District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural **Resources Department** 

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

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

)

Incident ID	NAPP2301152626
District RP	
Facility ID	
Application ID	

## **Release Notification**

## **Responsible Party**

Responsible Party XTO Energy	OGRID 5380	
Contact Name Garrett Green	Contact Telephone 575-200-0729	
Contact email garrett.green@exxonmobil.com	Incident # (assigned by OCD)	
Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220		

## **Location of Release Source**

32.41260 Latitude

Longitude	-104.1205
(NAD 83 in decimal degrees to 5 decim	al places)

-104.12059

Site Name Indian Draw Deep 7 Com 3	Site Type Well Pad
Date Release Discovered 12/28/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
А	07	228	28E	Eddy

Surface Owner: State Federal Tribal × Private (*Name:* Clark, Sammy D & Elizabeth A

## **Nature and Volume of Release**

≭ Crude Oil	Volume Released (bbls) 46.00	Volume Recovered (bbls) 35.00
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
had a h	developed a hole due to corrosion, which caused 46bt ole which allowed 11bbl of oil to impact pad surface. V ment. A third-party contractor has been retained for rer	

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Incident ID	NAPP2301152626	
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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.
🗶 Yes 🗌 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Garrett Green to c EMNRD on 12/29/2022 v	ocd.enviro@emnrd.nm.gov; Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD;Harimon, Jocelyn, ia email.

## **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

 $\checkmark$  The source of the release has been stopped.

★ The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

▲ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have <u>not</u> been undertaken, explain why:

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

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

Printed Name:	Title:
Signature: Satt Succession	Date: $\frac{01/11/2023}{575,200,0720}$
email:	Telephone:
OCD Only	
Received by: Jocelyn Harimon	Date: 01/12/2023

NA

Location:	Indian Draw Deep 7 Com 03		
Spill Date:	12/28/2022		
	Area 1		
Approximate A	rea =	196.51	cu.ft.
	VOLUME OF LEAK	-	-
Total Crude Oil	=	35.00	bbls
Total Produced	Water =	0.00	bbls
	Area 2		
Approximate A	rea =	7603.00	sq. ft.
Average Satura	tion (or depth) of spill =	3.25	inches
Average Porosi	ty Factor =	0.03	

VOLUME OF LEAK		
Total Crude Oil =	11.00	bbls
Total Produced Water =	0.00	bbls

TOTAL VOLUME OF LEAK			
Total Crude Oil =	46.00	bbls	
Total Produced Water =	0.00	bbls	
TOTAL VOLUME RECOVERED			
Total Crude Oil =	35.00	bbls	
Total Produced Water =	0.00	bbls	

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator: (	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	175252
	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

#### CONDITIONS

Created By		Condition Date
jharimor	None	1/12/2023

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.

Action 175252

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Page 3

Oil Conservation Division

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## Site Assessment/Characterization

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?	<u>&lt; 50 (</u> ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	🗌 Yes 🔀 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🔀 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	🗌 Yes 🛛 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🗌 Yes 🖂 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### Characterization Report Checklist: Each of the following items must be included in the report.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- $\square$  Depth to water determination
- Determination of water sources and significant watercourses within <sup>1</sup>/<sub>2</sub>-mile of the lateral extents of the release
- $\boxtimes$  Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Received by OCD: 6/23/2023	1:34:15 PM State of New Mexico			Page 6 of 125
			Incident ID	NAPP2301152626
Page 4	Oil Conservation Divisio	on	District RP	
			Facility ID	
			Application ID	
regulations all operators are req public health or the environmen failed to adequately investigate addition, OCD acceptance of a d and/or regulations. Printed Name:	tion given above is true and complete to uired to report and/or file certain release in it. The acceptance of a C-141 report by the and remediate contamination that pose a C-141 report does not relieve the operator en	notifications and perform co he OCD does not relieve the threat to groundwater, surfa	prrective actions for rele coperator of liability sho ce water, human health iance with any other feo nator	ases which may endanger ould their operations have or the environment. In deral, state, or local laws
OCD Only				
Received by: Shelly Wells	·	Date: <u>6/23/</u>	2023	

