



December 9, 2025

**New Mexico Oil Conservation Division**

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

**Re: Reclamation Report  
North Indian Flats 26 Fed 1  
Incident Number nAPP2323653065  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc (XTO), has prepared the following *Reclamation Report* for the North Indian Flats 26 Fed 1 (Site). This *Reclamation Report* documents the Site history, reclamation activities completed to date, and proposes a vegetation monitoring plan.

**BACKGROUND**

The Site is located in Unit J, Section 35, Township 21 South, Range 28 East, in Eddy County, New Mexico (32.43431°, -104.05561°) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land.

On August 11, 2023, while removing an inactive produced water polyline, a cut on the polyline was found and allowed 17.96 barrels (bbls) of produced water to release onto the surface of a pasture area. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 10.00 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 24, 2023. The release was assigned Incident Number nAPP2323653065.

Delineation and excavation of impacted soil was completed at the Site between August and September 2023. Based on the delineation and excavation soil sample analytical results, a *Closure Request* was submitted to the NMOCD on November 09, 2023. The NMOCD approved the *Closure Request* on March 11, 2024. Additional details regarding the release, Site Characterization, delineation and excavation activities, and soil sample analytical results can be referenced in the approved *Closure Request* attached as an appendix in this report. Remediation of the release was completed in accordance with Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

**RECLAMATION ACTIVITIES**

The excavation measured approximately 1,702 square feet. A total of approximately 265 cubic yards of impacted soil were removed during the excavation activities. Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled and the disturbed area was restored to its original condition. The excavation area within the pasture was backfilled with locally

XTO Energy, Inc  
Reclamation Report  
North Indian Flats 26 Fed 1

procured topsoil. Following backfill activities, the disturbed area was graded and contoured to match the surrounding topography. The release extent, excavation extent, and reclamation area are shown on the attached Figure 1.

One representative 5-point composite sample (BF01) was collected from the topsoil backfill material on June 19, 2025. The backfill soil sample was transported under strict chain-of-custody procedures to Cardinal Laboratories in Hobbs, New Mexico, for analysis of the following constituents of concern (COCs): total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standards Method 4500.

Laboratory analytical results for the backfill soil sample confirmed compliance with NMOCD requirements for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 milligrams per kilogram (mg/kg) and TPH concentrations less than 100 mg/kg. The laboratory analytical results are summarized in the attached Table 1 and the complete laboratory analytical report is included as Appendix A. Photographic documentation of the current Site condition is included in Appendix B.

The pasture area will be seeded during the Spring of 2026, when temperatures and precipitation are more conducive to vegetation growth. The Site will be seeded with the below BLM seed mix #1 for loamy sites at the rate specified in pounds of pure live seed (PLS) per acre.

Species/Cultivar	PLS/Acre
Plains lovegrass ( <i>Eragrostis intermedia</i> )	0.5
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sideoats grama ( <i>Bouteloua curtipendula</i> )	5.0
Plains bristlegrass ( <i>Setaria macrostachya</i> )	2.0

The seed mix will be applied via drill seeding or broadcast seeding. If broadcast seeding is selected, the PLS/acre will be doubled, and the seed will be raked in by chaining or dragging the Site.

## VEGETATION MONITORING

The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and Site degradation, and to monitor for and treat invasive and noxious weed species.

- Annual inspections will take place at the location to assess revegetation progress until vegetation is consistent with local natural vegetation density.
- If necessary, an additional application of the BLM seed mix will be applied.
- Noxious and invasive weeds will be identified and treated by licensed contracted herbicide applicator or mechanically removed.

A *Revegetation Report* will be submitted to the NMOCD once vegetation growth in the reclaimed pasture area has uniform vegetative cover that reflects a life-form ratio of plus or minus 50 percent (%) of pre-disturbance levels and a total percent plant cover of at least 70% of pre-disturbance levels, excluding noxious weeds, per NMAC 19.15.29.13 D.(3).

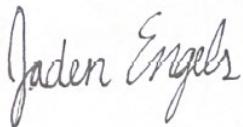
XTO Energy, Inc  
Reclamation Report  
North Indian Flats 26 Fed 1

## RECLAMATION APPROVAL REQUEST

The approved November 9, 2023, *Closure Request* is included in Appendix C. Based on the reclamation activities completed to date and proposed vegetation monitoring plan described above, XTO respectfully requests approval of this *Reclamation Report* and a status update to *Reclamation Report Approved, Pending submission of Re-Vegetation Report* for Incident nAPP2323653065.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or [tmorrissey@ensolum.com](mailto:tmorrissey@ensolum.com).

Sincerely,  
**Ensolum, LLC**



Jaden Engels  
Associate Geologist



Tacoma Morrissey, PG (Licensed in TX)  
Associate Principal

cc: Robert Woodall, XTO  
Richard Kotzur, XTO  
Bureau of Land Management

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Figure 4 Proposed Area of Reclamation
- Table 1 Soil Sample Analytical Results
- Appendix A Laboratory Analytical Report & Chain of Custody Documentation
- Appendix B Photographic Log
- Appendix C November 9, 2023, *Closure Request*



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## FIGURES

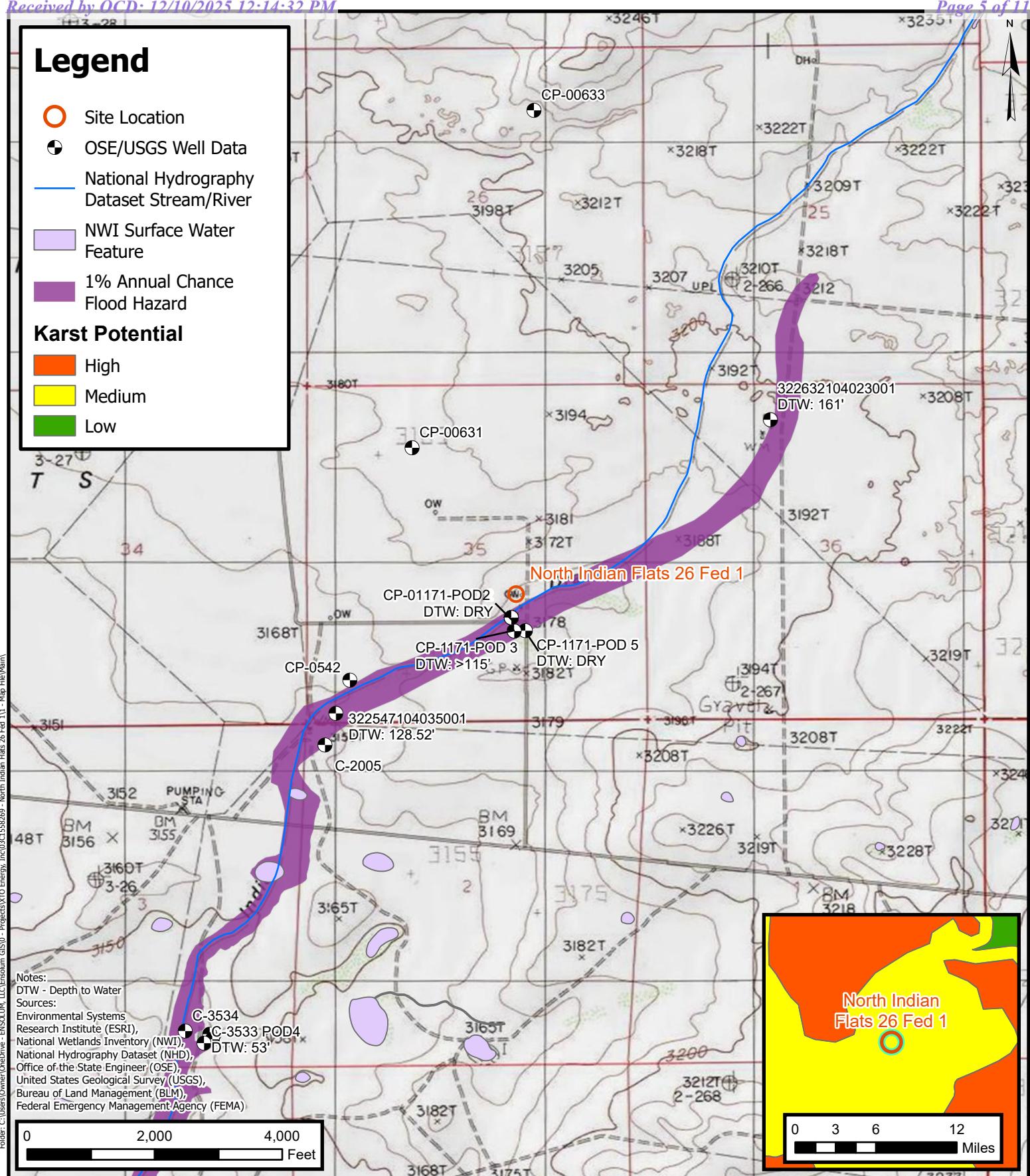
## Legend

- Site Location
- OSE/USGS Well Data
- National Hydrography Dataset Stream/River
- NWI Surface Water Feature

- 1% Annual Chance Flood Hazard

### Karst Potential

- High
- Medium
- Low



## Site Receptor Map

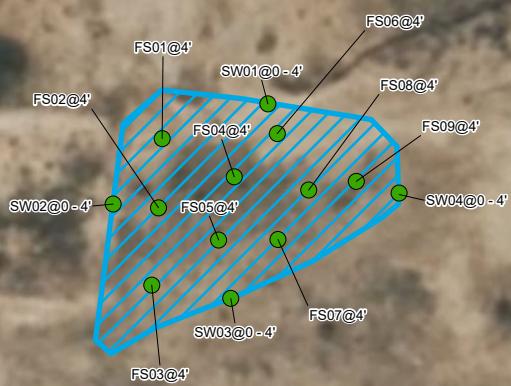
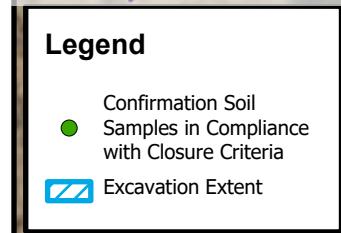
XTO Energy, Inc  
 North Indian Flats 26 Fed 1  
 Incident Number: NAPP2323653065  
 Unit J, Sec 35, T21S, R28E  
 Eddy County, New Mexico

**FIGURE**  
**1**



**Delineation Soil Sample Locations**  
 XTO Energy, Inc  
 North Indian Flats 26 Fed 1  
 Incident Number: NAPP2323653065  
 Unit J, Sec 35, T21S, R28E  
 Eddy County, New Mexico

**FIGURE**  
**2**



Notes: Sample ID@Depth Below Ground Surface.

0 5 10 20 30 40  
Feet

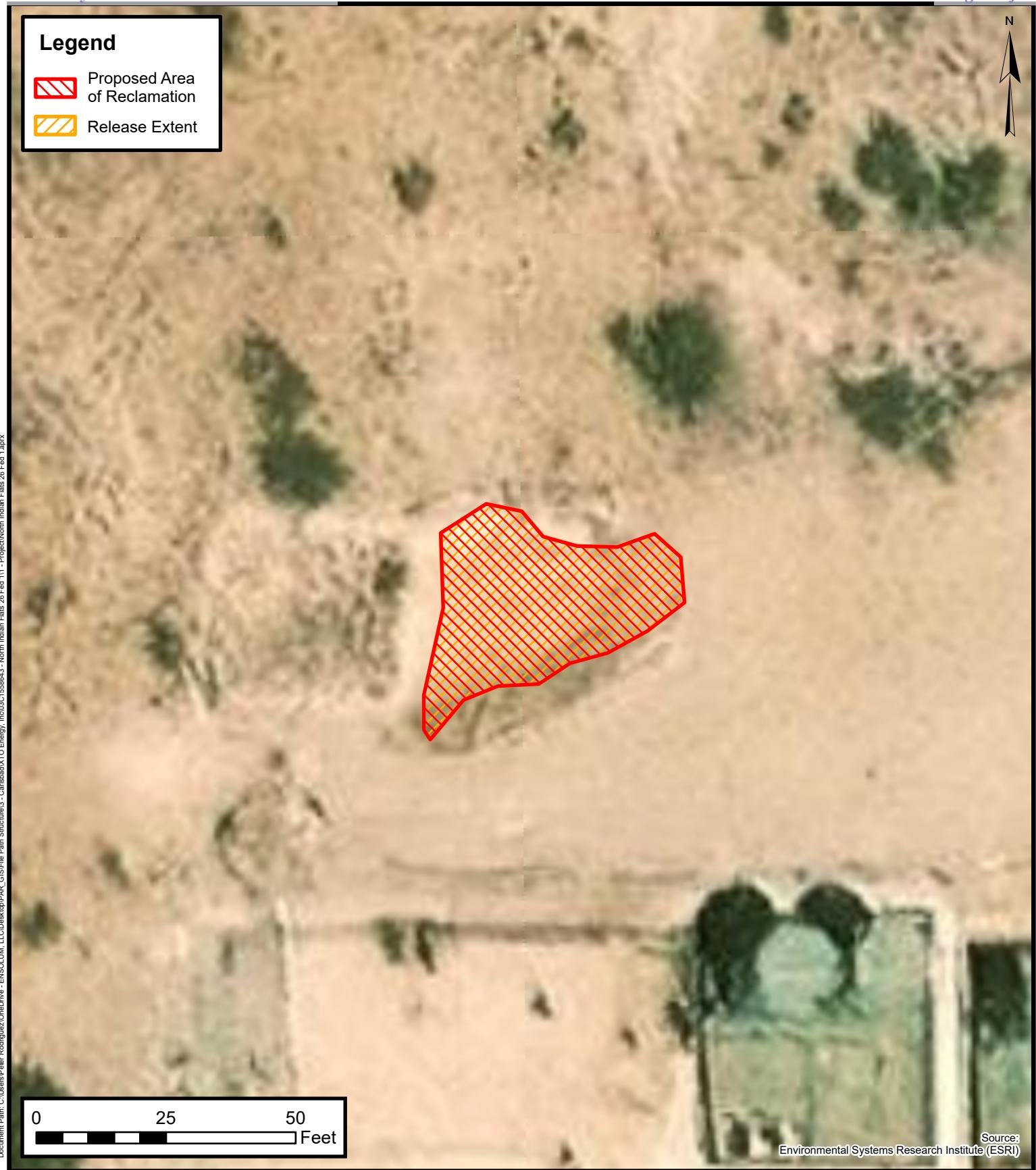
Sources: Environmental Systems Research Institute (ESRI)



## Excavation Soil Sample Locations

XTO Energy, Inc  
North Indian Flats 26 Fed 1  
Incident Number: NAPP2323653065  
Unit J, Sec 35, T21S, R28E  
Eddy County, New Mexico

**FIGURE**  
**3**



Environmental, Engineering and  
Hydrogeologic Consultants

## Proposed Area of Reclamation

XTO Energy, Inc.  
North Indian Flats 26 Fed 1  
Incident Number: nAPP2323653065  
Unit J, Sec 35, T21S, R28E  
Eddy County, New Mexico

**FIGURE**  
**4**



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## TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**North Indian Flats 26 Fed 1**  
**XTO Energy, Inc**  
**Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
<b>Delineation Soil Samples</b>										
SS01*	08/31/2023	0.5	<0.00202	<0.00403	<50.5	618	<50.5	618	618	8,520
SS02*	08/31/2023	0.5	<0.00199	<0.00398	<503	13,300	<503	13,300	13,300	7,770
SS03*	08/31/2023	0.5	<0.00198	<0.00396	<50.4	2,540	144	2,540	2,680	8,930
SS04*	08/31/2023	0.5	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	179
SS05*	08/31/2023	0.5	<0.00200	<0.00400	<49.9	85.1	<49.9	85.1	85.1	61.5
SS06*	08/31/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	54.4
SS07*	08/31/2023	0.5	<0.00202	<0.00404	<49.5	<49.5	<49.5	<49.5	<49.5	208
<b>Confirmation Soil Samples</b>										
FS01	09/28/2023	4	<0.00199	<0.00398	<49.8	60.5	<49.8	60.5	60.5	508
FS02	09/28/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	444
FS03	09/28/2023	4	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	1,470
FS04	09/28/2023	4	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	745
FS05	09/28/2023	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	747
FS06	09/28/2023	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	891
FS07	09/28/2023	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	842
FS08	09/28/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,280
FS09	09/28/2023	4	<0.00200	<0.00401	<50.1	53.1	<50.1	53.1	53.1	1,530
SW01*	09/28/2023	0 - 4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	37.4
SW02*	09/28/2023	0 - 4	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	91.0
SW03*	09/28/2023	0 - 4	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	98.7
SW04*	09/28/2023	0 - 4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	95.3
<b>Backfill Confirmation Soil Sample</b>										
BF01	6/19/2025	0.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.

