-24	FCS-24	Total/NA	Solid	8015NM Prep	
880-5902-25	FCS-25	Total/NA	Solid	8015NM Prep	
880-5902-26	FCS-26	Total/NA	Solid	8015NM Prep	
880-5902-27	FSTP-1	Total/NA	Solid	8015NM Prep	
880-5902-28	FSTP-2	Total/NA	Solid	8015NM Prep	
880-5902-29	FSTP-3	Total/NA	Solid	8015NM Prep	
880-5902-30	FSTP-4	Total/NA	Solid	8015NM Prep	
MB 880-7705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-7705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-7705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-5902-22 MS	FCS-22	Total/NA	Solid	8015NM Prep	
880-5902-22 MSD	FCS-22	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 7639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-21	FCS-21	Soluble	Solid	DI Leach	
880-5902-22	FCS-22	Soluble	Solid	DI Leach	
880-5902-23	FCS-23	Soluble	Solid	DI Leach	
880-5902-24	FCS-24	Soluble	Solid	DI Leach	
880-5902-25	FCS-25	Soluble	Solid	DI Leach	
880-5902-26	FCS-26	Soluble	Solid	DI Leach	
880-5902-27	FSTP-1	Soluble	Solid	DI Leach	
880-5902-28	FSTP-2	Soluble	Solid	DI Leach	
880-5902-29	FSTP-3	Soluble	Solid	DI Leach	
880-5902-30	FSTP-4	Soluble	Solid	DI Leach	
MB 880-7639/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7639/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7639/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5902-22 MS	FCS-22	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

HPLC/IC (Continued)

Leach Batch: 7639 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-22 MSD	FCS-22	Soluble	Solid	DI Leach	

Analysis Batch: 7682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-21	FCS-21	Soluble	Solid	300.0	7639
880-5902-22	FCS-22	Soluble	Solid	300.0	7639
880-5902-23	FCS-23	Soluble	Solid	300.0	7639
880-5902-24	FCS-24	Soluble	Solid	300.0	7639
880-5902-25	FCS-25	Soluble	Solid	300.0	7639
880-5902-26	FCS-26	Soluble	Solid	300.0	7639
880-5902-27	FSTP-1	Soluble	Solid	300.0	7639
880-5902-28	FSTP-2	Soluble	Solid	300.0	7639
880-5902-29	FSTP-3	Soluble	Solid	300.0	7639
880-5902-30	FSTP-4	Soluble	Solid	300.0	7639
MB 880-7639/1-A	Method Blank	Soluble	Solid	300.0	7639
LCS 880-7639/2-A	Lab Control Sample	Soluble	Solid	300.0	7639
LCSD 880-7639/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7639
880-5902-22 MS	FCS-22	Soluble	Solid	300.0	7639
880-5902-22 MSD	FCS-22	Soluble	Solid	300.0	7639

Leach Batch: 7692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Soluble	Solid	DI Leach	
880-5902-2	FCS-2	Soluble	Solid	DI Leach	
880-5902-3	FCS-3	Soluble	Solid	DI Leach	
880-5902-4	FCS-4	Soluble	Solid	DI Leach	
880-5902-5	FCS-5	Soluble	Solid	DI Leach	
880-5902-6	FCS-6	Soluble	Solid	DI Leach	
880-5902-7	FCS-7	Soluble	Solid	DI Leach	
880-5902-8	FCS-8	Soluble	Solid	DI Leach	
880-5902-9	FCS-9	Soluble	Solid	DI Leach	
880-5902-10	FCS-10	Soluble	Solid	DI Leach	
880-5902-11	FCS-11	Soluble	Solid	DI Leach	
880-5902-12	FCS-12	Soluble	Solid	DI Leach	
880-5902-13	FCS-13	Soluble	Solid	DI Leach	
880-5902-14	FCS-14	Soluble	Solid	DI Leach	
880-5902-15	FCS-15	Soluble	Solid	DI Leach	
880-5902-16	FCS-16	Soluble	Solid	DI Leach	
880-5902-17	FCS-17	Soluble	Solid	DI Leach	
880-5902-18	FCS-18	Soluble	Solid	DI Leach	
880-5902-19	FCS-19	Soluble	Solid	DI Leach	
880-5902-20	FCS-20	Soluble	Solid	DI Leach	
MB 880-7692/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-7692/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-7692/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-5902-1 MS	FCS-1	Soluble	Solid	DI Leach	
880-5902-1 MSD	FCS-1	Soluble	Solid	DI Leach	
880-5902-11 MS	FCS-11	Soluble	Solid	DI Leach	
880-5902-11 MSD	FCS-11	Soluble	Solid	DI Leach	

Eurofins Xenco, Midland

QC Association Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

HPLC/IC

Analysis Batch: 7709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-5902-1	FCS-1	Soluble	Solid	300.0	7692
880-5902-2	FCS-2	Soluble	Solid	300.0	7692
880-5902-3	FCS-3	Soluble	Solid	300.0	7692
880-5902-4	FCS-4	Soluble	Solid	300.0	7692
880-5902-5	FCS-5	Soluble	Solid	300.0	7692
880-5902-6	FCS-6	Soluble	Solid	300.0	7692
880-5902-7	FCS-7	Soluble	Solid	300.0	7692
880-5902-8	FCS-8	Soluble	Solid	300.0	7692
880-5902-9	FCS-9	Soluble	Solid	300.0	7692
880-5902-10	FCS-10	Soluble	Solid	300.0	7692
880-5902-11	FCS-11	Soluble	Solid	300.0	7692
880-5902-12	FCS-12	Soluble	Solid	300.0	7692
880-5902-13	FCS-13	Soluble	Solid	300.0	7692
880-5902-14	FCS-14	Soluble	Solid	300.0	7692
880-5902-15	FCS-15	Soluble	Solid	300.0	7692
880-5902-16	FCS-16	Soluble	Solid	300.0	7692
880-5902-17	FCS-17	Soluble	Solid	300.0	7692
880-5902-18	FCS-18	Soluble	Solid	300.0	7692
880-5902-19	FCS-19	Soluble	Solid	300.0	7692
880-5902-20	FCS-20	Soluble	Solid	300.0	7692
MB 880-7692/1-A	Method Blank	Soluble	Solid	300.0	7692
LCS 880-7692/2-A	Lab Control Sample	Soluble	Solid	300.0	7692
LCSD 880-7692/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	7692
880-5902-1 MS	FCS-1	Soluble	Solid	300.0	7692
880-5902-1 MSD	FCS-1	Soluble	Solid	300.0	7692
880-5902-11 MS	FCS-11	Soluble	Solid	300.0	7692
880-5902-11 MSD	FCS-11	Soluble	Solid	300.0	7692

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-1

Lab Sample ID: 880-5902-1

Date Collected: 09/08/21 11:41

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 19:55	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 12:46	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 21:15	SC	XEN MID

Client Sample ID: FCS-2

Lab Sample ID: 880-5902-2

Date Collected: 09/08/21 11:46

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 20:15	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 13:50	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 21:31	SC	XEN MID

Client Sample ID: FCS-3

Lab Sample ID: 880-5902-3

Date Collected: 09/08/21 11:49

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 20:35	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 14:11	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 21:37	SC	XEN MID

Client Sample ID: FCS-4

Lab Sample ID: 880-5902-4

Date Collected: 09/08/21 11:58

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 20:56	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 14:33	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 21:43	SC	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-5