Incident ID	NAPP2301152626
District RP	
Facility ID	
Application ID	

## Closure

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

A scaled site and sampling diagram as described in 19.15.29.11 NMAC         Image: A scaled site and sampling diagram as described in 19.15.29.11 NMAC         Image: A scaled site and sampling the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to final sampling)         Image: A scaled site and sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)         Image: A scaled site and sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)         Image: A scaled site and sampling diver 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 endregerations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, strace water, burnan health or the environment. The acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other fedaral, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC Including notification to the OCD when reclamation and re-vegetation are complete.         Printed Name: Garrett Green	<b><u>Closure Report Attachment Checklist</u>:</b> Each of the following it	tems must be included in the closure report.
must be notified 2 days prior to liner inspection)         Image: Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)         Image: Description of remediation activities    I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report 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 of compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate he impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.         Printed Name:       Garrett Green       Title:       SSHE Coordinator         Signature:       Jate:       6/22/2023       enail:       garrett green@exxonmobil.com         CDD Onlv       Received by:       Shelly. Wells       Date:       6/23/2023	A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Description of remediation activities          I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of risponsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.         Printed Name:       Garrett Green		of the liner integrity if applicable (Note: appropriate OCD District office
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health, or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.         Printed Name:       Garrett Green       Title:       SSHE Coordinator         Signature:       Jate:       6/22/2023         email:       garrett.green@exxonmobil.com       Telephone:       575-200-0729         OCD Only       Received by:       Shelly Wells       Date:       6/23/2023	Laboratory analyses of final sampling (Note: appropriate ODC	2 District office must be notified 2 days prior to final sampling)
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health, or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.  Printed Name: Garrett Green Title: <u>SSHE Coordinator</u> Date: <u>6/22/2023</u> email:garrett.green@exxonmobil.com Date: <u>6/23/2023</u> CODONty Received by: <u>Shelly Wells</u> Date: <u>6/23/2023</u> Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	Description of remediation activities	
and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health, or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.  Printed Name: Garrett Green Title: <u>SSHE Coordinator</u> Date: <u>6/22/2023</u> email:garrett.green@exxonmobil.com Date: <u>6/23/2023</u> CODONty Received by: <u>Shelly Wells</u> Date: <u>6/23/2023</u> Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Received by: Date: Date:       Date:         Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.         Closure Approved by: Date:       Date:	and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rem human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regula restore, reclaim, and re-vegetate the impacted surface area to the cor accordance with 19.15.29.13 NMAC including notification to the O Printed Name: <u>Garrett Green</u> Signature: <u>Satt Sum</u>	a release notifications and perform corrective actions for releases which a C-141 report by the OCD does not relieve the operator of liability mediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially inditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete. Title: <u>SSHE Coordinator</u> Date: <u>6/22/2023</u>
Received by: Date: Date:       Date:         Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.         Closure Approved by:       Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. Closure Approved by: Date:	OCD Only	
remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.  Closure Approved by: Date:	Received by: <u>Shelly Wells</u>	Date: <u>6/23/2023</u>
	remediate contamination that poses a threat to groundwater, surface w	water, human health, or the environment nor does not relieve the responsible
Printed Name:	Closure Approved by:	Date:
	Printed Name:	Title:

# **ENSOLUM**

June 22, 2023

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

Re: Closure Request Indian Draw Deep 7 Com 3 Incident Number NAPP2301152626 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 and soil sampling activities at the Indian Draw Deep 7 Com 3 (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of crude oil at the Site. Based on Site assessment, delineation activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing remediation activities that have occurred and requesting no further action for Incident Number NAPP2301152626.

## SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit A, Section 7, Township 22 South, Range 28 East, in Eddy County, New Mexico (32.41260°, -104.12059°) and is associated with oil and gas exploration and production operations on private land owned by Mr. and Mrs. Sammy D and Elizabeth A Clark.

On December 28, 2022, a hole developed in a crude oil tank due to corrosion, resulting in the release of approximately 46 barrels (bbls) of crude oil into a lined containment. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 35 bbls of crude oil were recovered. XTO reported the release immediately to the New Mexico Oil Conservation (NMOCD) via email on December 29, 2022, and submitted a Release Notification Form C-141 (Form C-141) on January 11, 2023. The release was assigned Incident Number NAPP2301152626.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was assessed for 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. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be less than 50 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater is New Mexico Office of the State Engineer (OSE) well C-04702, located approximately 1.47 miles south of the Site. The groundwater well has a reported depth to groundwater of 46 feet bgs and a total depth of 55 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A. Indian Draw Deep 7 Com 3 XTO Energy, Inc Closure Request

The closest continuously flowing or significant watercourse to the Site is a large ditch (abandoned canal) that was excavated and once served to direct surface runoff for irrigation purposes and is now considered as a seasonal dry wash, located approximately 1,174 feet northeast of the Site. The Site is greater than 200 feet from any 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 within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area).

Based on estimated depth to groundwater to be less than 50 feet bgs, 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): 100 mg/kg
- Chloride: 600 mg/kg

## SITE ASSESSMENT ACTIVITIES

On March 15, 2023, Site assessment activities were conducted at the Site to evaluate the release based on information provided on the C-141 and visual observations. The *Cause of Release* section of the Form C-141 indicated the "containment had a hole"; however, a liner integrity inspection was conducted by Ensolum personnel and the liner was determined to be in good working condition. Six delineation soil samples (SS01 through SS06) were collected around the containment area at a depth of 0.5 feet bgs to confirm the release did not extend outside the walls of the containment area. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach<sup>®</sup> chloride QuanTab<sup>®</sup> test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation of the Site assessment activities and liner inspection were completed and a photographic log 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 constituents of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (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 degrees Celsius required for shipment and long term storage, but are considered to have been received in acceptable condition by the laboratory.

## DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

On March 24, 2023, Ensolum personnel returned to the Site to complete additional delineation activities. Six boreholes (BH01 through BH06) were advanced via hand auger to assess the release area. Boreholes BH01 through BH06 were advanced in the vicinity of soil sample locations SS01 through SS06, respectively. Discrete delineation soil samples were collected in each borehole at the terminal depth of 2 feet bgs. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs and are included in Appendix C. All delineation soil samples were field screened, handled, and analyzed as described above. The delineation soil sample locations are depicted on Figure 2.

Indian Draw Deep 7 Com 3 XTO Energy, Inc Closure Request

## 

Laboratory analytical results indicated all COC concentrations for all delineation soil samples collected were in compliance with the Site Closure Criteria and the most stringent Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

## **CLOSURE REQUEST**

Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil from the December 28, 2022 release of crude oil. Delineation activities were completed, and laboratory analytical results indicated all COC concentrations for all delineation soil samples collected were in compliance with the Closure Criteria and the strictest Table I Closure Criteria. Although the Cause of Release section of the Form C-141 indicates the "containment had a hole", a liner integrity inspection was conducted by Ensolum personnel and the liner was determined to be in good working condition. Therefore, due to delineation soil sample results, a liner inspection indicating the liner is in good condition, the absence of a newly installed liner patch, and the absence of surficial staining surrounding the containment area, XTO believes there was an error in calculating the volumes of the released fluids and/or recovered fluids immediately following the release.

Based on initial response efforts and soil sample laboratory analytical results compliant with the Closure Criteria, no further remediation was required. XTO believes these remedial actions are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2301152626.

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

Sincerely, Ensolum, LLC

Wake

Meredith Roberts **Field Geologist** 

Daniel R. Moir PG Senior Managing Geologist

CC: Garrett Green, XTO Shelby Pennington, XTO Mr. and Mrs. Sammy D and Elizabeth A Clark

Appendices:

- Figure 1 Site Receptor Map Figure 2 **Delineation Soil Sample Locations**
- Table 1 Soil Sample Analytical Results
- **Referenced Well Records** Appendix A
- Appendix B Photographic Log
- Appendix C
- Lithologic Soil Sampling Logs
- Laboratory Analytical Reports & Chain-of-Custody Documentation Appendix D
- Appendix E NMOCD Notifications



**FIGURES** 



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# TABLES

# ENSOLUM

	TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Indian Draw Deep 7 Com 3 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 C	Closure Criteria (I	NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600				
				Delir	neation Soil Sa	nples				1				
SS01	03/15/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	19.2				
BH01	03/24/2023	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	53.8				
SS02	03/15/2023	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	92.8				
BH02	03/24/2023	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	59.6				
SS03	03/15/2023	0.5	<0.00200	<0.00401	<50.0	55.5	<50.0	55.5	55.5	17.8				
BH03	03/24/2023	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	53.0				
SS04	03/15/2023	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	15.3				
BH04	03/24/2023	2	<0.00199	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	57.1				
SS05	03/15/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	8.72				
BH05	03/24/2023	2	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	40.1				
SS06	03/15/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	254				
BH06	03/24/2023	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	119				

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

### GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon NMAC: New Mexico Administrative Code



# APPENDIX A

Referenced Well Records



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

z	OSE POD NO. C-04702 PC		D.)	W	ELL TAG ID NO	0.		OSE FILE NO	(S).			
CATIO	WELL OWNE	R NAME(S	) erica Exploration					PHONE (OPTI 931-436-03		-		
VELL LO	WELL OWNE	R MAILIN						CITY Midland		STATE TX	79701	ZIP
GENERAL AND WELL LOCATION	WELL LOCATION (FROM GPS	10	DI	egrees 32 104	MINUTES 23 07	SECONI 24.4 27.3	5 N		REQUIRED: ONE TEN	TH OF A S	ECOND	
ENE		LO	NGITUDE	11.11 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (								
1. GI	Old Indian		NG WELL LOCATION TO nit #001	) STREET ADDRESS	AND COMMO	IN LANDMA	RKS – PLS	SS (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVA	ILABLE	
	LICENSE NO. WD-1	456	NAME OF LICENSED		n W. White	;			NAME OF WELL DR White D		OMPANY ompany, Inc.	
	DRILLING ST 02/13/2		DRILLING ENDED 2/16/2023	DEPTH OF COMPL	ETED WELL (1 55.0	FT)	BORE HO	LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOU 46.4		
z	COMPLETED	WELL IS:	ARTESIAN *add Centralizer info be	DRY HOLE	SHALLO	OW (UNCON	FINED)		I WATER LEVEL PLETED WELL 46	5.4 <sup>I</sup>	DATE STATIC 02/16/	
TIO	DRILLING FL	UID:	AIR	MUD	ADDITT	VES - SPECI	FY:					
RMA	DRILLING MI	ETHOD:	ROTARY HAM	MER CABLE T	OOL TO OTH	HER - SPECI	FY:		CHECK	HERE IF	PITLESS ADA	PTER IS
NFOI	DEPTH (	feet bgl)	BORE HOLE	CASING MA	(include each casing string, and T			au de	CASING	1	SING WALL SLO	
2. DRILLING & CASING INFORMATION	FROM	то	DIAM (inches)	(include each				ASING NECTION TYPE ling diameter)	INSIDE DIAM. (inches)	THI	CKNESS nches)	SLOT SIZE (inches)
& CA	0.0	35.0	6.0		40 Riser	~		hreads	2.0		1/4"	
TING	30.0	55.0	6.0	Sch.	40 Screen		T	hreads	2.0		1/4"	.010
2. DRII												
- 1					-		_		192 DIT M	AR & 2	025 PM 172	ġ
	DEPTH (	feet bgl)	BORE HOLE	LIST ANNULA		ERIAL AND BY INTERV		L PACK SIZE-	AMOUNT		METHO	DOF
IAL	FROM	то	DIAM. (inches)	*(if using Central				spacing below)	(cubic feet)		PLACEN	IENT
FER	31,0	33.0	6.0		Bento	onite Chips			0.5 Bag		Hand N	
MA	33,0	55.0	6.0		20/-	40 Sand			8 Bags		Hand I	Mix
LAR									1			
3. ANNULAR MATERIAL												
	OSE INTERN					6			0 WELL RECORD		Version 09/2	2/2022)
FILE		047			POD NO	0. 7		TRN 1	1 111	865	PACE	LOFT
LOC	ATION 7	25.	28E.18.2	.1.9				WELL TAG I	D NO.		PAGE	1 OF 2