Soil samples indicating an \* symbol indicate soil sample required to be compliant with reclamation requirement.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



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APPENDIX A  
Laboratory Analytical Reports &  
Chain of Custody Documentation

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 27, 2025

TRACY HILLARD

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: NORTH INDIAN FLATS 26 FED 1 - SPILL

Enclosed are the results of analyses for samples received by the laboratory on 06/23/25 12:18.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

ENSOLUM, LLC  
 TRACY HILLARD  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 06/23/2025 Sampling Date: 06/19/2025  
 Reported: 06/27/2025 Sampling Type: Soil  
 Project Name: NORTH INDIAN FLATS 26 FED 1 - SPILL Sampling Condition: Cool & Intact  
 Project Number: 03C1558643 Sample Received By: Alyssa Parras  
 Project Location: XTO 32.43431-104.05561

**Sample ID: BF 01 0.5' (H253758-01)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	06/25/2025	ND	2.02	101	2.00	0.403		
Toluene*	<0.050	0.050	06/25/2025	ND	2.06	103	2.00	0.355		
Ethylbenzene*	<0.050	0.050	06/25/2025	ND	2.10	105	2.00	0.309		
Total Xylenes*	<0.150	0.150	06/25/2025	ND	6.16	103	6.00	0.340		
Total BTEX	<0.300	0.300	06/25/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	06/25/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	06/24/2025	ND	203	101	200	4.04		
DRO >C10-C28*	<10.0	10.0	06/24/2025	ND	225	113	200	5.65		
EXT DRO >C28-C36	<10.0	10.0	06/24/2025	ND						

Surrogate: 1-Chlorooctane 101 % 44.4-145

Surrogate: 1-Chlorooctadecane 97.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

ANALYSIS REQUEST										BILL TO			
Company Name: Ensolum, LLC		Project Manager: Tracy Hilliard		City: Midland		Address: 601 N Marienfeld Street, Suite 400		State: TX		Zip: 79701			
Phone #: 575-937-3906		Fax #: 575-937-3906		Project #: 03C1558643		Project Name: North Indian Flats 26 Fed 1		Project Owner: XTO Energy		City: Carlsbad			
Project Location: 32.43431,-104.05561		Sampler Name: Jesse Dorman		FOR LAB USE ONLY		State: NM		Zip: 88220		Phone #: 505-232-1100			
Lab I.D. H2S3758		Sample I.D. 13F01		Depth (feet) 15'		(G)RAB OR (C)OMP. # CONTAINERS		MATRIX		PRESERV.			
						GROUNDWATER				SAMPLING			
						WASTEWATER							
						SOIL							
						OIL							
						SLUDGE							
						OTHER:							
						ACID/BASE:							
						ICE / COOL							
						OTHER:							
						DATE 6/19/25		TIME 11:50		TPH 8015			
										BTEX 8021			
										Chloride 4500			
Received By: <i>Jesse Dorman</i>		Date: 6/19/25		Time: 11:50		Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:					
Relinquished By: <i>Jesse Dorman</i>		Date: 6/19/25		Time: 11:50		All Results are emailed. Please provide Email address:							
						BBell@ensolum.com, JMorrissey@ensolum.com, JReich@ensolum.com							
						THillard@ensolum.com, KThomason@ensolum.com, Jdorman@ensolum.com							
REMARKS: Incident Number: nAPP2323653065		Cost Center: 1657411001		GFCM: 48605000									
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <i>Jesse Dorman</i>		Observed Temp. °C 24.3		Sample Condition Cool Yes <input checked="" type="checkbox"/> Yes		CHECKED BY: (Initials) <i>JDP</i>		Turnaround Time: 48-72 hours		Standard Rush <input checked="" type="checkbox"/>		Bacteria (only) Sample Condition Cool Yes <input type="checkbox"/> Yes	
		Corrected Temp. °C 25.4		Intact Yes <input checked="" type="checkbox"/> Yes				Rush <input type="checkbox"/>		Intact Yes <input type="checkbox"/>		Observed Temp. °C Yes <input type="checkbox"/>	
				No <input type="checkbox"/> No								Yes <input type="checkbox"/> No <input type="checkbox"/>	
												Corrected Temp. °C	

Cardinal cannot accept verbal changes. Please email changes to [info@cardinal.com](mailto:info@cardinal.com).



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## APPENDIX B

### Photographic Log

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### Photographic Log

XTO Energy, Inc

North Indian Flats 26 Fed 1

nAPP2323653065



03.20.2024 01:47 PM  
32.43432, -104.0556  
Unnamed Road, Carlsbad, NM 88220

Photograph: 1

Date: 3/20/2024

Description: Backfill activities

View: Southwest



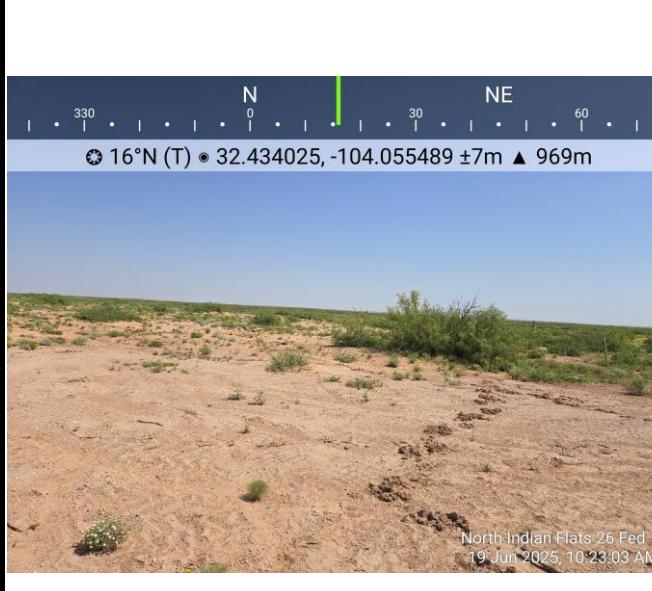
03.20.2024 01:47 PM  
32.43432, -104.0556  
Unnamed Road, Carlsbad, NM 88220

Photograph: 2

Date: 3/20/2024

Description: Backfill activities

View: Southeast



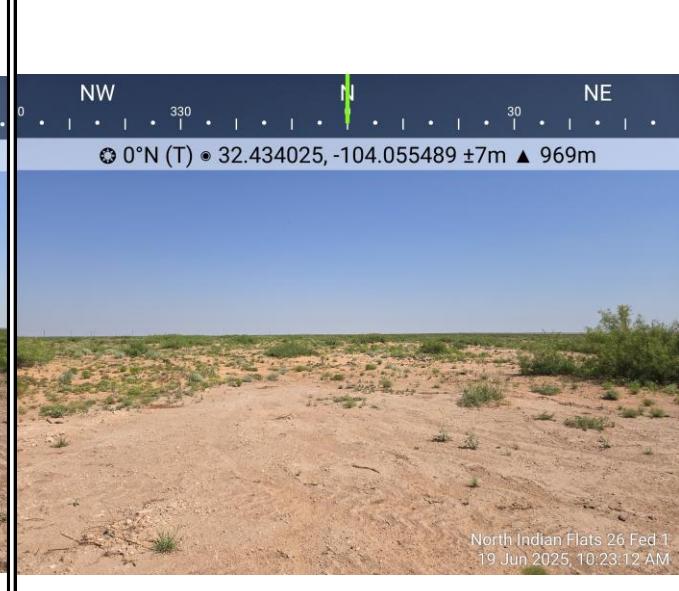
North Indian Flats 26 Fed 1  
19 Jun 2025, 10:23:03 AM

Photograph: 3

Date: 6/19/2025

Description: Backfill activities

View: Northeast



North Indian Flats 26 Fed 1  
19 Jun 2025, 10:23:12 AM

Photograph: 4

Date: 6/19/2025

Description: Backfill activities

View: North



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## APPENDIX C

November 9, 2023, *Closure Request*



November 9, 2023

**New Mexico Oil Conservation Division**  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Closure Request**  
**North Indian Flats 26 Fed 1**  
**Incident Number NAPP2323653065**  
**Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document assessment, delineation, excavation, and soil sampling activities performed at the North Indian Flats 26 Fed 1 (Site). The purpose of the Site assessment, delineation, excavation, and soil sampling activities was to address impacts to soil resulting from a release of produced water at the Site. Based on excavation activities and laboratory analytical results from the soil sampling events, XTO is submitting this *Closure Request*, describing remedial actions that have occurred and requesting closure for Incident Number NAPP2323653065.

## SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit J, Section 35, Township 21 South, Range 28 East, in Eddy County, New Mexico (32.43431°, -104.05560°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On August 11, 2023, while removing an inactive produced water polyline, a cut on the polyline was found and allowed 17.96 barrels (bbls) of produced water to release onto the surface of a pasture area. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 10.00 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 24, 2023. The release was assigned Incident Number NAPP2323653065.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (OSE) well boring CP-01171 POD3, located approximately 327 feet south of the Site. The soil boring was drilled to a depth of 115 feet bgs and was dry. There are additional soil borings nearby that were also dry, but they were not advanced as

deep as 100 feet.. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

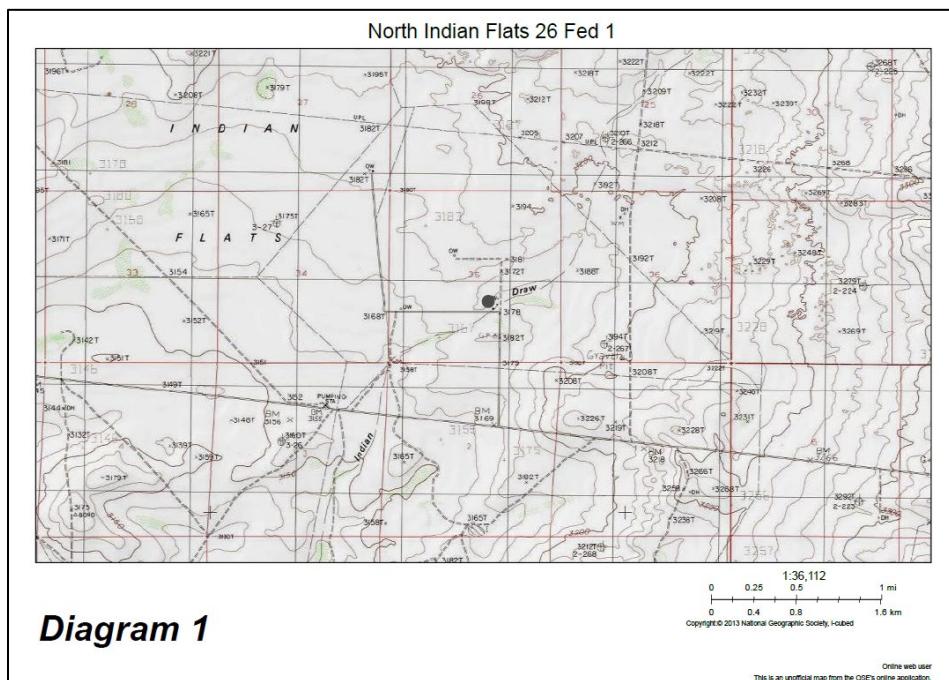
The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not overlying a subsurface mine. The Site is proximal to, but not within, a 100-year floodplain (Zone A, 1 % annual chance flood hazard). The Site is not underlain by unstable geology (medium potential karst designation area).

### Watercourse Survey

The closest potential surface water or significant watercourse to the Site is a seasonal dry wash, located approximately 89 feet southeast of the Site. Because the watercourse appears in satellite imagery to flow through multiple access roads, pipeline right-of-ways, and the nearby facility pad (Figure 2),

Ensolum personnel conducted a field investigation to confirm the presence or absence of the significant watercourse. Field verification is sometimes necessary to measure the distance of the feature from the release extent and to confirm the feature complies with the definition of a significant watercourse per Subsection P of 19.15.17.7 NMAC. Specifically, the definition in Subsection P of 19.15.17.7 NMAC requires a defined bed and bank and either named or identified by a dashed blue line on

United States Geological Survey (USGS) 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank of such watercourse.



**Diagram 1**

The watercourse feature is not identified by a dashed blue line on the current USGS 7.5-minute quadrangle map. The proposed watercourse is identified as a dashed black line (Diagram 1). Additionally, no features with a defined bed or bank were observed within 300 feet of the release during ground truthing, which included a pedestrian survey of the subject watercourse. The survey provided no evidence of fluvial deposition within the watercourse, only a few erosional ruts and swales aligned with the topographic gradient that did not connect to other watercourses. Instead, the watercourses appeared to splay out onto the surface of the desert floor. Photos from the survey are presented in Figure 2.

Based on the observations presented, there are no significant watercourses located within 300 feet of the Site location per the definition of a significant watercourse in Subsection P of 19.15.17.7 NMAC. Instead, only a few faint erosional ruts and swales formed by drainage of water during storm events. The faint erosional features are intercepted by multiple access roads, pipeline right-of-ways, and the facility pad.

Based on the results of the Site Characterization, and the absence of a significant watercourse, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the pasture area that was impacted by the release, per 19.15.29.13.D (1) NMAC.

## SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On August 31, 2023, Site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Seven delineation soil samples (SS01 through SS07) were collected at a depth of 0.5 feet bgs to assess the extent of the release. Soil samples SS01 through SS03 were collected within the release area and soil samples SS04 through SS07 were collected outside the release area. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 3. Photographic documentation of the Site assessment is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they were collected may not have equilibrated to 6.0 degrees Celsius required for shipment and long-term storage but are considered to have been received in acceptable condition by the laboratory.