Lab Sample ID: 880-5902-5

Date Collected: 09/08/21 12:00

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 21:16	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 14:54	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 21:48	SC	XEN MID

Client Sample ID: FCS-6

Lab Sample ID: 880-5902-6

Date Collected: 09/08/21 12:03

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 21:37	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 15:15	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:05	SC	XEN MID

Client Sample ID: FCS-7

Lab Sample ID: 880-5902-7

Date Collected: 09/08/21 12:07

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 21:57	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 15:37	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:11	SC	XEN MID

Client Sample ID: FCS-8

Lab Sample ID: 880-5902-8

Date Collected: 09/08/21 12:09

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 22:17	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 15:58	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:16	SC	XEN MID

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Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-9

Lab Sample ID: 880-5902-9

Date Collected: 09/08/21 12:19

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 22:38	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 16:19	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:22	SC	XEN MID

Client Sample ID: FCS-10

Lab Sample ID: 880-5902-10

Date Collected: 09/08/21 12:22

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/09/21 22:58	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 16:40	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:27	SC	XEN MID

Client Sample ID: FCS-11

Lab Sample ID: 880-5902-11

Date Collected: 09/08/21 12:25

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 00:48	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 17:23	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:33	SC	XEN MID

Client Sample ID: FCS-12

Lab Sample ID: 880-5902-12

Date Collected: 09/08/21 12:28

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 01:08	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 17:44	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:50	SC	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-13

Lab Sample ID: 880-5902-13

Date Collected: 09/08/21 12:31

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 01:28	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 18:05	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 22:55	SC	XEN MID

Client Sample ID: FCS-14

Lab Sample ID: 880-5902-14

Date Collected: 09/08/21 12:45

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 01:49	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 18:26	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:12	SC	XEN MID

Client Sample ID: FCS-15

Lab Sample ID: 880-5902-15

Date Collected: 09/08/21 12:48

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 02:09	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 18:47	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:18	SC	XEN MID

Client Sample ID: FCS-16

Lab Sample ID: 880-5902-16

Date Collected: 09/08/21 12:51

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 02:30	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 19:08	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:24	SC	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-17

Lab Sample ID: 880-5902-17

Date Collected: 09/08/21 12:53

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 02:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 19:29	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:29	SC	XEN MID

Client Sample ID: FCS-18

Lab Sample ID: 880-5902-18

Date Collected: 09/08/21 12:55

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 03:11	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 19:50	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:35	SC	XEN MID

Client Sample ID: FCS-19

Lab Sample ID: 880-5902-19

Date Collected: 09/08/21 12:59

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 03:31	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 20:11	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:40	SC	XEN MID

Client Sample ID: FCS-20

Lab Sample ID: 880-5902-20

Date Collected: 09/08/21 13:01

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7696	09/09/21 11:55	MR	XEN MID
Total/NA	Analysis	8021B		1	7711	09/10/21 03:51	MR	XEN MID
Total/NA	Prep	8015NM Prep			7691	09/09/21 09:55	AM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 20:32	AJ	XEN MID
Soluble	Leach	DI Leach			7692	09/09/21 10:19	CH	XEN MID
Soluble	Analysis	300.0		1	7709	09/09/21 23:46	SC	XEN MID

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Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-21

Date Collected: 09/08/21 13:05

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 00:10	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 23:20	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 19:17	CH	XEN MID

Client Sample ID: FCS-22

Date Collected: 09/08/21 13:07

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 00:30	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 22:17	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 19:22	CH	XEN MID

Client Sample ID: FCS-23

Date Collected: 09/08/21 13:12

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 00:50	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/09/21 23:41	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 19:39	CH	XEN MID

Client Sample ID: FCS-24

Date Collected: 09/08/21 13:17

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 01:11	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 00:02	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 19:45	CH	XEN MID

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Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FCS-25

Lab Sample ID: 880-5902-25

Date Collected: 09/08/21 13:22

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 01:31	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 00:23	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:02	CH	XEN MID

Client Sample ID: FCS-26

Lab Sample ID: 880-5902-26

Date Collected: 09/08/21 13:25

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 01:52	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 00:44	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:07	CH	XEN MID

Client Sample ID: FSTP-1

Lab Sample ID: 880-5902-27

Date Collected: 09/08/21 13:46

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 02:12	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 01:05	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:13	CH	XEN MID

Client Sample ID: FSTP-2

Lab Sample ID: 880-5902-28

Date Collected: 09/08/21 13:48

Matrix: Solid

Date Received: 09/09/21 09:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 02:32	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:31	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 01:26	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:18	CH	XEN MID

Eurofins Xenco, Midland

Lab Chronicle

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Client Sample ID: FSTP-3

Date Collected: 09/08/21 13:53

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 02:53	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 01:47	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:24	CH	XEN MID

Client Sample ID: FSTP-4

Date Collected: 09/08/21 13:55

Date Received: 09/09/21 09:09

Lab Sample ID: 880-5902-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7698	09/09/21 11:58	MR	XEN MID
Total/NA	Analysis	8021B		1	7678	09/10/21 03:13	MR	XEN MID
Total/NA	Prep	8015NM Prep			7705	09/09/21 13:32	DM	XEN MID
Total/NA	Analysis	8015B NM		1	7689	09/10/21 02:08	AJ	XEN MID
Soluble	Leach	DI Leach			7639	09/09/21 09:45	SC	XEN MID
Soluble	Analysis	300.0		1	7682	09/09/21 20:30	CH	XEN MID

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Accreditation/Certification Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
8015NM Prep	Microextraction	SW846	XEN MID
DI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XEN MID = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Eurofins Xenco, Midland