	DEPTH (fee	et bgl)		COLOR	AND TYPE OF M	ATEDIALE	NCOUNTERED			ESTIMATED
	FROM	то	THICKNESS (feet)	INCLUDE WA	AND TYPE OF M ATER-BEARING supplemental she	CAVITIES O	R FRACTURE ZONES	BEA	ATER RING? S / NO)	YIELD FOR WATER- BEARING ZONES (gpm)
	0.0	0.5	0.5		Brown	clayey sand		Y	√ N	
	0.5	1.0	0.5		Brown	limestone		Y	√ N	
	1.0	19.0	18.0		С	aliche		Y	√ N	
	19.0	20.5	1.5		Gray bro	wn limestone		Y	√ N	
	20.5	24.0	3.5		C	aliche		Y	√ N	
T	24.0	31.0	7.0		Gravel	/limestone		Y	√ N	
WEI	31.0	35.0	4.0		Brown sa	and w/gravel		Y	√ N	
OF	35.0	44.0	9.0		Red brow	n sandy shale	0.0	Y	√ N	
DOC	44.0	50.0	6.0		Brown sa	nd/sandstone		√ Y	N	
ICI	50.0	55.0	5.0		Red brow	vn silty shale		Y	N	
LOG								Y	N	
4. HYDROGEOLOGIC LOG OF WELL								Y	Ν	
RO								Y	N	
HYD								Y	N	
4.								Y	N	
								Y	N	
								Y	N	
								Y	N	
								Y	N	
								Y	N	
								Y	N	
	METHOD USE	D TO ES	TIMATE YIELD C	F WATER-BEAR	ING STRATA:		ТС	TAL ESTI	MATED	
	PUMP			BAILER	OTHER - SPECIE	Y:	w	ELL YIELI	O (gpm):	
NOIS	WELL TEST	TEST	RESULTS - ATTA I TIME, END TIM	CH A COPY OF D E, AND A TABLE	ATA COLLECTE SHOWING DISC	D DURING V HARGE ANI	WELL TESTING, INCLUI D DRAWDOWN OVER T	DING DISC HE TESTII	CHARGE N NG PERIC	METHOD, DD.
TEST; RIG SUPERVISI	MISCELLANE	OUS INF	ORMATION:							
5. TEST	PRINT NAME( William B. Atl		RILL RIG SUPERV	ISOR(S) THAT PF	ROVIDED ONSIT	E SUPERVIS	SION OF WELL CONSTR	UCTION C	THER TH	IAN LICENSEE:
6. SIGNATDRE	CORRECT REG	CORD OF	EREBY CERTIFIE THE ABOVE DE LDER WITHIN 30	SCRIBED HOLE A	AND THAT HE O	R SHE WILL	WLEDGE AND BELIEF, L FILE THIS WELL RECO ING:	THE FORI ORD WITH	EGOING I I THE STA	S A TRUE AND ATE ENGINEER
6. SIGN		AN	5		John W. White		_	2/28	3/2023	
	/	SIGNATU	JRE OF DRILLER	/ PRINT SIGNE	E NAME				DATE	
	OSE INTERNA				-		WR-20 WELL R		LOG (Ver	rsion 09/22/2022)
		>470			POD NO.	2	TRN NO.74	1865		
LOC	CATION Z	25.7	28E.18.	2.1.4			WELL TAG ID NO			PAGE 2 OF 2