Laboratory analytical results for delineation soil samples SS01 through SS03 indicated TPH and chloride concentrations exceeded the reclamation requirement. Based on laboratory analytical results, excavation activities were warranted.

## EXCAVATION SOIL SAMPLING ACTIVITIES

From September 26 to September 28, 2023, Ensolum personnel returned to the Site to oversee excavation activities. Two potholes were advanced via backhoe within the release footprint to assess the vertical extent of impacted soil. The potholes were both advanced to a depth of 4 feet bgs. Discrete soil samples were collected at depths ranging from 1-foot to 4 feet bgs and field screened for VOCs and

chloride as described above. Based on potholing field screening results, impacted soil was present from ground surface to 4 feet bgs.

Impacted soil was excavated from the release area as indicated by delineation field screening results and laboratory analytical results. Excavation activities were performed utilizing heavy equipment and transport vehicles. The excavation occurred in a previously disturbed pasture area, just north of the facility pad. To direct excavation activities, soil was field screened as described above. The excavation was completed to a depth of 4 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of the impacted soil, 5-point composite soil samples were collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. Composite soil samples FS01 through FS09 were collected from the floor of the excavation at a depth of 4 feet bgs. The soil samples were collected and handled following the same procedures as described above and analyzed for the same COCs as described above. The excavation extent and excavation soil sample locations are presented on Figure 4.

The excavation area measured approximately 1,702 square feet. A total of approximately 265 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Landfill Facility located in Hobbs, New Mexico.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the lateral delineation soil samples and all confirmation soil samples collected from the final excavation extent were compliant with the Closure Criteria. Confirmation samples collected above four feet bgs were compliant with the reclamation requirement. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C. All NMOC correspondence is provided in Appendix D.

## CLOSURE REQUEST

Site assessment, delineation, and excavation activities were conducted at the Site to address the August 2023 release of produced water. Laboratory analytical results for all confirmation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Site Closure Criteria and samples representing the top four feet of the excavation were compliant with the reclamation requirement. This includes sidewall soil samples SW01 through SW04, which confirms the edge of the release extent has been fully defined. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing Site conditions. The pasture area affected by the release will be reseeded with an approved BLM seed mixture.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2323653065.

If you have any questions or comments, please contact Mr. Benjamin Belill at (989) 854-0852 or [bbelill@ensolum.com](mailto:bbelill@ensolum.com).

XTO Energy, Inc  
Closure Request  
North Indian Flats 26 Fed 1



Sincerely,  
**Ensolum, LLC**

A handwritten signature in black ink that appears to read "Ben J. Belill".

Benjamin J. Belill  
Project Geologist

A handwritten signature in black ink that appears to read "Ashley L. Ager".

Ashley L. Ager, MS, PG  
Principal

cc: Garrett Green, XTO  
Tommee Lambert, XTO  
BLM

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Watercourse Survey Map
- Figure 3 Delineation Soil Sample Locations
- Figure 4 Excavation Soil Sample Locations
- Table 1 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix D NMOCD Correspondence



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## FIGURES

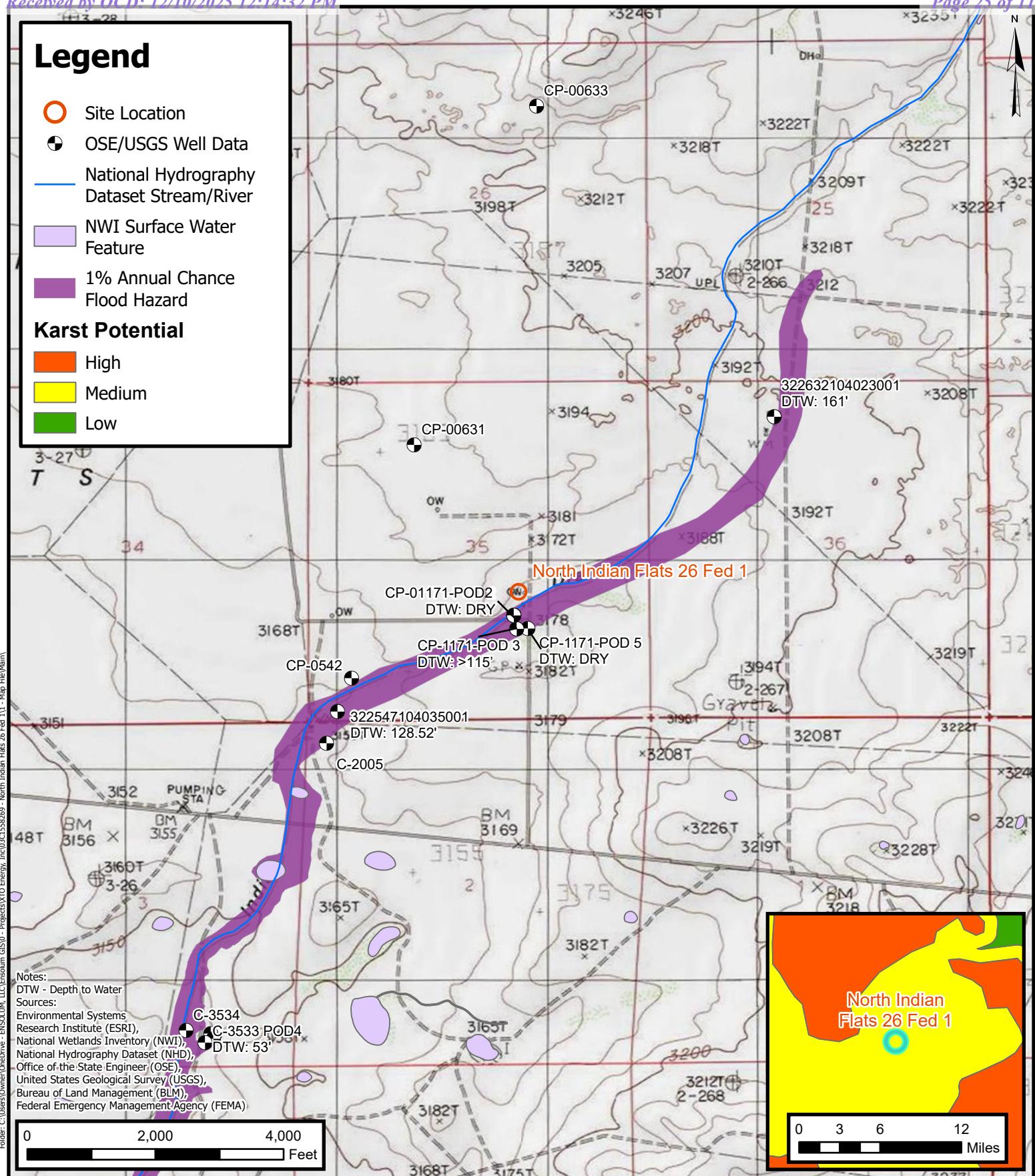
## Legend

- Site Location
- OSE/USGS Well Data
- National Hydrography Dataset Stream/River
- NWI Surface Water Feature

- 1% Annual Chance Flood Hazard

### Karst Potential

- High
- Medium
- Low



## Site Receptor Map

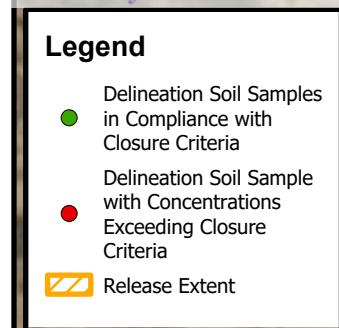
XTO Energy, Inc  
 North Indian Flats 26 Fed 1  
 Incident Number: NAPP2323653065  
 Unit J, Sec 35, T21S, R28E  
 Eddy County, New Mexico

**FIGURE**  
**1**

## Legend

- Photograph Location
- Watercourse





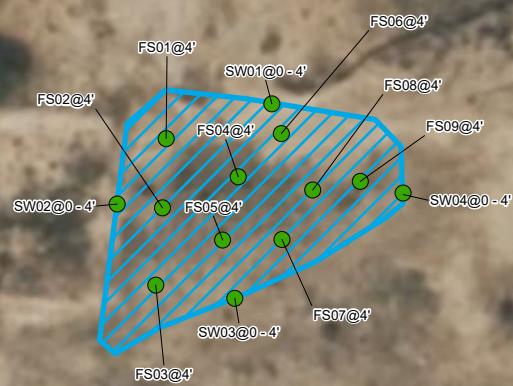
**Delineation Soil Sample Locations**  
 XTO Energy, Inc  
 North Indian Flats 26 Fed 1  
 Incident Number: NAPP2323653065  
 Unit J, Sec 35, T21S, R28E  
 Eddy County, New Mexico

**FIGURE**  
**3**

N

**Legend**

- Confirmation Soil Samples in Compliance with Closure Criteria
- Excavation Extent

Notes:  
Sample ID@Depth Below Ground Surface.

0 5 10 20 30 40  
 Feet

Sources: Environmental Systems Research Institute (ESRI)

Environmental, Engineering and  
Hydrogeologic Consultants**Excavation Soil Sample Locations**

XTO Energy, Inc  
 North Indian Flats 26 Fed 1  
 Incident Number: NAPP2323653065  
 Unit J, Sec 35, T21S, R28E  
 Eddy County, New Mexico

**FIGURE  
4**



## TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**North Indian Flats 26 Fed 1**  
**XTO Energy, Inc**  
**Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
<b>Delineation Soil Samples</b>										
SS01*	08/31/2023	0.5	<0.00202	<0.00403	<50.5	618	<50.5	618	618	8,520
SS02*	08/31/2023	0.5	<0.00199	<0.00398	<503	13,300	<503	13,300	13,300	7,770
SS03*	08/31/2023	0.5	<0.00198	<0.00396	<50.1	2,540	144	2,540	2,680	8,930
SS04*	08/31/2023	0.5	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	179
SS05*	08/31/2023	0.5	<0.00200	<0.00400	<49.9	85.1	<49.9	85.1	85.1	61.5
SS06*	08/31/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	54.4
SS07*	08/31/2023	0.5	<0.00202	<0.00404	<49.5	<49.5	<49.5	<49.5	<49.5	208
<b>Confirmation Soil Samples</b>										
FS01	09/28/2023	4	<0.00199	<0.00398	<49.8	60.5	<49.8	60.5	60.5	508
FS02	09/28/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	444
FS03	09/28/2023	4	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	1,470
FS04	09/28/2023	4	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	745
FS05	09/28/2023	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	747
FS06	09/28/2023	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	891
FS07	09/28/2023	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	842
FS08	09/28/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,280
FS09	09/28/2023	4	<0.00200	<0.00401	<50.1	53.1	<50.1	53.1	53.1	1,530
SW01*	09/28/2023	0 - 4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	37.4
SW02*	09/28/2023	0 - 4	<0.00200	<0.00399	<50.3	<50.3	<50.3	<50.3	<50.3	91
SW03*	09/28/2023	0 - 4	<0.00200	<0.00401	<50.4	<50.4	<50.4	<50.4	<50.4	98.7
SW04*	09/28/2023	0 - 4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	95.3

## Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.

Soil samples indicating an \* symbol indicate soil sample required to be compliant with reclamation requirement.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



## APPENDIX A

### Referenced Well Records



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO

2013 JUN 10 P 1:20

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>(POD3) INDIAN FLATS BASS FED SWD SB-10</b>				OSE FILE NUMBER(S) <b>CP 01171</b>			
	WELL OWNER NAME(S) <b>BOPCO OPERATING CO</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>6 DESTA DRIVE, SUITE 3700, P.O. BOX 2760</b>				CITY <b>MIDLAND</b>	STATE <b>TX</b>	ZIP <b>79702</b>	
	WELL LOCATION (FROM GPS)	LATITUDE <b>32</b>	DEGREES <b>26</b>	MINUTES <b>01</b>	SECONDS <b>N</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE <b>104</b>	03	19	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>62/140 &amp; MM 43 GO 4.3 MI VEER L &amp; GO E 1.2 MI TURN L GO N TURN INTO SITE. SEC 35, TWP 21S, RANGE 28 E.</b>								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>WD1478</b>		NAME OF LICENSED DRILLER <b>MARTIN STRAUB</b>			NAME OF WELL DRILLING COMPANY <b>STRAUB CORPORATION</b>		
	DRILLING STARTED <b>5-31-13</b>	DRILLING ENDED <b>5-31-13</b>	DEPTH OF COMPLETED WELL (FT) <b>0'</b>	BORE HOLE DEPTH (FT) <b>115'</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>N/A</b>			
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>N/A</b>			
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD				ADDITIVES - SPECIFY:			
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)	BORE HOLE	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM <b>0</b>	TO <b>115'</b>	DIAM (inches) <b>5"</b>	N/A		N/A	N/A	N/A
3. ANNULAR MATERIAL	DEPTH (feet bgl)	BORE HOLE	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL			AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM <b>0</b>	TO <b>2'</b>	DIAM. (inches) <b>5"</b>	<b>.5 OF CONCRETE</b>				<b>TOPLOAD</b>

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER <b>CP-1171</b>	POD NUMBER <b>3</b>	TRN NUMBER <b>527952</b>
LOCATION <b>Expl</b>	<b>21S. 28E. 35. 41</b>	PAGE 1 OF 2

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 2 OF 2	



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## APPENDIX B

### Photographic Log

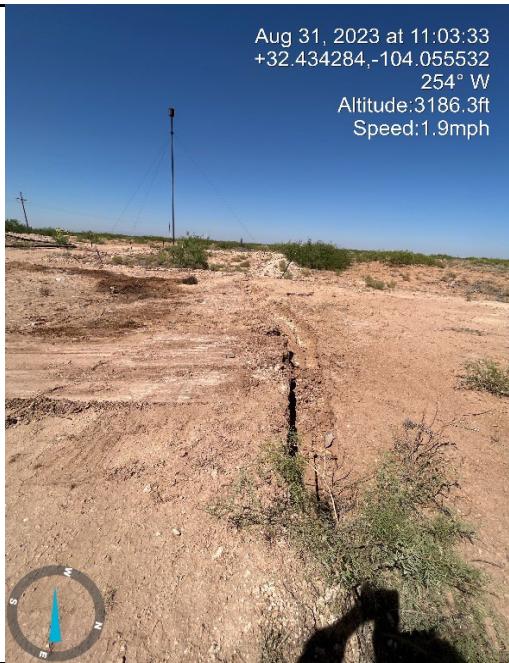
---



**ENSOLUM**

### Photographic Log

XTO Energy, Inc  
North Indian Flats 26 Fed 1  
Incident Number NAPP2323653065



Aug 31, 2023 at 11:03:33  
+32.434284,-104.055532  
254° W  
Altitude:3186.3ft  
Speed:1.9mph



Aug 31, 2023 at 11:03:24  
+32.434220,-104.055608  
259° W  
Altitude:3186.7ft  
Speed:1.9mph

Photograph 1

Date: 8/31/2023

Description: Removed polyline near release point.