Sample Summary

Client: Ensolum
Project/Site: 58548OUQ Line Strike

Job ID: 880-5902-1
SDG: Eddy County

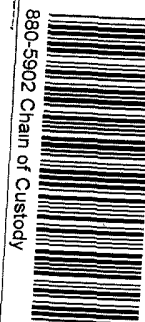
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-5902-1	FCS-1	Solid	09/08/21 11:41	09/09/21 09:09	9'
880-5902-2	FCS-2	Solid	09/08/21 11:46	09/09/21 09:09	12'
880-5902-3	FCS-3	Solid	09/08/21 11:49	09/09/21 09:09	12'
880-5902-4	FCS-4	Solid	09/08/21 11:58	09/09/21 09:09	12'
880-5902-5	FCS-5	Solid	09/08/21 12:00	09/09/21 09:09	9'
880-5902-6	FCS-6	Solid	09/08/21 12:03	09/09/21 09:09	12'
880-5902-7	FCS-7	Solid	09/08/21 12:07	09/09/21 09:09	12'
880-5902-8	FCS-8	Solid	09/08/21 12:09	09/09/21 09:09	12'
880-5902-9	FCS-9	Solid	09/08/21 12:19	09/09/21 09:09	9'
880-5902-10	FCS-10	Solid	09/08/21 12:22	09/09/21 09:09	12'
880-5902-11	FCS-11	Solid	09/08/21 12:25	09/09/21 09:09	12'
880-5902-12	FCS-12	Solid	09/08/21 12:28	09/09/21 09:09	12'
880-5902-13	FCS-13	Solid	09/08/21 12:31	09/09/21 09:09	0' - 12'
880-5902-14	FCS-14	Solid	09/08/21 12:45	09/09/21 09:09	0' - 12'
880-5902-15	FCS-15	Solid	09/08/21 12:48	09/09/21 09:09	0' - 12'
880-5902-16	FCS-16	Solid	09/08/21 12:51	09/09/21 09:09	0' - 12'
880-5902-17	FCS-17	Solid	09/08/21 12:53	09/09/21 09:09	0' - 12'
880-5902-18	FCS-18	Solid	09/08/21 12:55	09/09/21 09:09	0' - 12'
880-5902-19	FCS-19	Solid	09/08/21 12:59	09/09/21 09:09	0' - 12'
880-5902-20	FCS-20	Solid	09/08/21 13:01	09/09/21 09:09	0' - 9'
880-5902-21	FCS-21	Solid	09/08/21 13:05	09/09/21 09:09	0' - 9'
880-5902-22	FCS-22	Solid	09/08/21 13:07	09/09/21 09:09	3'
880-5902-23	FCS-23	Solid	09/08/21 13:12	09/09/21 09:09	2'
880-5902-24	FCS-24	Solid	09/08/21 13:17	09/09/21 09:09	1'
880-5902-25	FCS-25	Solid	09/08/21 13:22	09/09/21 09:09	2"
880-5902-26	FCS-26	Solid	09/08/21 13:25	09/09/21 09:09	2"
880-5902-27	FSTP-1	Solid	09/08/21 13:46	09/09/21 09:09	-
880-5902-28	FSTP-2	Solid	09/08/21 13:48	09/09/21 09:09	-
880-5902-29	FSTP-3	Solid	09/08/21 13:53	09/09/21 09:09	-
880-5902-30	FSTP-4	Solid	09/08/21 13:55	09/09/21 09:09	-



Environment Testing
Xenco

Chain of C

Houston, TX (281) 240-4200, I
Midland, TX (432) 704-5440, San
El Paso, TX (915) 585-3443, Lu
Hobbs, NM (575) 392-7550, Can



ork Order No: 5902

www.xenco.com Page 1 of 3

Project Manager: Beaux Team's		Bill to: (if different)	
Company Name: Ensilum LLC		Company Name:	
Address: 705 W. Highway Ave		Address:	
City, State ZIP: Midland TX 79705		City, State ZIP:	
Phone: 810 219 8858		Email: Bgenomys@ensilum.com	

Project Name: 5854800A Line Share	Turn Around	Pre-Code
Project Number: 03B1226038	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	
Project Location: Kelly County, NY	Due Date: 24 hr	
Sampler's Name: Kelly Lowery	TAT starts the day received by the lab, if received by 4:30pm	
PO #: 03B1226038		

SAMPLE RECEIPT		Temp Blank: Yes (No) <input checked="" type="checkbox"/>	Wet Ice: Yes (No) <input checked="" type="checkbox"/>
Samples Received Intact: Yes (No) <input checked="" type="checkbox"/>	Thermometer ID: 108		
Cooler Custody Seals: Yes (No) <input checked="" type="checkbox"/>	Correction Factor: +0.5		
Sample Custody Seals: Yes (No) <input checked="" type="checkbox"/>	Temperature Reading: 2.0		
Total Containers: 5	Corrected Temperature: 2.5		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters
FCS-1	S	09/05/21	1141	9'	C	1	X BTEX 8021B
FCS-2	S	09/05/21	1146	12'	C	1	X TPH 8015M
FCS-3	S	09/05/21	1149	12'	C	1	X Chlorides 3000
FCS-4	S	09/05/21	1158	12'	C	1	
FCS-5	S	09/05/21	1200	12'	C	1	
FCS-6	S	09/05/21	1203	12'	C	1	
FCS-7	S	09/05/21	1207	12'	C	1	
FCS-8	S	09/05/21	1209	12'	C	1	
FCS-9	S	09/05/21	1219	9'	C	1	
FCS-10	S	09/05/21	1222	12'	C	1	

Total 2007 / 6010 2008 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed: TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471	

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		09/05/21 0851			09/05/21 0851

Revised Date: 08/25/2020 Rev: 2002



Environment Testing Xenoco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 5902

www.xenoco.com Page 2 of 3

Project Manager:	Bessie Jennings	Bill to: (if different)	
Company Name:	Ensulum, LLC	Company Name:	
Address:	705 H Hallett Ave	Address:	
City/State/Zip:	Midland, TX 79705	City/State/Zip:	
Phone:	810 219 8858	Email:	Bjennings@ensulum.com

Work Order Comments			
Program:	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>		
State of Project:			
Reporting Level:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>		
Deliverables:	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>		

Project Name:	58548002 Lane State	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	
Project Number:	03B1246038	Due Date:	24hr		
Project Location:	City County, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sample's Name:	Kelly Lowery				
PO #:	03B1246038				
SAMPLE RECEIPT		Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:			
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:			
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:			
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST										PRESERVATIVE CODES											
FCS-11	S	07/08/21	1225	12'	C	1	X	X	X									None	NO	DI Water	H ₂ O							
FCS-12			1228	12'		1												Cool: Cool		MeOH	Me							
FCS-13			1231	0'-12'		1												HCL: HC		HNO ₃	HIN							
FCS-14			1245	0'-12'		1												H ₂ SO ₄ : H ₂										
FCS-15			1248	0'-12'		1												H ₃ PO ₄ : HP										
FCS-16			1251	0'-12'		1												NaHSO ₄ : NABIS										
FCS-17			1253	0'-12'		1												Na ₂ S ₂ O ₃ : NaSO ₃										
FCS-18			1255	0'-12'		1												Zn Acetate+NaOH: Zn										
FCS-19			1259	0'-12'		1												NaOH+Ascorbic Acid: SAPC										
FCS-20	S	07/08/21	1301	0'-9'	C	1	X	X	X																			

Total 2007/6010 2008/6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	07/09/21 0851	<i>[Signature]</i>	<i>[Signature]</i>	07/09/21 0851



Environment Testing

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3333
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1266
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: 5902

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Project Manager:	Breux Jennings	Bill to: (if different)	
Company Name:	Ensolium, LLC	Company Name:	
Address:	703 H. Melley Ave	Address:	
City, State ZIP:	Milled, TX 74705	City, State ZIP:	
Phone:	210 219 8858	Email:	Bjennings@ensolium.com

Work Order Comments

Program: ☐ UST/PST ☐ PBP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐





Deliverables: EDD ☐ ADAPT ☐ Other:

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	BT	PC	Chl	Sample Comments
FC5-a1	S	09/06/21	1305	0'-0'	C		X	X	X	
FC5-a2			1307	3'			X	X		24 hr
FC5-a3			1312	2'			X	X		
FC5-a4			1317	1'			X	X		
FC5-a5			1322	2"			X	X		
FC5-a6			1325	2"			X	X		
F5TP-1			1346	-			X	X		
F5TP-2			1348	-			X	X		
F5TP-3			1353	-			X	X		
F5TP-4	S	09/06/21	1355	-	C		X	X	X	

Total 2002/6010	2008/6020:	
Circle Method(s) and Metal(s) to be analyzed	8RCRA 13PPM	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
	TCLP/SPLP 6010 : 8RCRA 5b As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

of service. Eurofins Xerco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xerco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xerco, but not analyzed. These terms will be enforced unless previously negotiated in writing.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		09/05/21 0851	2 		9/9/2017
3			4		
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-5902-1

SDG Number: Eddy County

Login Number: 5902

List Number: 1

Creator: Phillips, Kerianna

List Source: Eurofins Xenco, Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
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").	N/A	



APPENDIX F

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2036546984
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Enterprise Field Services LLC	OGRID	241602
Contact Name	Maria Lerma	Contact Telephone	432-686-5404
Contact email	mmlerma@eprod.com	Incident # (assigned by OCD)	
Contact mailing address	PO Box 4324, Houston, TX 77210		

Location of Release Source

Latitude 32.236741 Longitude -104.419843
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Pipeline #58548OUQ	Site Type	Gathering Pipeline
Date Release Discovered	December 15, 2020	API# (if applicable)	

Unit Letter	Section	Township	Range	County
C	8	24S	25E	Eddy

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: SLO)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) approximately <1 bbl	Volume Recovered (bbls) - 0
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) 1260	Volume Recovered (Mcf) - 0
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Contractor working for Marathon Oil struck our line and caused the release. The line was properly marked for excavation.