Released to Imaging: 12/19/2023 9:10:17 AM



# APPENDIX B

Photographic Log







APPENDIX C

Lithologic Soil Sampling Logs

•

							_	Sample Name: BH01	Date: 03/24/2023
		E	N	5 (	O L	UN	1	Site Name: Indian Draw Deep 7	
	Sec. 1		Unin	entai, Li	igmeening	and		Incident Number: NAPP230115	
Hydrogeologic Consultants								Job Number: 03C1558185	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: MR	Method: Hand Auger
Coordin	ates: 32.4			-				Hole Diameter: 4"	Total Depth: 2'
					h HACH Chlo	ride Test St	rips and P	ID for chloride and vapor, respe	
			-				•	tor is included in all chloride scr	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs) 0	Symbol	Lithologic D 0 - 0.75' CALICHE, red/lig	
					<u>ل</u> ــــــــــــــــــــــــــــــــــــ		CCITE	poorly sorted, no stair	n, no odor, dry.
D	<173.6	0.7	Ν	SS01	0.5	-	SP	0.75 - 2' SAND, medium t	arown silty-sand mix
М	<173.6	0.9	Ν		-	1	35		inded grains, no stain, no
						-			
Μ	<173.6	0.7	Ν	BH01	2	2 TD		Total Depth @ 2' bgs.	
					-				
					-	-			
					-	-			
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				6				Sample Name: BH02	Date: 03/24/2023
			N	5 (	O L		/	Site Name: Indian Draw Deep 7 C	iom 3
		Envir	onm	ental, Er	ngineering			Incident Number: NAPP23011526	
		Hydro	ogeo	logic Co	nsultants			Job Number: 03C1558185	
LITHOLOGIC / SOIL SAMPLING LOG							Logged By: MR	Method: Hand Auger	
Coordinates: 32.411994, -104.120713								Hole Diameter: 4"	Total Depth: 2'
					h HACH Chlo	ride Test St	rips and P	ID for chloride and vapor, respect	
		-						tor is included in all chloride scree	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		
D	<173.6	0.7	N	SS02	0.5	0	CCHE	0 - 0.75' CALICHE, red/light poorly sorted, no stain,	brown, sub-rounded, no odor, dry.
M	<173.6		N	5502		- _ 1 -	SP	0.75 - 2' SAND, medium bro poorly sorted, sub-round odor, moist.	own, silty-sand mix, ded grains, no stain, n
М	<173.6	0.6	N	BH02	2	- 2 TD			
								Total Depth @ 2' bgs.	

				0	<u> </u>			Sample Name: BH03	Date: 03/24/2023
	green (		N	5 (	O L	UN	1	Site Name: Indian Draw Deep 7 Co	
	Second Second	Envir	onm	ental, Er	ngineering			Incident Number: NAPP23011526	
		Hydro	ogeo	ologic Co	nsultants			Job Number: 03C1558185	
	LI	THOLO	GIC	/ SOIL S	AMPLING	LOG		Logged By: MR	Method: Hand Auger
oordin	ates: 32.4			-				Hole Diameter: 4"	Total Depth: 2'
					h HACH Chlo	ride Test St	rips and P	ID for chloride and vapor, respectiv	•
		-						tor is included in all chloride scree	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	
D	<173.6	0.3	N	SS03	L 0.5	L 0	CCHE	0 - 0.75' CALICHE, red/light poorly sorted, no stain, r	brown, sub-rounded, no odor, dry.
M	<173.6		N	3303	0.5 _	1	SP	0.75 - 2' SAND, medium brc poorly sorted, sub-rounc odor, moist.	own, silty-sand mix, led grains, no stain, no
М	<173.6	0.4	N	BH03	2	-			
101	<1/5.0	0.4	IN	впоз	<u> </u>	2 TD		Total Depth @ 2' bgs.	
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				C			A	Sample Name: BH04	Date: 03/24/2023
			N	5 (	OL	UN		Site Name: Indian Draw Deep	0 7 Com 3
		Envir	onm	ental, Er	gineering	and		Incident Number: NAPP2301	152626
		Hydro	ogeo	logic Co	nsultants			Job Number: 03C1558185	
	LI	THOLO	GIC	/ SOIL S	AMPLING	LOG		Logged By: MR	Method: Hand Auger
Coordina	ates: 32.4							Hole Diameter: 4"	Total Depth: 2'
		-					•	ID for chloride and vapor, res tor is included in all chloride s	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Descriptions
D	<173.6	0.3	N	SS04	0.5	L 0	CCHE	0 - 0.75' CALICHE, red/li poorly sorted, no sta	ght brown, sub-rounded, in, no odor, dry.
	<173.6	0.6	N	5504		1	SP	0.75 - 2' SAND, medium poorly sorted, sub-rc odor, moist.	brown, silty-sand mix, bunded grains, no stain, no
М	<173.6	0.5	N	BH04	2	2			
						TD		Total Depth @ 2' bgs.	