View: West

Photograph 2

Date: 8/31/2023

Description: Site assessment activities, release extent.

View: West



Date & Time: Thu, Sep 28, 2023 at 09:58:03 MDT  
Position: +32.315212° / -104.220771° (±16759.7ft)  
Altitude: 3182ft (±8.6ft)  
Datum: WGS-84  
Azimuth/Bearing: 023° N29° 0409mils True (±21°)  
Elevation Angle: -12.4°  
Horizon Angle: -01.7°  
Zoom: 1.0x

North Indian Flats 26 Fed 1, excavation



Date & Time: Thu, Sep 28, 2023 at 09:58:54 MDT  
Position: +32.315212° / -104.220771° (±16759.7ft)  
Altitude: 3182ft (±8.6ft)  
Datum: WGS-84  
Azimuth/Bearing: 267° S47W 4391mils True (±21°)  
Elevation Angle: -11.5°  
Horizon Angle: -00.8°  
Zoom: 1.0x

North Indian Flats 26 Fed 1, excavation

Photograph 3

Date: 9/28/2023

Description: Final excavation extent.

View: Northeast

Photograph 4

Date: 9/28/2023

Description: Final excavation extent.

View: Southwest



## APPENDIX C

### Closure Request



Environment Testing

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Ben Belill

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 9/6/2023 9:33:51 AM

## JOB DESCRIPTION

North Indian Flats 26 Fed 1

SDG NUMBER 03C1558269

## JOB NUMBER

890-5188-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

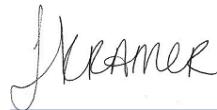
# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
9/6/2023 9:33:51 AM

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

# Table of Contents

Cover Page .....	1	3
Table of Contents .....	3	4
Definitions/Glossary .....	4	5
Case Narrative .....	5	6
Client Sample Results .....	6	7
Surrogate Summary .....	12	8
QC Sample Results .....	13	9
QC Association Summary .....	17	10
Lab Chronicle .....	20	11
Certification Summary .....	23	12
Method Summary .....	24	13
Sample Summary .....	25	14
Chain of Custody .....	26	
Receipt Checklists .....	27	

**Definitions/Glossary**

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

**Qualifiers****GC VOA**

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

**GC Semi VOA**

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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.**

□	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: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
 SDG: 03C1558269

**Job ID: 890-5188-1****Laboratory: Eurofins Carlsbad****Narrative****Job Narrative  
890-5188-1****Receipt**

The samples were received on 9/1/2023 8:11 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 3.8°C

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-5188-1), SS02 (890-5188-2), SS03 (890-5188-3), SS04 (890-5188-4), SS05 (890-5188-5), SS06 (890-5188-6) and SS07 (890-5188-7).

**GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS02 (890-5188-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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 surrogate recovery for the blank associated with preparation batch 880-61797 and analytical batch 880-61786 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-5188-1), SS02 (890-5188-2), SS03 (890-5188-3), SS04 (890-5188-4), SS05 (890-5188-5), SS06 (890-5188-6), SS07 (890-5188-7) and (890-5188-A-4-D MSD).

Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-61786/20), (CCV 880-61786/21) and (CCV 880-61786/5). Evidence of matrix interferences is not obvious.

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: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
 SDG: 03C1558269

**Client Sample ID: SS01**  
 Date Collected: 08/31/23 11:10  
 Date Received: 09/01/23 08:11  
 Sample Depth: 0.5

**Lab Sample ID: 890-5188-1**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
Toluene	<0.00202	U	0.00202	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
o-Xylene	<0.00202	U	0.00202	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg	09/05/23 09:19	09/05/23 12:39		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	90			70 - 130		09/05/23 09:19	09/05/23 12:39	1
1,4-Difluorobenzene (Surr)	101			70 - 130		09/05/23 09:19	09/05/23 12:39	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	618		50.5	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg	09/05/23 09:43	09/05/23 12:52		1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>618</b>		50.5	mg/Kg	09/05/23 09:43	09/05/23 12:52		1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg	09/05/23 09:43	09/05/23 12:52		1
<b>Surrogate</b>								
1-Chlorooctane	129		70 - 130		09/05/23 09:43	09/05/23 12:52		1
<i>o</i> -Terphenyl	139	S1+	70 - 130		09/05/23 09:43	09/05/23 12:52		1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8520		49.7	mg/Kg			09/05/23 18:53	10

**Client Sample ID: SS02**

**Lab Sample ID: 890-5188-2**  
 Matrix: Solid

Date Collected: 08/31/23 11:15  
 Date Received: 09/01/23 08:11  
 Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
Toluene	<0.00199	U	0.00199	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
o-Xylene	<0.00199	U	0.00199	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg	09/05/23 09:19	09/05/23 13:00		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130			09/05/23 09:19	09/05/23 13:00	1

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## Client Sample Results

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

**Client Sample ID: SS02**  
Date Collected: 08/31/23 11:15  
Date Received: 09/01/23 08:11  
Sample Depth: 0.5

**Lab Sample ID: 890-5188-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	09/05/23 09:19	09/05/23 13:00	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	13300		503	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<503	U	503	mg/Kg		09/05/23 09:43	09/05/23 20:41	10
Diesel Range Organics (Over C10-C28)	13300		503	mg/Kg		09/05/23 09:43	09/05/23 20:41	10
Oil Range Organics (Over C28-C36)	<503	U	503	mg/Kg		09/05/23 09:43	09/05/23 20:41	10

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	165	S1+	70 - 130	09/05/23 09:43	09/05/23 20:41	10
o-Terphenyl	215	S1+	70 - 130	09/05/23 09:43	09/05/23 20:41	10

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7770		49.8	mg/Kg			09/05/23 19:00	10

**Client Sample ID: SS03****Lab Sample ID: 890-5188-3**

Matrix: Solid

Date Collected: 08/31/23 11:20

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/05/23 09:19	09/05/23 13:21	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/05/23 09:19	09/05/23 13:21	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/05/23 09:19	09/05/23 13:21	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/05/23 09:19	09/05/23 13:21	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/05/23 09:19	09/05/23 13:21	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/05/23 09:19	09/05/23 13:21	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	09/05/23 09:19	09/05/23 13:21	1
1,4-Difluorobenzene (Surr)	78		70 - 130	09/05/23 09:19	09/05/23 13:21	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2680		50.1	mg/Kg			09/06/23 09:47	1

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## Client Sample Results

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

**Client Sample ID: SS03**  
Date Collected: 08/31/23 11:20  
Date Received: 09/01/23 08:11  
Sample Depth: 0.5

**Lab Sample ID: 890-5188-3**  
Matrix: Solid

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		09/05/23 09:43	09/05/23 13:37	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>2540</b>		50.1	mg/Kg		09/05/23 09:43	09/05/23 13:37	1
<b>OII Range Organics (Over C28-C36)</b>	<b>141</b>		50.1	mg/Kg		09/05/23 09:43	09/05/23 13:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	149	S1+	70 - 130			09/05/23 09:43	09/05/23 13:37	1
<i>o-Terphenyl</i>	154	S1+	70 - 130			09/05/23 09:43	09/05/23 13:37	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>8930</b>		50.2	mg/Kg			09/05/23 19:07	10

**Client Sample ID: SS04**  
Date Collected: 08/31/23 11:25  
Date Received: 09/01/23 08:11  
Sample Depth: 0.5

**Lab Sample ID: 890-5188-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
<i>o-Xylene</i>	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/05/23 09:19	09/05/23 13:41	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	93		70 - 130			09/05/23 09:19	09/05/23 13:41	1
1,4-Difluorobenzene (Surr)	108		70 - 130			09/05/23 09:19	09/05/23 13:41	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		09/05/23 09:43	09/05/23 11:45	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>&lt;50.5</b>	<b>U</b>	<b>50.5</b>	<b>mg/Kg</b>		09/05/23 09:43	09/05/23 11:45	1
<b>OII Range Organics (Over C28-C36)</b>	<b>&lt;50.5</b>	<b>U</b>	<b>50.5</b>	<b>mg/Kg</b>		09/05/23 09:43	09/05/23 11:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	141	S1+	70 - 130			09/05/23 09:43	09/05/23 11:45	1
<i>o-Terphenyl</i>	156	S1+	70 - 130			09/05/23 09:43	09/05/23 11:45	1

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## Client Sample Results

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

**Client Sample ID: SS04**  
Date Collected: 08/31/23 11:25  
Date Received: 09/01/23 08:11  
Sample Depth: 0.5

**Lab Sample ID: 890-5188-4**  
Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	179		25.2	mg/Kg			09/05/23 19:13	5

**Client Sample ID: SS05**  
Date Collected: 08/31/23 11:35  
Date Received: 09/01/23 08:11  
Sample Depth: 0.5

**Lab Sample ID: 890-5188-5**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/05/23 09:19	09/05/23 14:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			09/05/23 09:19	09/05/23 14:02	1
1,4-Difluorobenzene (Surr)	105		70 - 130			09/05/23 09:19	09/05/23 14:02	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	85.1		49.9	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/05/23 09:43	09/05/23 13:59	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>85.1</b>		49.9	mg/Kg		09/05/23 09:43	09/05/23 13:59	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/05/23 09:43	09/05/23 13:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130			09/05/23 09:43	09/05/23 13:59	1
<i>o-Terphenyl</i>	153	S1+	70 - 130			09/05/23 09:43	09/05/23 13:59	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.5		5.04	mg/Kg			09/05/23 19:20	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
 SDG: 03C1558269

**Client Sample ID: SS06**  
 Date Collected: 08/31/23 11:40  
 Date Received: 09/01/23 08:11  
 Sample Depth: 0.5

**Lab Sample ID: 890-5188-6**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/05/23 09:19	09/05/23 14:23	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		92		70 - 130		09/05/23 09:19	09/05/23 14:23	1
1,4-Difluorobenzene (Surr)		101		70 - 130		09/05/23 09:19	09/05/23 14:23	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/05/23 09:43	09/05/23 14:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/05/23 09:43	09/05/23 14:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/05/23 09:43	09/05/23 14:21	1
<b>Surrogate</b>								
1-Chlorooctane								1
132 S1+								
o-Terphenyl								1
141 S1+								
70 - 130								

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.4		5.00	mg/Kg			09/05/23 19:27	1

**Client Sample ID: SS07**  
 Date Collected: 08/31/23 11:30  
 Date Received: 09/01/23 08:11  
 Sample Depth: 0.5

**Lab Sample ID: 890-5188-7**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/05/23 09:19	09/05/23 14:43	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		84		70 - 130		09/05/23 09:19	09/05/23 14:43	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
 SDG: 03C1558269

**Client Sample ID: SS07**  
 Date Collected: 08/31/23 11:30  
 Date Received: 09/01/23 08:11  
 Sample Depth: 0.5

**Lab Sample ID: 890-5188-7**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Sur)	106		70 - 130	09/05/23 09:19	09/05/23 14:43	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			09/05/23 17:36	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5	mg/Kg			09/06/23 09:47	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5	mg/Kg		09/05/23 09:43	09/05/23 14:43	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5	mg/Kg		09/05/23 09:43	09/05/23 14:43	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5	mg/Kg		09/05/23 09:43	09/05/23 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130	09/05/23 09:43	09/05/23 14:43	1
o-Terphenyl	153	S1+	70 - 130	09/05/23 09:43	09/05/23 14:43	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	208		25.0	mg/Kg			09/05/23 19:33	5

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## Surrogate Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)									
880-32807-A-1-B MS	Matrix Spike	94	104									
880-32807-A-1-C MSD	Matrix Spike Duplicate	103	101									
890-5188-1	SS01	90	101									
890-5188-2	SS02	164 S1+	86									
890-5188-3	SS03	74	78									
890-5188-4	SS04	93	108									
890-5188-5	SS05	87	105									
890-5188-6	SS06	92	101									
890-5188-7	SS07	84	106									
LCS 880-61792/1-A	Lab Control Sample	109	100									
LCSD 880-61792/2-A	Lab Control Sample Dup	94	96									
MB 880-61792/5-A	Method Blank	82	89									

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

## 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)									
890-5188-1	SS01	129	139 S1+									
890-5188-2	SS02	165 S1+	215 S1+									
890-5188-3	SS03	149 S1+	154 S1+									
890-5188-4	SS04	141 S1+	156 S1+									
890-5188-4 MS	SS04	127	129									
890-5188-4 MSD	SS04	145 S1+	141 S1+									
890-5188-5	SS05	140 S1+	153 S1+									
890-5188-6	SS06	132 S1+	141 S1+									
890-5188-7	SS07	143 S1+	153 S1+									
LCS 880-61797/2-A	Lab Control Sample	93	109									
LCSD 880-61797/3-A	Lab Control Sample Dup	85	97									
MB 880-61797/1-A	Method Blank	132 S1+	151 S1+									

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

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

Lab Sample ID: MB 880-61792/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61792

Prep Batch: 61792

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/05/23 09:19	09/05/23 11:36	1
Surrogate	MB		MB		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	82			70 - 130		09/05/23 09:19	09/05/23 11:36	1	
1,4-Difluorobenzene (Surr)	89			70 - 130		09/05/23 09:19	09/05/23 11:36	1	

Lab Sample ID: LCS 880-61792/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61790

Prep Batch: 61792

Analyte	Spike		LCS		LCS		%Rec		
	Added	Result	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07257			mg/Kg		73	70 - 130	
Toluene	0.100	0.08360			mg/Kg		84	70 - 130	
Ethylbenzene	0.100	0.09101			mg/Kg		91	70 - 130	
m-Xylene & p-Xylene	0.200	0.1929			mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09226			mg/Kg		92	70 - 130	
Surrogate	LCS		LCS		Limits	Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	109			70 - 130					
1,4-Difluorobenzene (Surr)	100			70 - 130					

Lab Sample ID: LCSD 880-61792/2-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61790

Prep Batch: 61792

Analyte	Spike		LCSD		LCSD		%Rec			RPD	
	Added	Result	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.07131			mg/Kg		71	70 - 130	2	35	
Toluene	0.100	0.07437			mg/Kg		74	70 - 130	12	35	
Ethylbenzene	0.100	0.07582			mg/Kg		76	70 - 130	18	35	
m-Xylene & p-Xylene	0.200	0.1548			mg/Kg		77	70 - 130	22	35	
o-Xylene	0.100	0.07453			mg/Kg		75	70 - 130	21	35	
Surrogate	LCSD		LCSD		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier		Limits							
4-Bromofluorobenzene (Surr)	94			70 - 130							
1,4-Difluorobenzene (Surr)	96			70 - 130							

Lab Sample ID: 880-32807-A-1-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61790

Prep Batch: 61792

Analyte	Sample		Sample		Spike		MS		MS		%Rec	
	Result	Qualifier	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996		0.07683			mg/Kg		77	70 - 130	
Toluene	<0.00199	U	0.0996		0.07608			mg/Kg		76	70 - 130	

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## QC Sample Results

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

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

Lab Sample ID: 880-32807-A-1-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61790