Incident ID	NAPP2036546984
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? – Exceeded the 500 mcf threshold
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notification was made to OCD on December 15, 2020 via email from Maria Lerma to Mike Bratcher and Jim Griswold	

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.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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.

Printed Name: Paul Reinermann Title: Environmental Manager

Signature: Paul Reinermann Date: 3/18/2021

email: psreinermann@eprod.com Telephone: 830-583-1924

OCD Only

Received by: Cristina Eads Date: 03/18/2021

Enterprise Products Operating LLC				Date	12/15/2020
				Time	8:00 AM
				Duration (hrs)	3.0000
County		Latitude		Longitude	
Location	End of A9 Lateral (Jurnegan Lateral - 58548OUQ Line)				
				Contact	Steve Kutach
				Phone	
Contaminant					
Quantity (lbs)		Limit	N/A	Permit No	N/A
Cause	Maverick Well Pluggers was doing work for Newborn/Marathon and they hit our 4" pipeline.				
Corrective Action	20 mins from the time it was discovered				

	Release Inputs	LEAK RELEASE TOTAL	LEAK RELEASE 24 HOUR
Release Type	Leak	1244.10	1244.10
PSV Flowrate (scfm)		2776.38	2776.38
Hole Length (in)	1.00	0.00	0.00
Hole Width (in)	1.00		
Hole Diameter (in)	1.00		
Pressure (psi)	400		
Flared	No		
	Blowdown Inputs	BLOWDOWN RELEASE TOTAL	EVENT 24 HOUR (Leak & Blowdown)
Pipe Length (ft)	5438.4	15.51	1259.61
Diameter (in)	4	34.62	2811.00
Pressure (psi)	400	0.00	0.00
Flared	No	0.00	0.00
Is blowdown Part of release	Yes	0.00	0.00
		EVENT TOTAL (LEAK & BLOWDOWN)	LEAK RELEASE 1 HOUR
		1259.61	414.70
		2811.00	18693.33
		0.00	

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

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

CONDITIONS

Action 21246

CONDITIONS OF APPROVAL

Operator: ENTERPRISE FIELD SERVICES, LLC PO Box 4324 Houston, TX77210			OGRID: 241602	Action Number: 21246	Action Type: C-141
OCD Reviewer			Condition		
ceads			None		



APPENDIX G

OSE Documentation

John R. D Antonio, Jr., P.E.
State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

**STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 702687
File Nbr: C 04565 POD1

Aug. 05, 2021

BEAUX JENNINGS
ENSOLUM LLC
705 W WADLEY AVE STE 240
MIDLAND, TX 79705

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- * If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- * If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- * The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- * This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

fa *ym*
KASHYAP PAREHK
(575) 622-6521

Enclosure

explore

File No. **C-4564 POD 1**

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable box):

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

Purpose:	<input type="checkbox"/> Pollution Control And/Or Recovery	<input type="checkbox"/> Ground Source Heat Pump
<input type="checkbox"/> Exploratory Well (Pump test)	<input type="checkbox"/> Construction Site/Public Works Dewatering	<input checked="" type="checkbox"/> Other(Describe): Investigation Soil Boring
<input type="checkbox"/> Monitoring Well	<input type="checkbox"/> Mine Dewatering	

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

<input type="checkbox"/> Temporary Request - Requested Start Date: 8/16/21	Requested End Date: 8/20/21
--	-----------------------------

Plugging Plan of Operations Submitted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--

1. APPLICANT(S)

Name: Enterprise Field Services, LLC	Name: Ensolum, LLC
Contact or Agent: check here if Agent <input type="checkbox"/> Mr. Robert Dunaway	Contact or Agent: check here if Agent <input checked="" type="checkbox"/> Mr. Beaux Jennings
Mailing Address: PO Box 4234	Mailing Address: 705 W. Wadley Ave, Ste 240
City: Houston	City: Midland
State: TX Zip Code: 77210	State: TX Zip Code: 79705
Phone: 361-815-0990 <input type="checkbox"/> Home <input checked="" type="checkbox"/> Cell Phone (Work):	Phone: 210-219-8858 <input type="checkbox"/> Home <input checked="" type="checkbox"/> Cell Phone (Work):
E-mail (optional): rhdunaway@eprod.com	E-mail (optional): bjennings@ensolum.com

OSE DTJ JUL 28 2021 AM 11:34

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 11/17/16

File No.: C-4564	Trn. No.: 702687	Receipt No.: 2-43648
Trans Description (optional): PODI		
Sub-Basin: CUB	PCW/LOG Due Date: 8-3-22	

Page 1 of 3

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

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), <u>or</u> Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<input type="checkbox"/> NM State Plane (NAD83) (Feet) <input type="checkbox"/> UTM (NAD83) (Meters) <input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10 th of second)			
<input type="checkbox"/> NM West Zone <input type="checkbox"/> Zone 12N <input type="checkbox"/> NM East Zone <input type="checkbox"/> Zone 13N <input type="checkbox"/> NM Central Zone			
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SB-1 C-4564 POD1	-104.420199	32.236914	NE 1/4 of NW 1/4 of S8, T24S, R25E
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Other description relating well to common landmarks, streets, or other: Soil boring will be installed approximately 100' due west of on-site oil and gas well.			
Well is on land owned by: State Land Office			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 60		Outside diameter of well casing (inches): 6	
Driller Name: West Texas Water Well Service - Ronny Keith		Driller License Number: WD-1184	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

The investigation soil boring will be installed to a depth of approximately 60' below ground surface. The soil boring will be left open for approximately 48 hours, gauged with a water level meter to check for potential groundwater, then plugged with bentonite.

OSE DJT JUL 28 2021 PM 11:34

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

C-4564

Trm No.:

702687

Page 2 of 3

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

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

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Beaux Jennings Robert Dunaway

Print Name(s)

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

Beaux Jennings Digitally signed by Beaux Jennings
Date: 2021.07.26 13:31:49 -05'00'

Robert Dunaway Digitally signed by Robert Dunaway
Date: 2021.07.26 13:33:02 -06'00'

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved

☐ partially approved

☐ denied

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

Witness my hand and seal this 5th day of August 20 21, for the State Engineer,

John R. D'Antonio, Jr., P.E.