		-		C				Sample Name: BH05	Date: 03/24/2023
			N	5	O L			Site Name: Indian Draw Deep 7	Com 3
	Research				ngineering			Incident Number: NAPP230115	2626
		Hydro	ogeo	logic Co	nsultants			Job Number: 03C1558185	
	LI	THOLO	GIC	/ SOIL S	AMPLING	LOG		Logged By: MR	Method: Hand Auger
oordin	ates: 32.4							Hole Diameter: 4"	Total Depth: 2'
								ID for chloride and vapor, respector is included in all chloride scre	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic D	
D	<173.6	0.0	N	SS05	0.5	0	CCHE	0 - 0.75' CALICHE, red/ligh poorly sorted, no stain	nt brown, sub-rounded, , no odor, dry.
M	<173.6		N	3303		1	SP	0.75 - 2' SAND, medium b poorly sorted, sub-rou odor, moist.	rown, silty-sand mix, nded grains, no stain, no
N 4	<172 C	0.7	NI	BH05		-			
Μ	<173.6	0.7	Ν	BH02	2	<u>2</u> TD		Total Depth @ 2' bgs.	

						A	Sample Name: BH06	Date: 03/24/2023
	-   E		5	OL			Site Name: Indian Draw Deep 7	Com 3
	En	nvironm	nental, Er	ngineering	and		Incident Number: NAPP2301152	.626
	Ну	ydroge	biogic Co	nsultants			Job Number: 03C1558185	
	LITHC	DLOGIC	/ SOIL S	AMPLING	LOG		Logged By: MR	Method: Hand Auger
Coordinates:	32.41207	6, -104.1	20735				Hole Diameter: 4"	Total Depth: 2'
		-					ID for chloride and vapor, respec tor is included in all chloride scre	
Moisture Content Chloride	(ppm) Vapor	(ppm) Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	
D <17	73.6 0.	.2 N	SS06	0.5	<u> </u>	CCHE	0 - 0.75' CALICHE, red/ligh poorly sorted, no stain,	t brown, sub-rounded, no odor, dry.
	73.6 1.		3300		1	SP	0.75 - 2' SAND, medium bi poorly sorted, sub-rour odor, moist.	rown, silty-sand mix, Ided grains, no stain, no
M <17	73.6 0.	.7 N	BH06	2	 			
							Total Depth @ 2' bgs.	



# APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Received by OCD: 6/23/2023 1:34:15 PM



**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 3/29/2023 2:58:14 PM

# JOB DESCRIPTION

Indian Draw Deep 7 Com 3 SDG NUMBER 03C1558185

# **JOB NUMBER**

890-4323-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



Received by OCD: 6/23/2023 1:34:15 PM

# **Eurofins Carlsbad**

Job Notes

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

RAMER

Generated 3/29/2023 2:58:14 PM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

SDG: 03C1558185

Laboratory Job ID: 890-4323-1

# **Table of Contents**

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Dil Fac

DL, RA, RE, IN

DL

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

ML

MPN

MQL

NC

ND

NEG

POS

PQL PRES

QC RER

RL

RPD

TEF

TEQ

TNTC

**Dilution Factor** 

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent Positive / Present

Presumptive Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

	Definitions/Glossary		
Client: Ensolu Project/Site: I	-	Job ID: 890-4323-1 SDG: 03C1558185	
Qualifiers			
GC VOA Qualifier	Qualifier Description		
S1-	Surrogate recovery exceeds control limits, low biased.		-
S1+	Surrogate recovery exceeds control limits, high biased.		Ę
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VO			
Qualifier F2	Qualifier Description MS/MSD RPD exceeds control limits		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		8
HPLC/IC			
Qualifier	Qualifier Description		9
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		4
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

**Eurofins Carlsbad** 

4

### Job ID: 890-4323-1 SDG: 03C1558185

### Job ID: 890-4323-1

### Laboratory: Eurofins Carlsbad

#### Narrative

Job Narrative 890-4323-1

### Receipt

The samples were received on 3/15/2023 2:17 PM. 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 1.0°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4323-1), SS02 (890-4323-2), SS03 (890-4323-3), SS04 (890-4323-4) and SS05 (890-4323-5).

### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-4323-1), SS02 (890-4323-2), SS03 (890-4323-3), SS04 (890-4323-4), SS05 (890-4323-5), (890-4353-A-34-C), (890-4353-A-34-A MS) and (890-4353-A-34-B MSD). 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 880-49143 and analytical batch 880-49155 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-49143/2-A) and (LCSD 880-49143/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-49143 and analytical batch 880-49155 was outside control limits. Sample non-homogeneity is suspected.

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.