Prep Batch: 61792

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00199	U	0.0996	0.07529		mg/Kg	76	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1509		mg/Kg	76	70 - 130	
o-Xylene	<0.00199	U	0.0996	0.07090		mg/Kg	71	70 - 130	
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	94			70 - 130					
1,4-Difluorobenzene (Surr)	104			70 - 130					

Lab Sample ID: 880-32807-A-1-C MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61790

Prep Batch: 61792

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00199	U	0.100	0.08037		mg/Kg	80	70 - 130	5
Toluene	<0.00199	U	0.100	0.08412		mg/Kg	84	70 - 130	10
Ethylbenzene	<0.00199	U	0.100	0.08422		mg/Kg	84	70 - 130	11
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1706		mg/Kg	85	70 - 130	12
o-Xylene	<0.00199	U	0.100	0.08032		mg/Kg	80	70 - 130	35
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	103			70 - 130					
1,4-Difluorobenzene (Surr)	101			70 - 130					

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

Lab Sample ID: MB 880-61797/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg	09/05/23 07:40	09/05/23 08:20		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	09/05/23 07:40	09/05/23 08:20		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	09/05/23 07:40	09/05/23 08:20		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	132	S1+	70 - 130		09/05/23 07:40	09/05/23 08:20		1
o-Terphenyl	151	S1+	70 - 130		09/05/23 07:40	09/05/23 08:20		1

Lab Sample ID: LCS 880-61797/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	973.8		mg/Kg	97	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	967.7		mg/Kg	97	70 - 130	

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## QC Sample Results

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

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

Lab Sample ID: LCS 880-61797/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
<i>o</i> -Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-61797/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	831.1		mg/Kg	83	70 - 130
Diesel Range Organics (Over C10-C28)	1000	822.5		mg/Kg	82	70 - 130

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
<i>o</i> -Terphenyl	97		70 - 130

Lab Sample ID: 890-5188-4 MS

Client Sample ID: SS04

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Analyte	Sample	Sample	Spike	MS	MS		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	D
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	998	924.8		mg/Kg	88
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1076		mg/Kg	104

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	127		70 - 130
<i>o</i> -Terphenyl	129		70 - 130

Lab Sample ID: 890-5188-4 MSD

Client Sample ID: SS04

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 61786

Prep Batch: 61797

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	D
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	998	1082		mg/Kg	104
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1220		mg/Kg	119

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	145	S1+	70 - 130
<i>o</i> -Terphenyl	141	S1+	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-61798/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<5.00	U	5.00	mg/Kg			09/05/23 16:14	1

Lab Sample ID: LCS 880-61798/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	RPD
	Added	Result	Qualifier					
Chloride	250	245.1		mg/Kg		98	90 - 110	

Lab Sample ID: LCSD 880-61798/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD
	Added	Result	Qualifier					
Chloride	250	239.0		mg/Kg		96	90 - 110	3

Lab Sample ID: 880-32585-A-8-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	3940		1260	5242		mg/Kg		103	90 - 110	

Lab Sample ID: 880-32585-A-8-C MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	3940		1260	5245		mg/Kg		103	90 - 110	0

Lab Sample ID: 880-32797-A-5-C MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	33.8		250	293.9		mg/Kg		104	90 - 110	0

Lab Sample ID: 880-32797-A-5-D MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 61847

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	33.8		250	293.6		mg/Kg		104	90 - 110	0

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## QC Association Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

## GC VOA

## Analysis Batch: 61790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	8021B	61792
890-5188-2	SS02	Total/NA	Solid	8021B	61792
890-5188-3	SS03	Total/NA	Solid	8021B	61792
890-5188-4	SS04	Total/NA	Solid	8021B	61792
890-5188-5	SS05	Total/NA	Solid	8021B	61792
890-5188-6	SS06	Total/NA	Solid	8021B	61792
890-5188-7	SS07	Total/NA	Solid	8021B	61792
MB 880-61792/5-A	Method Blank	Total/NA	Solid	8021B	61792
LCS 880-61792/1-A	Lab Control Sample	Total/NA	Solid	8021B	61792
LCSD 880-61792/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	61792
880-32807-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	61792
880-32807-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	61792

## Prep Batch: 61792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	5035	11
890-5188-2	SS02	Total/NA	Solid	5035	12
890-5188-3	SS03	Total/NA	Solid	5035	13
890-5188-4	SS04	Total/NA	Solid	5035	14
890-5188-5	SS05	Total/NA	Solid	5035	
890-5188-6	SS06	Total/NA	Solid	5035	
890-5188-7	SS07	Total/NA	Solid	5035	
MB 880-61792/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-61792/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-61792/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-32807-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-32807-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 61878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	Total BTEX	
890-5188-2	SS02	Total/NA	Solid	Total BTEX	
890-5188-3	SS03	Total/NA	Solid	Total BTEX	
890-5188-4	SS04	Total/NA	Solid	Total BTEX	
890-5188-5	SS05	Total/NA	Solid	Total BTEX	
890-5188-6	SS06	Total/NA	Solid	Total BTEX	
890-5188-7	SS07	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 61786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	8015B NM	61797
890-5188-2	SS02	Total/NA	Solid	8015B NM	61797
890-5188-3	SS03	Total/NA	Solid	8015B NM	61797
890-5188-4	SS04	Total/NA	Solid	8015B NM	61797
890-5188-5	SS05	Total/NA	Solid	8015B NM	61797
890-5188-6	SS06	Total/NA	Solid	8015B NM	61797
890-5188-7	SS07	Total/NA	Solid	8015B NM	61797
MB 880-61797/1-A	Method Blank	Total/NA	Solid	8015B NM	61797
LCS 880-61797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61797

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## QC Association Summary

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

## GC Semi VOA (Continued)

## Analysis Batch: 61786 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-61797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61797
890-5188-4 MS	SS04	Total/NA	Solid	8015B NM	61797
890-5188-4 MSD	SS04	Total/NA	Solid	8015B NM	61797

## Prep Batch: 61797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	8015NM Prep	
890-5188-2	SS02	Total/NA	Solid	8015NM Prep	
890-5188-3	SS03	Total/NA	Solid	8015NM Prep	
890-5188-4	SS04	Total/NA	Solid	8015NM Prep	
890-5188-5	SS05	Total/NA	Solid	8015NM Prep	
890-5188-6	SS06	Total/NA	Solid	8015NM Prep	
890-5188-7	SS07	Total/NA	Solid	8015NM Prep	
MB 880-61797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-61797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5188-4 MS	SS04	Total/NA	Solid	8015NM Prep	
890-5188-4 MSD	SS04	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 61914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Total/NA	Solid	8015 NM	
890-5188-2	SS02	Total/NA	Solid	8015 NM	
890-5188-3	SS03	Total/NA	Solid	8015 NM	
890-5188-4	SS04	Total/NA	Solid	8015 NM	
890-5188-5	SS05	Total/NA	Solid	8015 NM	
890-5188-6	SS06	Total/NA	Solid	8015 NM	
890-5188-7	SS07	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 61798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Soluble	Solid	DI Leach	
890-5188-2	SS02	Soluble	Solid	DI Leach	
890-5188-3	SS03	Soluble	Solid	DI Leach	
890-5188-4	SS04	Soluble	Solid	DI Leach	
890-5188-5	SS05	Soluble	Solid	DI Leach	
890-5188-6	SS06	Soluble	Solid	DI Leach	
890-5188-7	SS07	Soluble	Solid	DI Leach	
MB 880-61798/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-61798/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-61798/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32585-A-8-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-32585-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-32797-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-32797-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 61847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-1	SS01	Soluble	Solid	300.0	61798

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## QC Association Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

## HPLC/IC (Continued)

## Analysis Batch: 61847 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5188-2	SS02	Soluble	Solid	300.0	61798
890-5188-3	SS03	Soluble	Solid	300.0	61798
890-5188-4	SS04	Soluble	Solid	300.0	61798
890-5188-5	SS05	Soluble	Solid	300.0	61798
890-5188-6	SS06	Soluble	Solid	300.0	61798
890-5188-7	SS07	Soluble	Solid	300.0	61798
MB 880-61798/1-A	Method Blank	Soluble	Solid	300.0	61798
LCS 880-61798/2-A	Lab Control Sample	Soluble	Solid	300.0	61798
LCSD 880-61798/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	61798
880-32585-A-8-B MS	Matrix Spike	Soluble	Solid	300.0	61798
880-32585-A-8-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	61798
880-32797-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	61798
880-32797-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	61798

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Eurofins Carlsbad

## Lab Chronicle

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

## Client Sample ID: SS01

Date Collected: 08/31/23 11:10

Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 12:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 12:52	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		10			61847	09/05/23 18:53	CH	EET MID

## Client Sample ID: SS02

Date Collected: 08/31/23 11:15

Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 13:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	61786	09/05/23 20:41	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		10			61847	09/05/23 19:00	CH	EET MID

## Client Sample ID: SS03

Date Collected: 08/31/23 11:20

Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 13:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 13:37	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		10			61847	09/05/23 19:07	CH	EET MID

## Client Sample ID: SS04

Date Collected: 08/31/23 11:25

Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 13:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID

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## Lab Chronicle

Client: Ensolum  
Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
SDG: 03C1558269

## Client Sample ID: SS04

Date Collected: 08/31/23 11:25  
Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 11:45	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		5			61847	09/05/23 19:13	CH	EET MID

## Client Sample ID: SS05

Date Collected: 08/31/23 11:35  
Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 14:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 13:59	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		1			61847	09/05/23 19:20	CH	EET MID

## Client Sample ID: SS06

Date Collected: 08/31/23 11:40  
Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 14:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 14:21	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		1			61847	09/05/23 19:27	CH	EET MID

## Client Sample ID: SS07

Date Collected: 08/31/23 11:30  
Date Received: 09/01/23 08:11

## Lab Sample ID: 890-5188-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	61792	09/05/23 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61790	09/05/23 14:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61878	09/05/23 17:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			61914	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 14:43	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Ensolum  
 Project/Site: North Indian Flats 26 Fed 1

Job ID: 890-5188-1  
 SDG: 03C1558269

**Client Sample ID: SS07**

Date Collected: 08/31/23 11:30

Date Received: 09/01/23 08:11

**Lab Sample ID: 890-5188-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	61798	09/05/23 10:27	SMC	EET MID
Soluble	Analysis	300.0		5			61847	09/05/23 19:33	CH	EET MID

**Laboratory References:**

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

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Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

### **Laboratory: Eurofins Midland**

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

## Method Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

### Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

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

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## Sample Summary

Client: Ensolum

Job ID: 890-5188-1

Project/Site: North Indian Flats 26 Fed 1

SDG: 03C1558269

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5188-1	SS01	Solid	08/31/23 11:10	09/01/23 08:11	0.5
890-5188-2	SS02	Solid	08/31/23 11:15	09/01/23 08:11	0.5
890-5188-3	SS03	Solid	08/31/23 11:20	09/01/23 08:11	0.5
890-5188-4	SS04	Solid	08/31/23 11:25	09/01/23 08:11	0.5
890-5188-5	SS05	Solid	08/31/23 11:35	09/01/23 08:11	0.5
890-5188-6	SS06	Solid	08/31/23 11:40	09/01/23 08:11	0.5
890-5188-7	SS07	Solid	08/31/23 11:30	09/01/23 08:11	0.5

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Environment Testing

318

**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**  
**1-800-444-3222, 1-800-322-2222, 1-800-322-2223**

Work Order No: \_\_\_\_\_

Project Manager:	Ben Belli	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 Nati Parks Hwy	Address:	3104 E Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852	Email:	bbelli@ensolum.com

<a href="http://www.xenco.com">www.xenco.com</a> Page <u>      </u> of <u>      </u>					
<b>Work Order Comments</b>					
Program:	<input type="checkbox"/> UST/PST	<input type="checkbox"/> PRP	<input type="checkbox"/> Brownfields	<input type="checkbox"/> RRC	<input type="checkbox"/> Superfund
State of Project:					
Reporting:	<input type="checkbox"/> Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> PST/UST	<input type="checkbox"/> TRRP	<input type="checkbox"/> Level IV
Deliverables:	<input type="checkbox"/> EDD	<input type="checkbox"/> ADaPT	Other:		

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 SiO <sub>2</sub> 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 delivery/return of samples constitutes a valid purchase order from client/company to Eurofins Xencos, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xencos 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 Xencos. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencos, but not analyzed. These terms will be enforced unless previously negotiated.

Released by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<u>Patricia</u>	<u>Adriana</u>	9-1-23 8:18			
3					
5					

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5188-1

SDG Number: 03C1558269

**Login Number: 5188****List Source: Eurofins Carlsbad****List Number: 1****Creator: Lopez, Abraham**

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.	N/A	Refer to Job Narrative for details.
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	

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5188-1

SDG Number: 03C1558269

**Login Number: 5188****List Source: Eurofins Midland****List Number: 2****List Creation: 09/05/23 08:34 AM****Creator: Rodriguez, Leticia**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
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

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Tacoma Morrissey  
Ensolum  
601 N. Marienfeld St.  
Suite 400  
Midland, Texas 79701

Generated 10/9/2023 3:09:49 PM

## JOB DESCRIPTION

NORTH INDIAN FLATS 26 FED 1  
SDG NUMBER 03C1558269

## JOB NUMBER

890-5365-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

# Eurofins Carlsbad

## Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

## Authorization



Generated  
10/9/2023 3:09:49 PM

Authorized for release by  
Jessica Kramer, Project Manager  
[Jessica.Kramer@et.eurofinsus.com](mailto:Jessica.Kramer@et.eurofinsus.com)  
(432)704-5440

# Table of Contents

Cover Page .....	1	3
Table of Contents .....	3	4
Definitions/Glossary .....	4	5
Case Narrative .....	5	6
Client Sample Results .....	7	6
Surrogate Summary .....	18	7
QC Sample Results .....	20	8
QC Association Summary .....	26	8
Lab Chronicle .....	30	9
Certification Summary .....	34	10
Method Summary .....	35	11
Sample Summary .....	36	11
Chain of Custody .....	37	12
Receipt Checklists .....	38	13
		14

## Definitions/Glossary

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

#### GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.**

□	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: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

### Job ID: 890-5365-1

#### Laboratory: Eurofins Carlsbad

##### Narrative

##### Job Narrative 890-5365-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

##### Receipt

The samples were received on 9/28/2023 11:46 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 3.6°C

##### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SW01 (890-5365-1), SW02 (890-5365-2), SW03 (890-5365-3), SW04 (890-5365-4), FS01 (890-5365-5), FS02 (890-5365-6), FS03 (890-5365-7), FS04 (890-5365-8), FS05 (890-5365-9), FS06 (890-5365-10), FS07 (890-5365-11), FS08 (890-5365-12) and FS09 (890-5365-13).

##### GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63776 and analytical batch 880-64078 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63776 and analytical batch 880-64078 was outside the control 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 surrogate recovery for the blank associated with preparation batch 880-63700 and analytical batch 880-63835 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-63700/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-63936 and analytical batch 880-63913 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-63936/2-A). Evidence of matrix interferences is not obvious.