State Engineer

OSE DIT JUL 28 2021 11:34

By: K. Parekh
Signature

Print

Title: Kashyap Parekh, Water Resources Professional III
Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

C-4565

Trn No.:

702687

Page 3 of 3

**NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE**

SPECIFIC CONDITIONS OF APPROVAL

- 17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 17-1A Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04565 POD1

File Number: C 04565

Trn Number: 702687

page: 1

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion C 04565 POD1 must be completed and the Well Log filed on or before 08/03/2022.

IT IS THE PERMITTEES RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

SHOULD THE PERMITTEE CHANGE THE PURPOSE OF USE TO OTHER THAN MONITORING PURPOSES, AN APPLICATION SHALL BE ACQUIRED FROM THE OFFICE OF THE STATE ENGINEER.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 07/28/2021	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 5th day of Aug A.D., 2021

John R. D Antonio, Jr., P.E., State Engineer

By: K. Parekh
KASHYAP PAREKH

Trn Desc: C 04565 POD1

File Number: C 04565
Trn Number: 702687

**Coordinates****UTM - NAD 83 (m) - Zone 13**

Easting 554625.302

Northing 3566843.163

State Plane - NAD 83 (f) - Zone E

Easting 514482.525

Northing 449931.821

Degrees Minutes Seconds

Latitude 32 : 14 : 12.890400

Longitude -104 : 25 : 12.716400

Location pulled from Coordinate Search

NEW MEXICO OFFICE
OF THE
STATE ENGINEER

1:4,514

 0 90 180 360
ft
**Image Info**

Source: Maxar

Date: 1/1/2020

Resolution (m): 0.46

Accuracy (m): 5

Spatial Information

OSE Administrative Area: Eddy

County: Eddy

Groundwater Basin: Carlsbad

Abstract Area: Carlsbad 72-12-1

Carlsbad Underground Basin

Sub-Basin: Upper Pecos-Black

Land Grant: Not in Land Grant

Restrictions:

NA

PLSS Description

NESW NENW Qtr of Sec 08 of 024S 025E

POD Information

Owner: Enterprise/Ensolum

File Number: C-4564 POD1

POD Status: NoData

Permit Status: NoData

Permit Use: NoData

Purpose: Soil Boring SB-1

 ◆ Coord Search
Location

Surface Estate

 OSE District
Boundary

Both Estates



Site Boundaries

New Mexico State
Trust Lands
 Subsurface
Estate

8/2/202

Mendiola, Yolanda L., OSE

From: Water <water@slo.state.nm.us>
Sent: Tuesday, August 03, 2021 10:07 AM
To: Water; Mendiola, Yolanda L., OSE
Cc: Gallegos, David A.; rhdunaway@eprod.com
Subject: RE: please see attached

Yolanda

This application from Enterprise Field Services, LLC for a soil bore can be approved without any further action on our part.

The proposed soil bore is to explore depth to water on the Marathon Oil Permian LLC o&g lease #LG-5750-4 and will be considered by SLO an 'on-lease' activity because depth to water is required by the OCD in this instance.

Best regards,

Faith Crosby
Water Bureau Manager
Oil, Gas, and Minerals Division
Office 505.827.5849
Fax 505-827-4739

New Mexico State Land Office
310 Old Santa Fe Trail
Santa Fe, NM 87501
-Or-
P.O. Box 1148
Santa Fe, NM 87504-1148
fcrosby@slo.state.nm.us

**Due to the Coronavirus, State Land Office facilities are closed to the public until further notice. Business operations remain open and our staff can be reached at (505) 827-5760 or

<https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nmstatelands.org%2Fabout%2Fstaff-directory%2F&data=04%7C01%7Cyolanda.mendiola%40state.nm.us%7C26dcc30f160549c92c3108d95698c67e%7C04aa6bf4d436426bfa404b7a70e60ff%7C0%7C0%7C637636036431327707%7CUnknown%7CTWFpbGZsb3d8eyJWljoIMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6IjEhaWwiLCJXVCi6Mn0%3D%7C1000&data=1Kd4Hvwaffl2tWppqKDB8WAv7kSYfII1HjuL4URMG6k%3D&reserved=0>

.....
CONFIDENTIALITY NOTICE - This e-mail transmission, including all documents, files, or previous e-mail messages attached hereto, may contain confidential and/or legally privileged information. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that you must not read this transmission and that any disclosure, copying, printing, distribution, or use of any of the information contained in and/or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender and delete the original transmission and its attachments without reading or saving in any manner. Thank you.

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ROSWELL OFFICE

OFFICIAL RECEIPT NUMBER: 2 - **43648** DATE: 07-28-2021 FILE NO.: SB-1
 TOTAL: 5.00 RECEIVED: Five DOLLARS CHECK NO.: 1176 CASH:
 PAYOR: Hali Jennings ADDRESS: 6101 S. Bounty Rd CITY: Midland STATE: TX
 ZIP: 79706 RECEIVED BY: NSA

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

1. Change of Ownership of Water Right	\$ 2.00
2. Application to Appropriate or Supplement Domestic 72-12-1 Well	\$ 125.00
3. Application to Repair or Deepen 72-12-1 Well	\$ 75.00
4. Application for Replacement 72-12-1 Well	\$ 75.00
5. Application to Change Purpose of Use 72-12-1 Well	\$ 75.00
6. Application for Stock Well/Temp. Use	\$ 5.00

B. Surface Water Filing Fees

1. Change of Ownership of a Water Right	\$ 5.00
2. Declaration of Water Right	\$ 10.00
3. Amended Declaration	\$ 25.00
4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	\$ 200.00
5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	\$ 200.00
6. Application to Change Point of Diversion	\$ 100.00
7. Application to Change Place and/or Purpose of Use	\$ 100.00
8. Application to Appropriate Notice of Intent to Appropriate	\$ 25.00
9. Application for Extension of Time	\$ 25.00
10. Application for Extension of Time	\$ 50.00
11. Supplemental Well to a Surface Right	\$ 100.00
12. Return Flow Credit	\$ 100.00
13. Proof of Completion of Works	\$ 25.00
14. Proof of Application of Water to Beneficial Use	\$ 25.00
15. Water Development Plan	\$ 25.00
16. Declaration of Livestock Water Impoundment	\$ 100.00
17. Application for Livestock Water Impoundment	\$ 10.00

C. Well Driller Fees

1. Application for Well Driller's License	\$ 50.00
2. Application for Renewal of Well Driller's License	\$ 50.00
3. Application to Amend Well Driller's License	\$ 50.00

D. Reproduction of Documents

— @ 0.25¢	\$
— Map(s) @ \$3.00	\$

E. Certification

—	\$
---	----

F. Other

—	\$
---	----

G. Comments:

Mail

All fees are non-refundable.

15. Application for Test, Expl. Observ. Well	\$ 5.00
16. Application for Extension of Time	\$ 25.00
17. Proof of Application to Beneficial Use	\$ 25.00
18. Notice of Intent to Appropriate	\$ 25.00



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

John R. D'Antonio Jr., P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

August 5, 2021

Enterprise Field Services LLC
P.O. Box 4234
Houston, Texas 77210

RE: Well Plugging Plan of Operations for **C-4565-POD1**

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced project. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer.

Plugging operations shall also be conducted in accordance with NMED, NMOCD, or other State or Federal agencies having oversight for the above described project.