Project/Site: Indian Draw Deep 7 Com 3

Job ID: 890-4323-1 SDG: 03C1558185

## **Client Sample ID: SS01**

Date Collected: 03/15/23 11:00 Date Received: 03/15/23 14:17

Sample Depth: 0.5

Client: Ensolum

## Lab Sample ID: 890-4323-1

Matrix: Solid

5

	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 19:20	
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 19:20	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 19:20	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 14:10	03/28/23 19:20	
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 19:20	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 14:10	03/28/23 19:20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	49	S1-	70 - 130			03/24/23 14:10	03/28/23 19:20	
1,4-Difluorobenzene (Surr)	87		70 - 130			03/24/23 14:10	03/28/23 19:20	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/29/23 12:47	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			03/22/23 16:11	
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Method: SW846 8015B NM - Dies Analyte		nics (DRO) Qualifier	(GC) RL	Unit	D	Prepared	Analyzed	Dil Fa
		Qualifier	· · ·	Unit mg/Kg	D	Prepared 03/21/23 13:58	Analyzed 03/22/23 12:56	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			D	· · · · · · · · · · · · · · · · · · ·		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9	Qualifier U U	<b>RL</b> 49.9	mg/Kg	<u> </u>	03/21/23 13:58	03/22/23 12:56	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9	Qualifier U U U	RL 49.9 49.9	mg/Kg	<u>D</u>	03/21/23 13:58 03/21/23 13:58	03/22/23 12:56 03/22/23 12:56	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	Qualifier U U U	RL           49.9           49.9           49.9           49.9	mg/Kg	<u>D</u>	03/21/23 13:58 03/21/23 13:58 03/21/23 13:58	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result           <49.9	Qualifier U U U	RL 49.9 49.9 49.9 <i>Limits</i>	mg/Kg	<u>D</u>	03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 <b>Prepared</b>	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result           <49.9	Qualifier U U Qualifier	RL           49.9           49.9           49.9           20.9           Limits           70 - 130           70 - 130	mg/Kg	<u>D</u>	03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 Prepared 03/21/23 13:58	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 <u>Analyzed</u> 03/22/23 12:56	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result           <49.9	Qualifier U U Qualifier	RL           49.9           49.9           49.9           20.9           Limits           70 - 130           70 - 130	mg/Kg	D	03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 Prepared 03/21/23 13:58	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 <u>Analyzed</u> 03/22/23 12:56	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion	Result           <49.9	Qualifier U U Qualifier	RL           49.9           49.9           49.9           49.9           2000           Limits           70 - 130           70 - 130           6	mg/Kg mg/Kg mg/Kg		03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion Analyte	Result           <49.9	Qualifier U U Qualifier	RL           49.9           49.9           49.9           20.9           Limits           70 - 130           70 - 130           70 - RL	mg/Kg mg/Kg mg/Kg Unit		03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 <b>Prepared</b> 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 <b>Prepared</b>	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 <b>Analyzed</b> 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56	Dil Fa Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: EPA 300.0 - Anions, Ion Analyte Chloride	Result           <49.9	Qualifier U U Qualifier	RL           49.9           49.9           49.9           20.9           Limits           70 - 130           70 - 130           70 - RL	mg/Kg mg/Kg mg/Kg Unit		03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 <b>Prepared</b> 03/21/23 13:58 03/21/23 13:58 03/21/23 13:58 <b>Prepared</b>	03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 <b>Analyzed</b> 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 03/22/23 12:56 <b>Analyzed</b> 03/26/23 10:41 nple ID: 890-	Dil Fa

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/24/23 14:10	03/28/23 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130			03/24/23 14:10	03/28/23 19:46	1

Eurofins Carlsbad

Released to Imaging: 12/19/2023 9:10:17 AM

Project/Site: Indian Draw Deep 7 Com 3

## **Client Sample Results**

Job ID: 890-4323-1 SDG: 03C1558185

Matrix: Solid

5

Lab Sample ID: 890-4323-2

## Client Sample ID: SS02

Date Collected: 03/15/23 11:25 Date Received: 03/15/23 14:17

Sample Depth: 0.5

Client: Ensolum

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130			03/24/23 14:10	03/28/23 19:46	1
Method: TAL SOP Total BTEX - To	otal BTEX Calo	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			03/29/23 12:47	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/22/23 16:11	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (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		03/21/23 13:58	03/22/23 13:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 13:17	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 13:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			03/21/23 13:58	03/22/23 13:17	1
o-Terphenyl	108		70 - 130			03/21/23 13:58	03/22/23 13:17	1
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.8		5.03	mg/Kg			03/26/23 10:46	1

Date Received: 03/15/23 14:17 Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/23 14:10	03/28/23 20:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	160	S1+	70 - 130			03/24/23 14:10	03/28/23 20:13	1
1,4-Difluorobenzene (Surr)	92		70 - 130			03/24/23 14:10	03/28/23 20:13	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/29/23 12:47	1
	esel Range Organ	ics (DRO) (	GC)					
Method: SW846 8015 NM - Die								
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Project/Site: Indian Draw Deep 7 Com 3

Job ID: 890-4323-1 SDG: 03C1558185

Matrix: Solid

5

Lab Sample ID: 890-4323-3

# **Client Sample ID: SS03**

Date Collected: 03/15/23 11:10 Date Received: 03/15/23 14:17

Sample Depth: 0.5

Client: Ensolum

Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)				
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/21/23 13:58	03/22/23 13:40
Diesel Range Organics (Over C10-C28)	55.5		50.0	mg/Kg		03/21/23 13:58	03/22/23 13:40
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/21/23 13:58	03/22/23 13:40
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed
1-Chlorooctane	106		70 - 130			03/21/23 13:58	03/22/23 13:40
o-Terphenyl	113		70 - 130			03/21/23 13:58	03/22/23 13:40