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

##### HPLC/IC

Method 300\_ORGFM\_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-63653 and analytical batch 880-63879 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

**Case Narrative**

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

**Job ID: 890-5365-1 (Continued)****Laboratory: Eurofins Carlsbad (Continued)**

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

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: SW01

Lab Sample ID: 890-5365-1

Matrix: Solid

Date Collected: 09/28/23 09:00

Date Received: 09/28/23 11:46

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
Ethylbenzene	<0.00199	U F1	0.00199	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
o-Xylene	<0.00199	U F1	0.00199	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		10/02/23 15:48	10/06/23 12:04	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		95		70 - 130		10/02/23 15:48	10/06/23 12:04	1
1,4-Difluorobenzene (Surr)		108		70 - 130		10/02/23 15:48	10/06/23 12:04	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 12:04	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/03/23 11:20	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/30/23 19:46	10/03/23 11:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/30/23 19:46	10/03/23 11:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/23 19:46	10/03/23 11:20	1
<b>Surrogate</b>								
1-Chlorooctane								1
o-Terphenyl								1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.4	F1	5.04	mg/Kg			10/03/23 17:43	1

## Client Sample ID: SW02

Lab Sample ID: 890-5365-2

Matrix: Solid

Date Collected: 09/28/23 09:05

Date Received: 09/28/23 11:46

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/02/23 15:48	10/06/23 12:30	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		99		70 - 130		10/02/23 15:48	10/06/23 12:30	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

**Client Sample ID: SW02**  
 Date Collected: 09/28/23 09:05  
 Date Received: 09/28/23 11:46  
 Sample Depth: 0-4

**Lab Sample ID: 890-5365-2**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130	10/02/23 15:48	10/06/23 12:30	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/06/23 12:30	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			10/03/23 12:27	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		09/30/23 19:46	10/03/23 12:27	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		09/30/23 19:46	10/03/23 12:27	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		09/30/23 19:46	10/03/23 12:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	09/30/23 19:46	10/03/23 12:27	1
o-Terphenyl	106		70 - 130	09/30/23 19:46	10/03/23 12:27	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91.0		5.05	mg/Kg			10/03/23 18:00	1

**Client Sample ID: SW03****Lab Sample ID: 890-5365-3**

Matrix: Solid

Date Collected: 09/28/23 09:10

Date Received: 09/28/23 11:46

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 12:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 12:57	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	10/02/23 15:48	10/06/23 12:57	1
1,4-Difluorobenzene (Surr)	104		70 - 130	10/02/23 15:48	10/06/23 12:57	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/06/23 12:57	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			10/03/23 12:49	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: SW03

Lab Sample ID: 890-5365-3

Date Collected: 09/28/23 09:10

Matrix: Solid

Date Received: 09/28/23 11:46

Sample Depth: 0-4

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg	09/30/23 19:46	10/03/23 12:49		1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg	09/30/23 19:46	10/03/23 12:49		1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg	09/30/23 19:46	10/03/23 12:49		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130			09/30/23 19:46	10/03/23 12:49	1
o-Terphenyl	109		70 - 130			09/30/23 19:46	10/03/23 12:49	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.7		5.03	mg/Kg			10/03/23 18:06	1

## Client Sample ID: SW04

Lab Sample ID: 890-5365-4

Date Collected: 09/28/23 09:15

Matrix: Solid

Date Received: 09/28/23 11:46

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
Toluene	<0.00199	U	0.00199	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
o-Xylene	<0.00199	U	0.00199	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg	10/02/23 15:48	10/06/23 13:23		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			10/02/23 15:48	10/06/23 13:23	1
1,4-Difluorobenzene (Surr)	101		70 - 130			10/02/23 15:48	10/06/23 13:23	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 13:23	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			10/03/23 13:12	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg	09/30/23 19:46	10/03/23 13:12		1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg	09/30/23 19:46	10/03/23 13:12		1
OII Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg	09/30/23 19:46	10/03/23 13:12		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			09/30/23 19:46	10/03/23 13:12	1
o-Terphenyl	94		70 - 130			09/30/23 19:46	10/03/23 13:12	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: SW04

## Lab Sample ID: 890-5365-4

Matrix: Solid

Date Collected: 09/28/23 09:15

Date Received: 09/28/23 11:46

Sample Depth: 0-4

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.3		5.02	mg/Kg			10/03/23 18:12	1

## Client Sample ID: FS01

## Lab Sample ID: 890-5365-5

Matrix: Solid

Date Collected: 09/28/23 09:30

Date Received: 09/28/23 11:46

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			10/02/23 15:48	10/06/23 13:49	1
1,4-Difluorobenzene (Surr)	109		70 - 130			10/02/23 15:48	10/06/23 13:49	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 13:49	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.5		49.8	mg/Kg			10/03/23 13:34	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/30/23 19:46	10/03/23 13:34	1
Diesel Range Organics (Over C10-C28)	60.5		49.8	mg/Kg		09/30/23 19:46	10/03/23 13:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/23 19:46	10/03/23 13:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			09/30/23 19:46	10/03/23 13:34	1
o-Terphenyl	105		70 - 130			09/30/23 19:46	10/03/23 13:34	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	508		5.02	mg/Kg			10/03/23 18:18	1

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## Client Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

## Client Sample ID: FS02

Lab Sample ID: 890-5365-6

Matrix: Solid

Date Collected: 09/28/23 09:35  
Date Received: 09/28/23 11:46  
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
Toluene	<0.00200	U	0.00200	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg	10/02/23 15:48	10/06/23 14:15		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		97		70 - 130		10/02/23 15:48	10/06/23 14:15	1
1,4-Difluorobenzene (Surr)		105		70 - 130		10/02/23 15:48	10/06/23 14:15	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/06/23 14:15	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/03/23 13:56	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg	10/30/23 19:46	10/03/23 13:56		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	10/30/23 19:46	10/03/23 13:56		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	10/30/23 19:46	10/03/23 13:56		1
<b>Surrogate</b>								
1-Chlorooctane								1
o-Terphenyl								1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	444		4.99	mg/Kg			10/04/23 08:37	1

## Client Sample ID: FS03

Lab Sample ID: 890-5365-7

Matrix: Solid

Date Collected: 09/28/23 09:40  
Date Received: 09/28/23 11:46  
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
Toluene	<0.00201	U	0.00201	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
o-Xylene	<0.00201	U	0.00201	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg	10/02/23 15:48	10/06/23 14:41		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		96		70 - 130		10/02/23 15:48	10/06/23 14:41	1

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## Client Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

**Client Sample ID: FS03**  
Date Collected: 09/28/23 09:40  
Date Received: 09/28/23 11:46  
Sample Depth: 4

**Lab Sample ID: 890-5365-7**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	10/02/23 15:48	10/06/23 14:41	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/06/23 14:41	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			10/03/23 14:19	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		09/30/23 19:46	10/03/23 14:19	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2	mg/Kg		09/30/23 19:46	10/03/23 14:19	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		09/30/23 19:46	10/03/23 14:19	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/30/23 19:46	10/03/23 14:19	1
<i>o</i> -Terphenyl	95		70 - 130	09/30/23 19:46	10/03/23 14:19	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1470		24.9	mg/Kg			10/04/23 08:43	5

**Client Sample ID: FS04****Lab Sample ID: 890-5365-8**

Matrix: Solid

Date Collected: 09/28/23 09:45

Date Received: 09/28/23 11:46

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 15:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 15:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 15:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 15:07	1
<i>o</i> -Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 15:07	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 15:07	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	10/02/23 15:48	10/06/23 15:07	1
1,4-Difluorobenzene (Surr)	118		70 - 130	10/02/23 15:48	10/06/23 15:07	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/06/23 15:07	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			10/03/23 14:41	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: FS04

Lab Sample ID: 890-5365-8

Matrix: Solid

Date Collected: 09/28/23 09:45  
 Date Received: 09/28/23 11:46

Sample Depth: 4

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		09/30/23 19:46	10/03/23 14:41	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4	mg/Kg		09/30/23 19:46	10/03/23 14:41	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		09/30/23 19:46	10/03/23 14:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			09/30/23 19:46	10/03/23 14:41	1
o-Terphenyl	93		70 - 130			09/30/23 19:46	10/03/23 14:41	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	745		4.97	mg/Kg			10/04/23 08:49	1

## Client Sample ID: FS05

Lab Sample ID: 890-5365-9

Matrix: Solid

Date Collected: 09/28/23 10:00  
 Date Received: 09/28/23 11:46

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 15:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			10/02/23 15:48	10/06/23 15:33	1
1,4-Difluorobenzene (Surr)	111		70 - 130			10/02/23 15:48	10/06/23 15:33	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 15:33	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			10/03/23 15:03	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		09/30/23 19:46	10/03/23 15:03	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		09/30/23 19:46	10/03/23 15:03	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		09/30/23 19:46	10/03/23 15:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			09/30/23 19:46	10/03/23 15:03	1
o-Terphenyl	110		70 - 130			09/30/23 19:46	10/03/23 15:03	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

**Client Sample ID: FS05**  
 Date Collected: 09/28/23 10:00  
 Date Received: 09/28/23 11:46  
 Sample Depth: 4

**Lab Sample ID: 890-5365-9**  
 Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	747		4.97	mg/Kg			10/04/23 08:55	1

**Client Sample ID: FS06**  
 Date Collected: 09/28/23 10:05  
 Date Received: 09/28/23 11:46  
 Sample Depth: 4

**Lab Sample ID: 890-5365-10**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/02/23 15:48	10/06/23 16:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			10/02/23 15:48	10/06/23 16:06	1
1,4-Difluorobenzene (Surr)	108		70 - 130			10/02/23 15:48	10/06/23 16:06	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/06/23 16:06	1

**Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/03/23 15:25	1

**Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/30/23 19:46	10/03/23 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/30/23 19:46	10/03/23 15:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/23 19:46	10/03/23 15:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			09/30/23 19:46	10/03/23 15:25	1
o-Terphenyl	104		70 - 130			09/30/23 19:46	10/03/23 15:25	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	891		5.00	mg/Kg			10/04/23 09:00	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: FS07

Date Collected: 09/28/23 10:10

Date Received: 09/28/23 11:46

Sample Depth: 4

## Lab Sample ID: 890-5365-11

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 17:50	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		97		70 - 130		10/02/23 15:48	10/06/23 17:50	1
1,4-Difluorobenzene (Surr)		106		70 - 130		10/02/23 15:48	10/06/23 17:50	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 17:50	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			10/05/23 01:09	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		10/04/23 09:49	10/05/23 01:09	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		10/04/23 09:49	10/05/23 01:09	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		10/04/23 09:49	10/05/23 01:09	1
<b>Surrogate</b>								
1-Chlorooctane								1
o-Terphenyl								1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	842		4.96	mg/Kg			10/04/23 09:06	1

## Client Sample ID: FS08

Date Collected: 09/28/23 10:15

Date Received: 09/28/23 11:46

Sample Depth: 4

## Lab Sample ID: 890-5365-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/02/23 15:48	10/06/23 18:16	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		96		70 - 130		10/02/23 15:48	10/06/23 18:16	1

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## Client Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

## Client Sample ID: FS08

## Lab Sample ID: 890-5365-12

Date Collected: 09/28/23 10:15

Matrix: Solid

Date Received: 09/28/23 11:46

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	10/02/23 15:48	10/06/23 18:16	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/06/23 18:16	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/05/23 01:31	1

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/05/23 01:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/05/23 01:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/05/23 01:31	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	10/04/23 09:49	10/05/23 01:31	1
o-Terphenyl	109		70 - 130	10/04/23 09:49	10/05/23 01:31	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1280		25.2	mg/Kg			10/04/23 09:24	5

## Client Sample ID: FS09

## Lab Sample ID: 890-5365-13

Date Collected: 09/28/23 10:20

Matrix: Solid

Date Received: 09/28/23 11:46

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 18:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 18:42	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/02/23 15:48	10/06/23 18:42	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	10/02/23 15:48	10/06/23 18:42	1
1,4-Difluorobenzene (Surr)	112		70 - 130	10/02/23 15:48	10/06/23 18:42	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/06/23 18:42	1

## Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.1		50.1	mg/Kg			10/05/23 01:52	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: FS09

## Lab Sample ID: 890-5365-13

Date Collected: 09/28/23 10:20

Matrix: Solid

Date Received: 09/28/23 11:46

Sample Depth: 4

## Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		10/04/23 09:49	10/05/23 01:52	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>53.1</b>		50.1	mg/Kg		10/04/23 09:49	10/05/23 01:52	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		10/04/23 09:49	10/05/23 01:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	120		70 - 130			10/04/23 09:49	10/05/23 01:52	1
<i>o</i> -Terphenyl	105		70 - 130			10/04/23 09:49	10/05/23 01:52	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1530		24.9	mg/Kg			10/04/23 09:29	5

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## Surrogate Summary

Client: Ensolum

Job ID: 890-5365-1

Project/Site: NORTH INDIAN FLATS 26 FED 1

SDG: 03C1558269

## 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)
890-5365-1	SW01	95	108
890-5365-1 MS	SW01	88	107
890-5365-1 MSD	SW01	91	103
890-5365-2	SW02	99	112
890-5365-3	SW03	85	104
890-5365-4	SW04	89	101
890-5365-5	FS01	98	109
890-5365-6	FS02	97	105
890-5365-7	FS03	96	107
890-5365-8	FS04	102	118
890-5365-9	FS05	90	111
890-5365-10	FS06	96	108
890-5365-11	FS07	97	106
890-5365-12	FS08	96	102
890-5365-13	FS09	111	112
LCS 880-63776/1-A	Lab Control Sample	90	104
LCSD 880-63776/2-A	Lab Control Sample Dup	89	103
MB 880-63776/5-A	Method Blank	55 S1-	96

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5365-1	SW01	108	96
890-5365-1 MS	SW01	107	83
890-5365-1 MSD	SW01	108	85
890-5365-2	SW02	122	106
890-5365-3	SW03	126	109
890-5365-4	SW04	110	94
890-5365-5	FS01	123	105
890-5365-6	FS02	110	93
890-5365-7	FS03	108	95
890-5365-8	FS04	106	93
890-5365-9	FS05	128	110
890-5365-10	FS06	119	104
890-5365-11	FS07	114	100
890-5365-12	FS08	125	109
890-5365-13	FS09	120	105
890-5376-A-15-E MS	Matrix Spike	129	107
890-5376-A-15-F MSD	Matrix Spike Duplicate	129	105
LCS 880-63700/2-A	Lab Control Sample	136 S1+	145 S1+
LCS 880-63936/2-A	Lab Control Sample	136 S1+	143 S1+
LCSD 880-63700/3-A	Lab Control Sample Dup	110	117
LCSD 880-63936/3-A	Lab Control Sample Dup	102	107

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## Surrogate Summary

Client: Ensolum

Job ID: 890-5365-1

Project/Site: NORTH INDIAN FLATS 26 FED 1

SDG: 03C1558269

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		1
		1CO1 (70-130)	OTPH1 (70-130)	
MB 880-63700/1-A	Method Blank	159 S1+	150 S1+	
MB 880-63936/1-A	Method Blank	138 S1+	129	