Maximum 5.2 gallons water per 94 lb. sack Portland Cement PLUS 0.6 gallon per 1% increase in bentonite up to maximum 6% bentonite by dry weight ratio. Bentonite must be hydrated separately and then mixed.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Parekh", written over a horizontal line.

Kashyap Parekh
Water Resources Professional III



WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email umbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: POD1 (SB-1) C-4565-POD1

Name of well owner: Enterprise Field Services, LLC

Mailing address: PO Box 4234

County: Harris

City: Houston

State: TX

Zip code: 77210

Phone number: 361-815-0990

E-mail: rhduaway@eprod.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: West Texas Water Well Service

New Mexico Well Driller License No.: WD-1184

Expiration Date: October 31, 2021

IV. WELL INFORMATION: ☐ Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 14 min, 12.8898 sec
Longitude: -104 deg, 25 min, 12.7158 sec, NAD 83

2) Reason(s) for plugging well(s):

Investigation soil boring to determine groundwater level.

3) Was well used for any type of monitoring program? N/A If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? N/A If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 60 feet

- 7) Grout additives requested, and percent by dry weight relative to cement:

N/A

- 8) Additional notes and calculations:

N/A

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Volumes calculated on an up to an approximate 6" boring.

VIII. SIGNATURE:

I, Beaux Jennings, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Beaux Jennings

Digitally signed by Beaux Jennings
Date: 2021.08.04 20:07:28 -05'00'

8/4/2021

Signature of Applicant

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

☒ Approved subject to the attached conditions.
☐ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 5th day of AUGUST, 2021

John R. D'Antonio Jr. P.E., New Mexico State Engineer

By: K. Parekh

KASHYAP PAREKH
W.R.P. III



WD-08 Well Plugging Plan
 Version: July 31, 2019
 Page 3 of 5

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	N/A	N/A	0
Bottom of proposed sealant or grout placement (ft bgl)	N/A	N/A	10
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	26
Proposed abandonment sealant (manufacturer and trade name)	N/A	N/A	Bariod Hole Plug

Report Extensions

OCD Permitting

Home Searches Incidents Incident Details

NAPP2036546984 PIPELINE #58548OUQ @ C-08-24S-25E 0N 0E

General Incident Information

Site Name:PIPELINE #58548OUQ

Well:

Facility:

Operator:[241602] Enterprise Field Services, LLC

Status:Closure Not Approved

Type:Natural Gas Release

District:Artesia

Severity:Major

Surface Owner:State

County:Eddy (15)

Incident Location:C-08-24S-25E 0 FNL 0 FEL

Lat/Long:32.236741,-104.419843 NAD83

Directions:

Notes

Source of Referral:Industry Rep

Action / Escalation:Referred to Environmental Inspector

Resulted In Fire:☐

Will or Has Reached Watercourse:☐

Endangered Public Health:☐

Property Or Environmental Damage:☐

Fresh Water Contamination:☐

Contact Details

Contact Name:Paul Reinermann

Contact Title:Environmental Manager

Event Dates

Date of Discovery:12/15/2020

OCD Notified of Release:

Extension Date:03/15/2021

Cancelled Date:

Initial C-141 Received:03/18/2021

Characterization Report Approved:

Characterization Report Received:

Remediation Plan Approved:

Remediation Plan Received:

Remediation Due:09/11/2021

Closure Report Received:

Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Human Error	Pipeline (Any)	Condensate	<input type="checkbox"/>	1	0	1	BBL

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Incident Events

Date	Detail
06/28/2021	2nd extension request approved
03/18/2021	The (03/18/2021, C-141) application [21246] was accepted by OCD. The operator was emailed with details of this event.
03/18/2021	An application [21246] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
03/18/2021	The (03/18/2021, C-141) application [21246] was assigned to this incident.
03/15/2021	Extension Request approved
12/30/2020	The (12/30/2020, NOR) application [13332] was accepted by OCD. The operator was emailed with details of this event.
12/30/2020	An application [13332] was submitted to OCD for review. It was submitted, indicating that it was an: [NOR] Notification of a release The operator was emailed confirmation of this event.
12/30/2020	The (12/30/2020, NOR) application [13332] was assigned to this incident.
12/30/2020	Additional Details provided by the operator: Contractor working for Marathon Oil struck our line and caused the release. The line was properly marked for excavation.
12/30/2020	Initial Response question & answers at the time of notification were as follows. <ul style="list-style-type: none">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.
12/30/2020	New incident created by the operator, upon the submission of notification of release.
12/15/2020	Release discovered by the operator.

Orders

No Orders Found

Client: Enterprise Field Services, LLC
Project Name: 58548OUQ Line Strike
Project Location: Carlsbad, Eddy County, New Mexico
Project Manager: Beaux Jennings

SOIL BORING / WELL LOG

DRILLING & SAMPLING INFORMATION

Date Started: 08/16/2021
Date Completed: 08/16/2021
Drilling Company: West Texas Water Well Service
Driller: Russell Southerland

Soil Boring / Well Number: SB-1

Project #: 03B1226038

Drawn By: Beaux Jennings

Approved By: Liz Scagg

Geologist: <u>Beaux Jennings</u>	Sampler: <u>Beaux Jennings</u>
Boring Method: <u>AR</u>	Logged By: <u>Beaux Jennings</u>
Sampler Type: <u>AR</u>	
Bore Hole Diameter: <u>6.5"</u>	Screen: <u>NA</u>
Casing Diameter: <u>NA</u>	Total Depth: <u>60'</u>
Well Materials: <u>NA</u>	
Surface Completion: <u>NA</u>	

Sampler: Beaux Jennings
 Logged By: Beaux Jennings
 Screen: NA
 Total Depth: 60'

BORING METHOD	SAMPLER TYPE	GROUNDWATER DEPTH
HSA - HOLLOW STEM AUGERS	CB - FIVE FOOT CORE BARREL	▼ AT COMPLETION
CFA - CONTINUOUS FLIGHT AUGERS	SS - DRIVEN SPLIT SPOON	▼ AT WELL STABILIZATION
GP - GEOPROBE	ST - PRESSED SHELBY TUBE	
AR - AIR ROTARY		

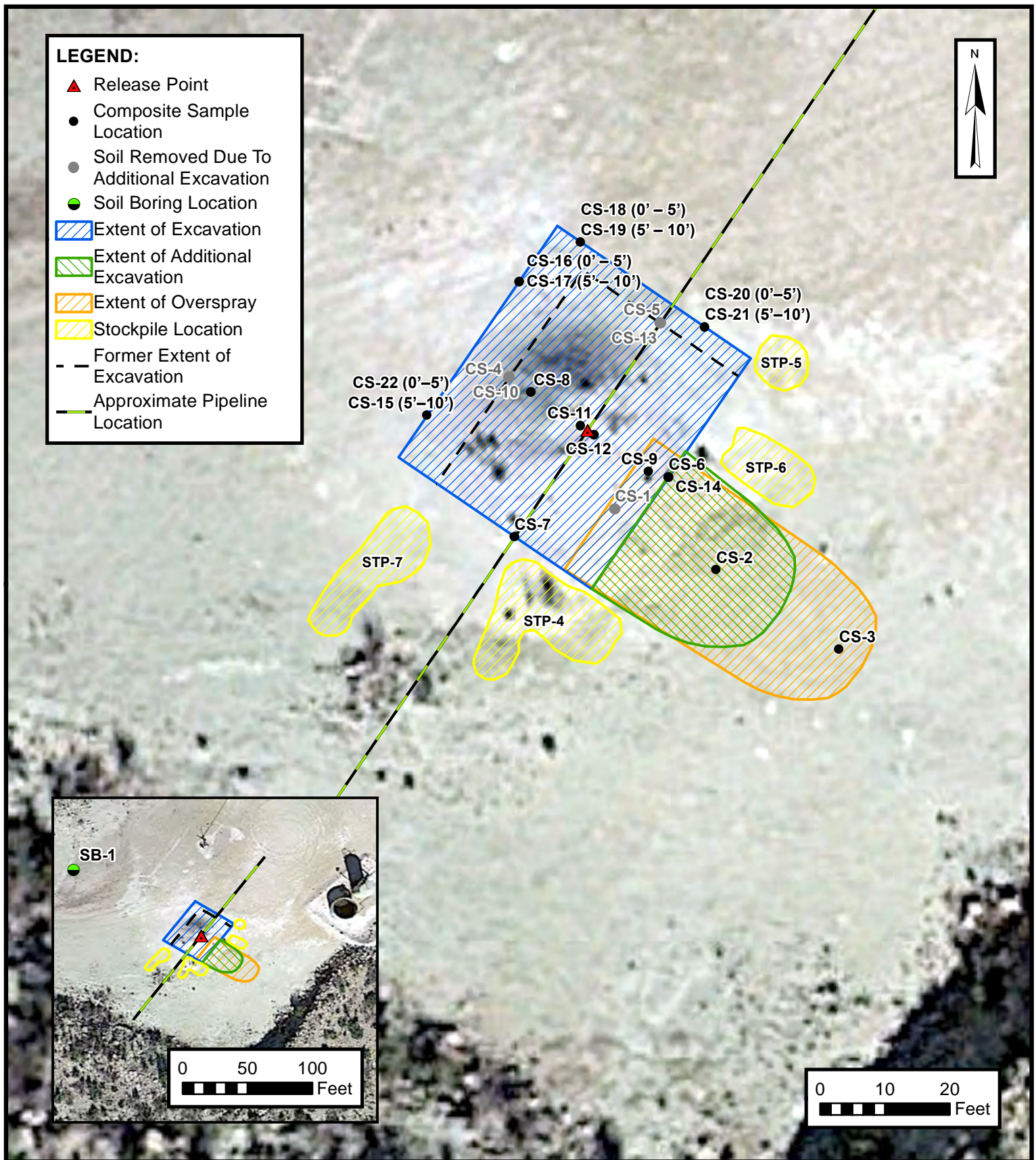
BORING AND SAMPLING NOTES

Monitor Well Detail	SOIL CLASSIFICATION		Stratum Depth	Depth Scale	Sample No.	Sample Inter	% Recovery	Groundwater	FID/PID Rea

[illegible]

AA - As Above





SITE MAP

ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W

PROJECT NUMBER: 03B1226038

FIGURE

3

OCD Report Extension Letter and Approvals



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

September 10, 2021

7015 0640 0002 7743 0114
Return Receipt Requested

Emily A. Hernandez
Environmental Bureau Chief
New Mexico Energy, Mineral & Natural Resources
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Closure Report - Extension Request
Enterprise Field Services, LLC
58548OUQ Line Strike
Eddy County, New Mexico
Latitude: 32.236741, Longitude: -104.419843
Incident No. NAPP2036546984

Ms. Hernandez:

Enterprise Field Services, LLC (Enterprise) is requesting a 90-day extension as allowed by 19.15.29.12.B.(2) NMAC to the deadline for submitting a closure report required by 19.15.29.12.B.(1) NMAC associated with the 58548OUQ Line Strike (Incident No. NAPP2036546984).

On December 15, 2020, a third party line strike occurred on Line 58548OUQ that resulted in a natural gas and liquids release. Initial site assessment, excavation and confirmation soil sampling were subsequently conducted. An extension was approved by the OCD on March 15, 2021 (see Attachment 1) to allow for additional excavation as the site did not meet the basic OCD cleanup standards. A second extension was approved on June 28, 2021 (see Attachment 1) to allow Enterprise time to drill a confirmation well to determine if groundwater depth is > 50 ft bgs (so that cleanup standards for groundwater >50 bgs could be used), to take final samples, and to issue the report. The second extension ends on September 11, 2021.

Due to the unavailability of drillers, the confirmation well was not completed until August 16, 2021. This effort did verify that there was no groundwater present at 60 ft bgs. A copy of the well drillers log and associated map are attached (see Attachment 2). Based on this information and the results of the most recent analytical results, closure of this effort is warranted. However, the analytical data cannot be used for the final report as the sampling event was not associated with a final sampling event notification to the OCD.

Enterprise via our 3rd party contractor submitted notice of the final sampling event to OCD on September 2, 2021 with a scheduled sample date of September 8, 2021 (samples taken). A copy of that notification is attached (see Attachment 3). Enterprise is requesting an additional 90-day extension to review the analytical results of the sampling event and to prepare and submit the closure report.

Enterprise appreciates the Oil Conservation Division's continued assistance with bringing this site remediation to closure. Should you have any questions, comments, concerns, or need additional information, please contact Rob Dunaway, Senior Environmental Engineer at (575) 628-6802 or Paul Reinermann, Field Environmental Manager at (830) 583-1924.

Thank you,



Jon E. Fields
Director, Field Environmental



Rodney M. Sartor
Senior Director, Environmental

/bjm
Attachments

ATTACHMENT 1

OCD EXTENSION APPROVALS

Searches Operator Data Submissions Administration

OCD Permitting

Home Searches Incidents Incident Details

NAPP2036546984 PIPELINE #58548OUQ @ C-08-24S-25E 0N 0E

General Incident Information

Site Name: PIPELINE #58548OUQ

Well:

Facility:

Operator: [241602] Enterprise Field Services, LLC

Status: Closure Not Approved

Type: Natural Gas Release

District: Artesia

Severity: Major

Surface Owner: State

County: Eddy (15)

Incident Location: C-08-24S-25E 0 FNL 0 FEL

Lat/Long: 32.236741,-104.419843 NAD83

Directions:

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- [Event](#)
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Notes

Source of Referral: Industry Rep

Action / Escalation: Referred to Environmental Inspector

Resulted In Fire:

Will or Has Reached Watercourse:

Endangered Public Health:

Property Or Environmental Damage:

Fresh Water Contamination:

Contact Details

Contact Name: Paul Reinermann

Contact Title: Environmental Manager

Event Dates

Date of Discovery: 12/15/2020

Extension Date: 03/15/2021

Initial C-141 Received: 03/18/2021

Characterization Report Received:

Remediation Plan Received:

Closure Report Received:

OCD Notified of Release:

Cancelled Date:

Characterization Report Approved:

Remediation Plan Approved:

Remediation Due: 09/11/2021

Closure Report Approved:

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Human Error	Pipeline (Any)	Condensate	0	1	0	1	BBL

[Searches](#) [Operator Data](#) [Submissions](#) [Administration](#)**Incident Events**

Date	Detail
06/28/2021	2nd extension request approved
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12/30/2020	Initial Response question & answers at the time of notification were as follows. <ul style="list-style-type: none">• 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.
12/30/2020	New incident created by the operator, upon the submission of notification of release.
12/15/2020	Release discovered by the operator.