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

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

Lab Sample ID: MB 880-63776/5-A

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63776

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Benzene	<0.00200	U	0.00200		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
Toluene	<0.00200	U	0.00200		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	10/02/23 15:48		10/06/23 11:38		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130			10/02/23 15:48		10/06/23 11:38		1
1,4-Difluorobenzene (Surr)	96		70 - 130			10/02/23 15:48		10/06/23 11:38		1

Lab Sample ID: LCS 880-63776/1-A

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63776

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifier							
Benzene	0.100	0.07044		mg/Kg			70	70 - 130		
Toluene	0.100	0.08066		mg/Kg			81	70 - 130		
Ethylbenzene	0.100	0.07569		mg/Kg			76	70 - 130		
m-Xylene & p-Xylene	0.200	0.1494		mg/Kg			75	70 - 130		
o-Xylene	0.100	0.07498		mg/Kg			75	70 - 130		
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	90		70 - 130							
1,4-Difluorobenzene (Surr)	104		70 - 130							

Lab Sample ID: LCSD 880-63776/2-A

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63776

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.07310		mg/Kg			73	70 - 130		4	35
Toluene	0.100	0.07874		mg/Kg			79	70 - 130		2	35
Ethylbenzene	0.100	0.07952		mg/Kg			80	70 - 130		5	35
m-Xylene & p-Xylene	0.200	0.1580		mg/Kg			79	70 - 130		6	35
o-Xylene	0.100	0.07679		mg/Kg			77	70 - 130		2	35
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	89		70 - 130								
1,4-Difluorobenzene (Surr)	103		70 - 130								

Lab Sample ID: 890-5365-1 MS

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 63776

Analyte	Sample	Sample	Spikes	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00199	U F1	0.0998	0.06917	F1	mg/Kg			69	70 - 130	
Toluene	<0.00199	U F1	0.0998	0.06608	F1	mg/Kg			66	70 - 130	

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## QC Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

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

Lab Sample ID: 890-5365-1 MS

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 63776

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00199	U F1	0.0998	0.05899	F1	mg/Kg		58	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1130	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.05946	F1	mg/Kg		60	70 - 130

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	88		70 - 130		
1,4-Difluorobenzene (Surr)	107		70 - 130		

Lab Sample ID: 890-5365-1 MSD

Matrix: Solid

Analysis Batch: 64078

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 63776

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00199	U F1	0.0990	0.05614	F1	mg/Kg		57	70 - 130
Toluene	<0.00199	U F1	0.0990	0.05472	F1	mg/Kg		55	70 - 130
Ethylbenzene	<0.00199	U F1	0.0990	0.04984	F1	mg/Kg		49	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.09469	F1	mg/Kg		48	70 - 130
o-Xylene	<0.00199	U F1	0.0990	0.04966	F1	mg/Kg		50	70 - 130

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	91		70 - 130		
1,4-Difluorobenzene (Surr)	103		70 - 130		

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

Lab Sample ID: MB 880-63700/1-A

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63700

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/30/23 19:46	10/03/23 08:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/23 19:46	10/03/23 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/23 19:46	10/03/23 08:44	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Recovery	Qualifier						
1-Chlorooctane	159	S1+	70 - 130			09/30/23 19:46	10/03/23 08:44	1
o-Terphenyl	150	S1+	70 - 130			09/30/23 19:46	10/03/23 08:44	1

Lab Sample ID: LCS 880-63700/2-A

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63700

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	939.7		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.0		mg/Kg		96	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

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

Lab Sample ID: LCS 880-63700/2-A

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63700

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	136	S1+	70 - 130
<i>o</i> -Terphenyl	145	S1+	70 - 130

Lab Sample ID: LCSD 880-63700/3-A

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63700

Analyte		Spike	LCSD	LCSD			%Rec	RPD
		Added	Result	Qualifier	Unit	D	Limits	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	944.3		mg/Kg	94	70 - 130	0
Diesel Range Organics (Over C10-C28)		1000	976.9		mg/Kg	98	70 - 130	1

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
<i>o</i> -Terphenyl	117		70 - 130

Lab Sample ID: 890-5365-1 MS

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 63700

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	992	1192		mg/Kg	118	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	992	987.7		mg/Kg	97	70 - 130

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
<i>o</i> -Terphenyl	83		70 - 130

Lab Sample ID: 890-5365-1 MSD

Matrix: Solid

Analysis Batch: 63835

Client Sample ID: SW01

Prep Type: Total/NA

Prep Batch: 63700

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	992	1205		mg/Kg	120	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	992	1030		mg/Kg	102	70 - 130

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	108		70 - 130
<i>o</i> -Terphenyl	85		70 - 130

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## QC Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

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

Lab Sample ID: MB 880-63936/1-A

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63936

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/04/23 19:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/04/23 19:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/04/23 09:49	10/04/23 19:21	1
Surrogate	MB	MB	Limits	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1-Chlorooctane	138	S1+	70 - 130			10/04/23 09:49	10/04/23 19:21	1
o-Terphenyl	129		70 - 130			10/04/23 09:49	10/04/23 19:21	1

Lab Sample ID: LCS 880-63936/2-A

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63936

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10			1000	995.3		mg/Kg		100	70 - 130	
Diesel Range Organics (Over C10-C28)			1000	957.7		mg/Kg		96	70 - 130	
Surrogate	MB	MB	Limits	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
	%Recovery	Qualifier								
1-Chlorooctane	136	S1+	70 - 130							
o-Terphenyl	143	S1+	70 - 130							

Lab Sample ID: LCSD 880-63936/3-A

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 63936

Analyte	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD
	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10			1000	903.4		mg/Kg		90	70 - 130	10
Diesel Range Organics (Over C10-C28)			1000	895.3		mg/Kg		90	70 - 130	7
Surrogate	MB	MB	Limits	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
	%Recovery	Qualifier								
1-Chlorooctane	102	S1+	70 - 130							
o-Terphenyl	107	S1+	70 - 130							

Lab Sample ID: 890-5376-A-15-E MS

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 63936

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	991	850.5		mg/Kg		83	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.5	U	991	1107		mg/Kg		112	70 - 130	

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## QC Sample Results

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

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

Lab Sample ID: 890-5376-A-15-E MS

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 63936

Surrogate	MS	MS	%Recovery	Qualifier	Limits
1-Chlorooctane			129		70 - 130
<i>o</i> -Terphenyl			107		70 - 130

Lab Sample ID: 890-5376-A-15-F MSD

Matrix: Solid

Analysis Batch: 63913

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 63936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	991	844.8		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.5	U	991	1075		mg/Kg		108	70 - 130	3	20

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
1-Chlorooctane			129		70 - 130
<i>o</i> -Terphenyl			105		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63653/1-A

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/03/23 17:25	1

Lab Sample ID: LCS 880-63653/2-A

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	238.4		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-63653/3-A

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit	
Chloride	250	238.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-5365-1 MS

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: SW01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	37.4	F1	252	341.2	F1	mg/Kg		121	90 - 110

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## QC Sample Results

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-5365-1 MSD

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: SW01  
 Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	37.4	F1	252	341.7	F1	mg/Kg	121	90 - 110	0	20	

Lab Sample ID: 890-5365-11 MS

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: FS07  
 Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	842		248	1106		mg/Kg	107	90 - 110			

Lab Sample ID: 890-5365-11 MSD

Matrix: Solid

Analysis Batch: 63879

Client Sample ID: FS07  
 Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	842		248	1104		mg/Kg	106	90 - 110	0	20	

## QC Association Summary

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1Job ID: 890-5365-1  
SDG: 03C1558269

## GC VOA

## Prep Batch: 63776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	5035	
890-5365-2	SW02	Total/NA	Solid	5035	
890-5365-3	SW03	Total/NA	Solid	5035	
890-5365-4	SW04	Total/NA	Solid	5035	
890-5365-5	FS01	Total/NA	Solid	5035	
890-5365-6	FS02	Total/NA	Solid	5035	
890-5365-7	FS03	Total/NA	Solid	5035	
890-5365-8	FS04	Total/NA	Solid	5035	
890-5365-9	FS05	Total/NA	Solid	5035	
890-5365-10	FS06	Total/NA	Solid	5035	
890-5365-11	FS07	Total/NA	Solid	5035	
890-5365-12	FS08	Total/NA	Solid	5035	
890-5365-13	FS09	Total/NA	Solid	5035	
MB 880-63776/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63776/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63776/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5365-1 MS	SW01	Total/NA	Solid	5035	
890-5365-1 MSD	SW01	Total/NA	Solid	5035	

## Analysis Batch: 64078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	8021B	63776
890-5365-2	SW02	Total/NA	Solid	8021B	63776
890-5365-3	SW03	Total/NA	Solid	8021B	63776
890-5365-4	SW04	Total/NA	Solid	8021B	63776
890-5365-5	FS01	Total/NA	Solid	8021B	63776
890-5365-6	FS02	Total/NA	Solid	8021B	63776
890-5365-7	FS03	Total/NA	Solid	8021B	63776
890-5365-8	FS04	Total/NA	Solid	8021B	63776
890-5365-9	FS05	Total/NA	Solid	8021B	63776
890-5365-10	FS06	Total/NA	Solid	8021B	63776
890-5365-11	FS07	Total/NA	Solid	8021B	63776
890-5365-12	FS08	Total/NA	Solid	8021B	63776
890-5365-13	FS09	Total/NA	Solid	8021B	63776
MB 880-63776/5-A	Method Blank	Total/NA	Solid	8021B	63776
LCS 880-63776/1-A	Lab Control Sample	Total/NA	Solid	8021B	63776
LCSD 880-63776/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63776
890-5365-1 MS	SW01	Total/NA	Solid	8021B	63776
890-5365-1 MSD	SW01	Total/NA	Solid	8021B	63776

## Analysis Batch: 64290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	Total BTEX	
890-5365-2	SW02	Total/NA	Solid	Total BTEX	
890-5365-3	SW03	Total/NA	Solid	Total BTEX	
890-5365-4	SW04	Total/NA	Solid	Total BTEX	
890-5365-5	FS01	Total/NA	Solid	Total BTEX	
890-5365-6	FS02	Total/NA	Solid	Total BTEX	
890-5365-7	FS03	Total/NA	Solid	Total BTEX	
890-5365-8	FS04	Total/NA	Solid	Total BTEX	
890-5365-9	FS05	Total/NA	Solid	Total BTEX	

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## QC Association Summary

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## GC VOA (Continued)

## Analysis Batch: 64290 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-10	FS06	Total/NA	Solid	Total BTEX	
890-5365-11	FS07	Total/NA	Solid	Total BTEX	
890-5365-12	FS08	Total/NA	Solid	Total BTEX	
890-5365-13	FS09	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 63700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	8015NM Prep	
890-5365-2	SW02	Total/NA	Solid	8015NM Prep	
890-5365-3	SW03	Total/NA	Solid	8015NM Prep	
890-5365-4	SW04	Total/NA	Solid	8015NM Prep	
890-5365-5	FS01	Total/NA	Solid	8015NM Prep	
890-5365-6	FS02	Total/NA	Solid	8015NM Prep	
890-5365-7	FS03	Total/NA	Solid	8015NM Prep	
890-5365-8	FS04	Total/NA	Solid	8015NM Prep	
890-5365-9	FS05	Total/NA	Solid	8015NM Prep	
890-5365-10	FS06	Total/NA	Solid	8015NM Prep	
MB 880-63700/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63700/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63700/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5365-1 MS	SW01	Total/NA	Solid	8015NM Prep	
890-5365-1 MSD	SW01	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 63835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	8015B NM	63700
890-5365-2	SW02	Total/NA	Solid	8015B NM	63700
890-5365-3	SW03	Total/NA	Solid	8015B NM	63700
890-5365-4	SW04	Total/NA	Solid	8015B NM	63700
890-5365-5	FS01	Total/NA	Solid	8015B NM	63700
890-5365-6	FS02	Total/NA	Solid	8015B NM	63700
890-5365-7	FS03	Total/NA	Solid	8015B NM	63700
890-5365-8	FS04	Total/NA	Solid	8015B NM	63700
890-5365-9	FS05	Total/NA	Solid	8015B NM	63700
890-5365-10	FS06	Total/NA	Solid	8015B NM	63700
MB 880-63700/1-A	Method Blank	Total/NA	Solid	8015B NM	63700
LCS 880-63700/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63700
LCSD 880-63700/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63700
890-5365-1 MS	SW01	Total/NA	Solid	8015B NM	63700
890-5365-1 MSD	SW01	Total/NA	Solid	8015B NM	63700

## Analysis Batch: 63913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-11	FS07	Total/NA	Solid	8015B NM	63936
890-5365-12	FS08	Total/NA	Solid	8015B NM	63936
890-5365-13	FS09	Total/NA	Solid	8015B NM	63936
MB 880-63936/1-A	Method Blank	Total/NA	Solid	8015B NM	63936
LCS 880-63936/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63936
LCSD 880-63936/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63936

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## QC Association Summary

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## GC Semi VOA (Continued)

## Analysis Batch: 63913 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5376-A-15-E MS	Matrix Spike	Total/NA	Solid	8015B NM	63936
890-5376-A-15-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63936

## Analysis Batch: 63931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Total/NA	Solid	8015 NM	
890-5365-2	SW02	Total/NA	Solid	8015 NM	
890-5365-3	SW03	Total/NA	Solid	8015 NM	
890-5365-4	SW04	Total/NA	Solid	8015 NM	
890-5365-5	FS01	Total/NA	Solid	8015 NM	
890-5365-6	FS02	Total/NA	Solid	8015 NM	
890-5365-7	FS03	Total/NA	Solid	8015 NM	
890-5365-8	FS04	Total/NA	Solid	8015 NM	
890-5365-9	FS05	Total/NA	Solid	8015 NM	
890-5365-10	FS06	Total/NA	Solid	8015 NM	
890-5365-11	FS07	Total/NA	Solid	8015 NM	
890-5365-12	FS08	Total/NA	Solid	8015 NM	
890-5365-13	FS09	Total/NA	Solid	8015 NM	

## Prep Batch: 63936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-11	FS07	Total/NA	Solid	8015NM Prep	
890-5365-12	FS08	Total/NA	Solid	8015NM Prep	
890-5365-13	FS09	Total/NA	Solid	8015NM Prep	
MB 880-63936/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63936/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63936/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5376-A-15-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5376-A-15-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 63653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Soluble	Solid	DI Leach	
890-5365-2	SW02	Soluble	Solid	DI Leach	
890-5365-3	SW03	Soluble	Solid	DI Leach	
890-5365-4	SW04	Soluble	Solid	DI Leach	
890-5365-5	FS01	Soluble	Solid	DI Leach	
890-5365-6	FS02	Soluble	Solid	DI Leach	
890-5365-7	FS03	Soluble	Solid	DI Leach	
890-5365-8	FS04	Soluble	Solid	DI Leach	
890-5365-9	FS05	Soluble	Solid	DI Leach	
890-5365-10	FS06	Soluble	Solid	DI Leach	
890-5365-11	FS07	Soluble	Solid	DI Leach	
890-5365-12	FS08	Soluble	Solid	DI Leach	
890-5365-13	FS09	Soluble	Solid	DI Leach	
MB 880-63653/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63653/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63653/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5365-1 MS	SW01	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## HPLC/IC (Continued)