Orders

No Orders Found

ATTACHMENT 2

WELL DRILLERS LOG AND MAP

Client: Enterprise Field Services LLC
 Project Name: 585480UQ Line Strike
 Project Location: Carlsbad, Eddy County, New Mexico
 Project Manager: Beaux Jennings

SOIL BORING / WELL LOG

DRILLING & SAMPLING INFORMATION

Date Started: 08/16/2021
 Date Completed: 08/16/2021
 Drilling Company: West Texas Water Well Service
 Driller: Russell Southerland

Soil Boring / Well Number: SB-1

Project #: 03B1226038

Drawn By: Beaux Jennings

Approved By: Liz Scaggs

Geologist: Beaux Jennings Sampler: Beaux Jennings
 Boring Method: AR Logged By: Beaux Jennings
 Sampler Type: AR
 Bore Hole Diameter: 6.5" Screen: NA
 Casing Diameter: NA Total Depth: 60'
 Well Materials: NA
 Surface Completion: NA

BORING METHOD

HSA - HOLLOW STEM AUGERS

CFA - CONTINUOUS FLIGHT AUGERS

GP - GEOPROBE

AR - AIR ROTARY

SAMPLER TYPE

CB - FIVE FOOT CORE BARREL

SS - DRIVEN SPLIT SPOON

ST - PRESSED SHELBY TUBE

GROUNDWATER DEPTH

▽ AT COMPLETION

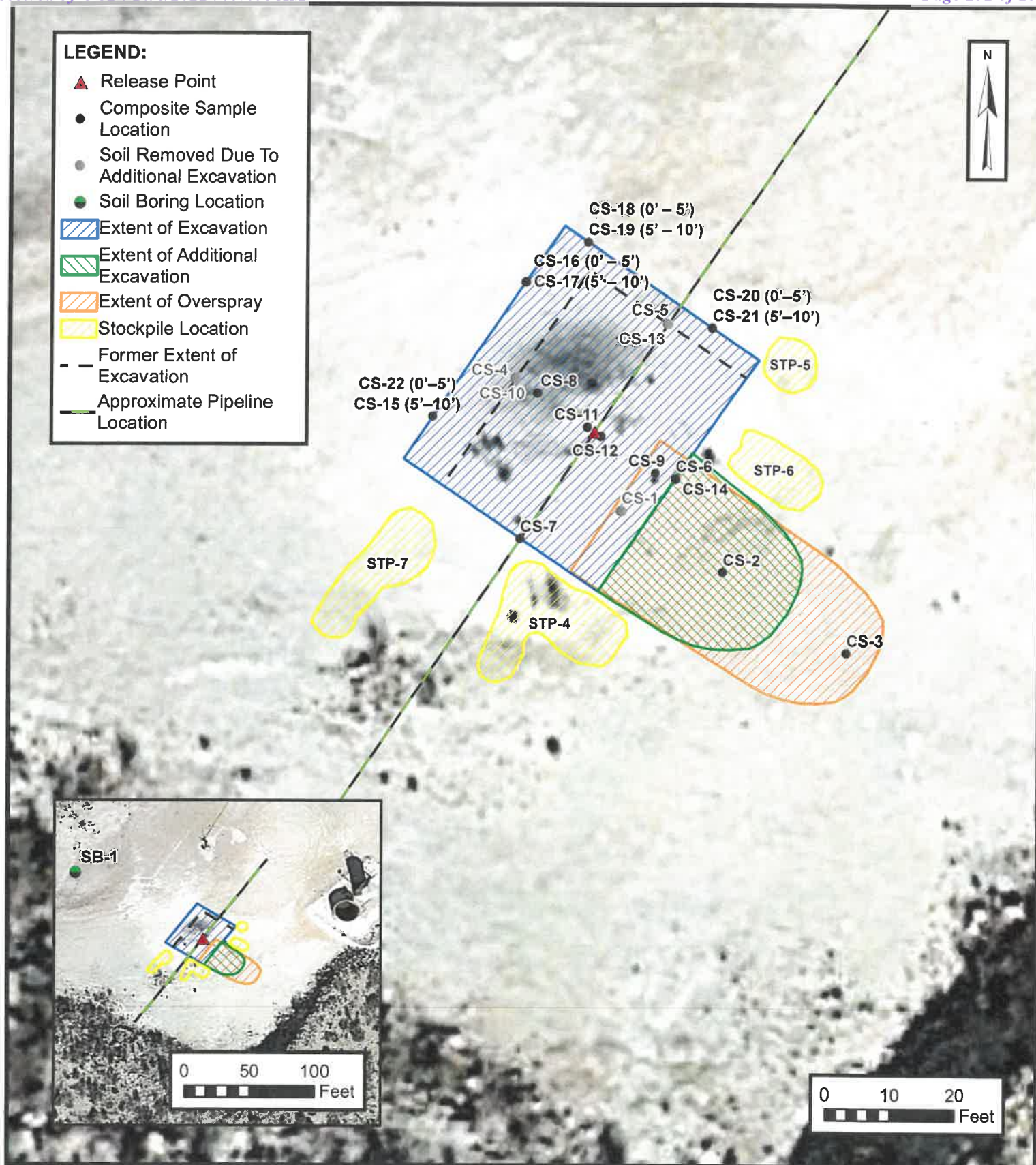
▽ AT WELL STABILIZATION

BORING AND SAMPLING NOTES

Monitor Well Detail	SOIL CLASSIFICATION	Stratum Depth	Depth Scale	Sample No.	Sample Interval	% Recovery	Groundwater Depth	FI/PI/ID Readings (ppm)
---------------------	---------------------	---------------	-------------	------------	-----------------	------------	-------------------	-------------------------

0' - Limestone, light gray, dry, no odor								
AA								0.0
AA								0.0
30' - Limestone, white, dry, no odor								30.4
AA								0.0
56' - Shale, very dark gray, dry, no odor								0.0
Total Depth - 60'								0.0

AA - As Above



SITE MAP

ENTERPRISE FIELD SERVICES, LLC
58548OUQ LINE STRIKE
Eddy County, New Mexico
32.236741° N, 104.419843° W

PROJECT NUMBER: 03B1226038

FIGURE

3

ATTACHMENT 3

FINAL SAMPLING NOTIFICATION

From: [Kelly Lowery](#)
To: OCD.Enviro@state.nm.us
Cc: [Liz Scaggs](#); [Beaux Jennings](#); [Dunaway, Robert](#); [Reinermann, Paul](#); [Hanway, Jeremiah](#)
Subject: [EXTERNAL] NAPP2036546984 Final Sampling Notice
Date: Thursday, September 2, 2021 1:21:04 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)

[Use caution with links/attachments]

Good afternoon,

Per NMOCD regulations, Ensolum, LLC is submitting this 48 hour notice for a Final Sampling Event for the NMOCD Incident No: NAPP2036546984 (58548OUQ Line Strike). Ensolum will be on-Site Wednesday, September the 8th, at 10:00 am Mountain Standard Time.

Please let us know if there are any questions.

Thank you and have a good day.



Kelly Lowery, GIT
Staff Geologist
214-733-3165
Ensolum, LLC
in f 

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 54882

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 54882
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2036546984 PIPELINE #58548OUQ, thank you. This closure is approved. Please be advised that bioremediation projects will need to be preapproved by the OCD and sampling of bioremediated soil will require a more stringent sampling protocol in the future.	3/1/2022