## Leach Batch: 63653 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1 MSD	SW01	Soluble	Solid	DI Leach	
890-5365-11 MS	FS07	Soluble	Solid	DI Leach	
890-5365-11 MSD	FS07	Soluble	Solid	DI Leach	

## Analysis Batch: 63879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5365-1	SW01	Soluble	Solid	300.0	63653
890-5365-2	SW02	Soluble	Solid	300.0	63653
890-5365-3	SW03	Soluble	Solid	300.0	63653
890-5365-4	SW04	Soluble	Solid	300.0	63653
890-5365-5	FS01	Soluble	Solid	300.0	63653
890-5365-6	FS02	Soluble	Solid	300.0	63653
890-5365-7	FS03	Soluble	Solid	300.0	63653
890-5365-8	FS04	Soluble	Solid	300.0	63653
890-5365-9	FS05	Soluble	Solid	300.0	63653
890-5365-10	FS06	Soluble	Solid	300.0	63653
890-5365-11	FS07	Soluble	Solid	300.0	63653
890-5365-12	FS08	Soluble	Solid	300.0	63653
890-5365-13	FS09	Soluble	Solid	300.0	63653
MB 880-63653/1-A	Method Blank	Soluble	Solid	300.0	63653
LCS 880-63653/2-A	Lab Control Sample	Soluble	Solid	300.0	63653
LCSD 880-63653/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63653
890-5365-1 MS	SW01	Soluble	Solid	300.0	63653
890-5365-1 MSD	SW01	Soluble	Solid	300.0	63653
890-5365-11 MS	FS07	Soluble	Solid	300.0	63653
890-5365-11 MSD	FS07	Soluble	Solid	300.0	63653

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## Lab Chronicle

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: SW01

Date Collected: 09/28/23 09:00

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 12:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 12:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 11:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 11:20	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/03/23 17:43	CH	EET MID

## Client Sample ID: SW02

Date Collected: 09/28/23 09:05

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 12:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 12:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 12:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 12:27	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/03/23 18:00	CH	EET MID

## Client Sample ID: SW03

Date Collected: 09/28/23 09:10

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 12:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 12:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 12:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 12:49	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/03/23 18:06	CH	EET MID

## Client Sample ID: SW04

Date Collected: 09/28/23 09:15

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 13:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 13:23	SM	EET MID

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## Lab Chronicle

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

## Client Sample ID: SW04

Date Collected: 09/28/23 09:15

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			63931	10/03/23 13:12	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 13:12	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/03/23 18:12	CH	EET MID

## Client Sample ID: FS01

Date Collected: 09/28/23 09:30

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 13:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 13:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 13:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 13:34	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/03/23 18:18	CH	EET MID

## Client Sample ID: FS02

Date Collected: 09/28/23 09:35

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 14:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 13:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 13:56	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 08:37	CH	EET MID

## Client Sample ID: FS03

Date Collected: 09/28/23 09:40

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 14:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 14:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 14:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 14:19	SM	EET MID

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## Lab Chronicle

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

## Client Sample ID: FS03

Date Collected: 09/28/23 09:40  
Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63879	10/04/23 08:43	CH	EET MID

## Client Sample ID: FS04

Date Collected: 09/28/23 09:45  
Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 15:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 15:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 14:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 14:41	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 08:49	CH	EET MID

## Client Sample ID: FS05

Date Collected: 09/28/23 10:00  
Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 15:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 15:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 15:03	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 08:55	CH	EET MID

## Client Sample ID: FS06

Date Collected: 09/28/23 10:05  
Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 16:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 16:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/03/23 15:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	63700	09/30/23 19:46	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63835	10/03/23 15:25	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 09:00	CH	EET MID

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## Lab Chronicle

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

## Client Sample ID: FS07

Date Collected: 09/28/23 10:10

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 17:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 17:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/05/23 01:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	63936	10/04/23 09:49	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63913	10/05/23 01:09	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 09:06	CH	EET MID

## Client Sample ID: FS08

Date Collected: 09/28/23 10:15

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 18:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 18:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/05/23 01:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	63936	10/04/23 09:49	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63913	10/05/23 01:31	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63879	10/04/23 09:24	CH	EET MID

## Client Sample ID: FS09

Date Collected: 09/28/23 10:20

Date Received: 09/28/23 11:46

## Lab Sample ID: 890-5365-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 18:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64290	10/06/23 18:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			63931	10/05/23 01:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	63936	10/04/23 09:49	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63913	10/05/23 01:52	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63879	10/04/23 09:29	CH	EET MID

## Laboratory References:

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

Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Ensolum  
Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
SDG: 03C1558269

### **Laboratory: Eurofins Midland**

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
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
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

**Method Summary**

Client: Ensolum  
 Project/Site: NORTH INDIAN FLATS 26 FED 1

Job ID: 890-5365-1  
 SDG: 03C1558269

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

**Protocol References:**

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

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

Eurofins Carlsbad

## Sample Summary

Client: Ensolum

Job ID: 890-5365-1

Project/Site: NORTH INDIAN FLATS 26 FED 1

SDG: 03C1558269

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5365-1	SW01	Solid	09/28/23 09:00	09/28/23 11:46	0-4
890-5365-2	SW02	Solid	09/28/23 09:05	09/28/23 11:46	0-4
890-5365-3	SW03	Solid	09/28/23 09:10	09/28/23 11:46	0-4
890-5365-4	SW04	Solid	09/28/23 09:15	09/28/23 11:46	0-4
890-5365-5	FS01	Solid	09/28/23 09:30	09/28/23 11:46	4
890-5365-6	FS02	Solid	09/28/23 09:35	09/28/23 11:46	4
890-5365-7	FS03	Solid	09/28/23 09:40	09/28/23 11:46	4
890-5365-8	FS04	Solid	09/28/23 09:45	09/28/23 11:46	4
890-5365-9	FS05	Solid	09/28/23 10:00	09/28/23 11:46	4
890-5365-10	FS06	Solid	09/28/23 10:05	09/28/23 11:46	4
890-5365-11	FS07	Solid	09/28/23 10:10	09/28/23 11:46	4
890-5365-12	FS08	Solid	09/28/23 10:15	09/28/23 11:46	4
890-5365-13	FS09	Solid	09/28/23 10:20	09/28/23 11:46	4

Houston, TX (281) 280-4200, Dallas, TX (214) 902-7330  
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) 598-3199

## Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 2

Project Manager:	Ben Bellil	Bill to: (if different)	Garrett Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garrett.Green@ExxonMobil.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

Level

III

PST/UST

TRRP

Level

IV

Deliverables:

EDD

ADAPT

Other:

Preservative Codes	None: NO	DI Water: H <sub>2</sub> O
Cool: Cool	MeOH: Me	HNO <sub>3</sub> : HN
HCl: HC	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na
H <sub>3</sub> PO <sub>4</sub> : HP		
NaHSO <sub>4</sub> : NABIS		
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>		
Zn Acetate+NaOH: Zn		
NaOH+Ascorbic Acid: SAPC		



890-5365 Chain of Custody

## Sample Comments

Received by (Signature)

Date Received

Relinquished by (Signature)

Date Relinquished

Work Order Comments

Incident ID:

nAPP2323053065

Cost Center:

1657411001

AFE:

Received by (Signature)

Date Received

Relinquished by (Signature)

Date Relinquished

ANALYSIS REQUEST							
Project Name:	North Indian Flats 26 Fed 1	Turn Around					
Project Number:	03C1558269	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code			
Project Location:		Due Date:					
Sampler's Name:	Connor Whitman						
PO #:							
<b>SAMPLE RECEIPT</b>	Temp Blank:	Yes	No	Wet Ice:	Yes	No	
Samples Received Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		Thermometer ID:	TUM007		Parameters
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	~0.8		
Sample Custody Seals:	Yes	No	N/A	Temperature Reading:	3.6		
Total Containers:				Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 3000.0)
SW01	S	9/28/2023	9:00	0 - 4	Comp	1	X X X X
SW02	S	9/28/2023	9:05	0 - 4	Comp	1	X X X X
SW03	S	9/28/2023	9:10	0 - 4	Comp	1	X X X X
SW04	S	9/28/2023	9:15	0 - 4	Comp	1	X X X X
FS01	S	9/28/2023	9:30	4	Comp	1	X X X X
FS02	S	9/28/2023	9:35	4	Comp	1	X X X X
FS03	S	9/28/2023	9:40	4	Comp	1	X X X X
FS04	S	9/28/2023	9:45	4	Comp	1	X X X X
FS05	S	9/28/2023	10:00	4	Comp	1	X X X X
FS06	S	9/28/2023	10:05	4	Comp	1	X 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 SiO<sub>2</sub> 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 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 \$65.00 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 Received

Relinquished by (Signature)

Date Relinquished

*E. Bellil**G. Green*

9/28/2023

11/13/2023

*E. Bellil*

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5365-1

SDG Number: 03C1558269

**Login Number: 5365****List Source: Eurofins Carlsbad****List Number: 1****Creator: Bruns, Shannon****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.

N/A

Refer to Job Narrative for details.

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

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5365-1

SDG Number: 03C1558269

**Login Number: 5365****List Source: Eurofins Midland****List Number: 2****List Creation: 09/29/23 11:04 AM****Creator: Rodriguez, Leticia**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
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		



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## APPENDIX D

### NMOCD Notifications

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**From:** [Rodgers, Scott, EMNRD](#)  
**To:** [Green, Garrett J](#); [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Velez, Nelson, EMNRD](#)  
**Cc:** [Ben Belill](#); [DelawareSpills /SM](#); [Collins, Melanie](#)  
**Subject:** RE: [EXTERNAL] XTO - Sampling Notification (Week of 9/25/23 - 9/29/23)  
**Date:** Wednesday, September 20, 2023 5:41:28 PM

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You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

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

The OCD has received your notification. When reporting sampling at multiple locations it is required to provide and date and time for each location. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

**Scott Rodgers** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113  
505.469.1830 | [scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/ocd>



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**From:** Green, Garrett J <garrett.green@exxonmobil.com>  
**Sent:** Wednesday, September 20, 2023 3:18 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Cc:** Ben Belill <bbelill@ensolum.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Collins, Melanie <melanie.collins@exxonmobil.com>  
**Subject:** [EXTERNAL] XTO - Sampling Notification (Week of 9/25/23 - 9/29/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of September 25, 2023.

Monday

- JRU 21 DI 9 Riser / NAPP2322141858
- Poker Lake Unit 301H / NAPP2322646789

Tuesday

- North Indian Flats 26 Fed 1 / nAPP2323653065
- Poker Lake Unit 301H / NAPP2322646789

Wednesday

- North Indian Flats 26 Fed 1 / nAPP2323653065
- BEU 70 / NAPP2318139530

Thursday

- PLU 15 Twin Wells Ranch CTB / Napp2323449490
- Perla Verde 31 State Battery / nAPP2322751480 (SLO)

Thank you,

**Garrett Green**

Environmental Coordinator

Delaware Business Unit

(575) 200-0729

[Garrett.Green@ExxonMobil.com](mailto:Garrett.Green@ExxonMobil.com)

XTO Energy, Inc.

3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
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QUESTIONS

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

Action 533769

**QUESTIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2323653065
Incident Name	NAPP2323653065 NORTH INDIAN FLATS 26 FED 1 @ FCYW2433028305
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Facility	[FCYW2433028305] INDIAN FLATS BASS FEDERAL SWD

**Location of Release Source**

*Please answer all the questions in this group.*

Site Name	NORTH INDIAN FLATS 26 FED 1
Date Release Discovered	08/11/2023
Surface Owner	Federal

**Incident Details**

*Please answer all the questions in this group.*

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

*Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	<i>Not answered.</i>
Produced Water Released (bbls) Details	<i>Cause: Equipment Failure   Flow Line - Production   Produced Water   Released: 18 BBL   Recovered: 10 BBL   Lost: 8 BBL.</i>
Is the concentration of chloride in the produced water >10,000 mg/l	<i>Yes</i>
Condensate Released (bbls) Details	<i>Not answered.</i>
Natural Gas Vented (Mcf) Details	<i>Not answered.</i>
Natural Gas Flared (Mcf) Details	<i>Not answered.</i>
Other Released Details	<i>Not answered.</i>
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	<i>Not answered.</i>

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

QUESTIONS, Page 2

Action 533769

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

*With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
--	---

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QUESTIONS, Page 3

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

Action 533769

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS****Site Characterization**

*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 100 and 200 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 1 and 100 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	1530
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	85.1
GRO+DRO (EPA SW-846 Method 8015M)	85.1
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

On what estimated date will the remediation commence	08/31/2023
On what date will (or did) the final sampling or liner inspection occur	09/28/2023
On what date will (or was) the remediation complete(d)	09/28/2023
What is the estimated surface area (in square feet) that will be reclaimed	1702
What is the estimated volume (in cubic yards) that will be reclaimed	265
What is the estimated surface area (in square feet) that will be remediated	1702
What is the estimated volume (in cubic yards) that will be remediated	265

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 4

Action 533769

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

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number: 533769
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Remediation Plan (continued)**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

*(Select all answers below that apply.)*

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
OR which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
OR is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
OR is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
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*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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

QUESTIONS, Page 5

Action 533769

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Deferral Requests Only**

*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	No
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QUESTIONS, Page 6

Action 533769

**State of New Mexico**  
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**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	473654
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/19/2025
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1702
What was the total volume (cubic yards) remediated	265
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1702
What was the total volume (in cubic yards) reclaimed	265
Summarize any additional remediation activities not included by answers (above)	"Site assessment, delineation, and excavation activities were conducted at the Site to address the August 2023 release of produced water. Laboratory analytical results for all confirmation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Site Closure Criteria and samples representing the top four feet of the excavation were compliant with the reclamation requirement. This includes sidewall soil samples SW01 through SW04, which confirms the edge of the release extent has been fully defined. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing Site conditions. The pasture area affected by the release will be reseeded with an approved BLM seed mixture. Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2323653065."

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
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QUESTIONS, Page 7

Action 533769

**State of New Mexico**  
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**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Reclamation Report**

*Only answer the questions in this group if all reclamation steps have been completed.*

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	1702
What was the total volume of replacement material (in cubic yards) for this site	265
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	10/01/2025
Summarize any additional reclamation activities not included by answers (above)	Following backfill activities, the disturbed area was contoured to match the surrounding topography and the surface was prepared for seeding. Upon confirmation that the excavation was backfilled with non-waste containing material, the disturbed pasture area will be seeded with a certified weed-free seed mix. The BLM Seed Mix #1 for loamy sites will be used to seed the Site. The seed mix will be applied via drill seeding. The Site will be monitored for vegetation growth to ensure that reclamation activities were successful.

*The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 12/10/2025
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QUESTIONS, Page 8

Action 533769

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**QUESTIONS**

**Revegetation Report**

*Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.*

Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 533769

**CONDITIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  533769
	Action Type:  [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	We have received your Reclamation Report for Incident #NAPP2323653065 NORTH INDIAN FLATS 26 FED 1, thank you. This Reclamation Report is approved.	12/30/2025