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.8	5.02	mg/Kg			03/26/23 10:51	1

### **Client Sample ID: SS04**

# Date Collected: 03/15/23 11:15

Date Received: 03/15/23 14:17 Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00202	U	0.00202	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/24/23 14:10	03/28/23 21:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130			03/24/23 14:10	03/28/23 21:57	1
1,4-Difluorobenzene (Surr)	87		70 - 130			03/24/23 14:10	03/28/23 21:57	1
Analyte Total BTEX	<0.00404		RL 0.00404	Unit mg/Kg	<u> </u>	Prepared	Analyzed 03/29/23 12:47	Dil Fac
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/22/23 16:11	1
Method: SW846 8015B NM - Diese	I Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fillingto						03/21/23 13:58	03/22/23 14:02	-
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/21/23 13:30	00/22/20 14.02	l
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0		50.0	mg/Kg		03/21/23 13:58	03/22/23 14:02	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)		U		0.0				1

Dil Fac 1

		Clien	t Sample Re	sults				
Client: Ensolum							Job ID: 890	
Project/Site: Indian Draw Deep 7 Co	om 3						SDG: 03C1	155818
Client Sample ID: SS04						Lab San	nple ID: 890-	4323-
Date Collected: 03/15/23 11:15							Matri	x: Soli
Date Received: 03/15/23 14:17								
Sample Depth: 0.5								
- Method: EPA 300.0 - Anions, Ion	Chromatogram	hv - Solubl	e					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	15.3		5.00	mg/Kg			03/26/23 11:05	
Client Sample ID: SS05						Lab San	nple ID: 890-	4323-
Date Collected: 03/15/23 11:20							-	x: Soli
Date Received: 03/15/23 14:17								
Sample Depth: 0.5								
_ Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 22:23	
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 22:23	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 22:23	
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/24/23 14:10	03/28/23 22:23	
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 22:23	
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/24/23 14:10	03/28/23 22:23	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130			03/24/23 14:10	03/28/23 22:23	
1,4-Difluorobenzene (Surr)	90		70 - 130			03/24/23 14:10	03/28/23 22:23	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/29/23 12:47	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			03/22/23 16:11	
_ Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 14:24	
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 14:24	
C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 14:24	
Surrogata	% Passar	Qualifier	Limite					
Surrogate 1-Chlorooctane	_ <b>%Recovery</b> 105	qualitier	<u>Limits</u> 70 - 130			Prepared 03/21/23 13:58	Analyzed 03/22/23 14:24	Dil Fa
o-Terphenyl	105		70 - 130 70 - 130			03/21/23 13:58	03/22/23 14:24	
						50/21/20 10.00	55,22,25 14.24	
Method: EPA 300.0 - Anions, Ion		hy - Solubl Qualifier	e RL	Unit	D	Prepared	Analyzod	Dil Fa
Analyte		Quaimer	<u>4 98</u>	0nit		Fiepaleu	Analyzed	

03/26/23 11:10

Chloride

4.98

mg/Kg

8.72

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

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-4323-1	SS01	49 S1-	87	
890-4323-2	SS02	144 S1+	85	
890-4323-3	SS03	160 S1+	92	
890-4323-4	SS04	147 S1+	87	
890-4323-5	SS05	154 S1+	90	
890-4353-A-34-A MS	Matrix Spike	143 S1+	94	
890-4353-A-34-B MSD	Matrix Spike Duplicate	138 S1+	99	
LCS 880-49447/1-A	Lab Control Sample	114	102	
LCSD 880-49447/2-A	Lab Control Sample Dup	114	107	
MB 880-49447/5-A	Method Blank	92	81	

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

matrix:	Solid

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-26040-A-11-B MS	Matrix Spike	100	99
880-26040-A-11-C MSD	Matrix Spike Duplicate	122	121
890-4323-1	SS01	82	91
890-4323-2	SS02	104	108
890-4323-3	SS03	106	113
890-4323-4	SS04	108	114
890-4323-5	SS05	105	111
LCS 880-49143/2-A	Lab Control Sample	115	135 S1+
LCSD 880-49143/3-A	Lab Control Sample Dup	111	132 S1+
MB 880-49143/1-A	Method Blank	117	138 S1+

### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

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

Lab Sample ID: MB 880-49447/5-A
Matrix: Solid

# Analysis Batch: 49735

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/24/23 14:10	03/28/23 15:20	1
1,4-Difluorobenzene (Surr)	81		70 - 130			03/24/23 14:10	03/28/23 15:20	1

### Lab Sample ID: LCS 880-49447/1-A Matrix: Solid

# Analysis Batch: 49735

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1130		mg/Kg		113	70 - 130
Toluene	0.100	0.09973		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.1082		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2222		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1057		mg/Kg		106	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

### Lab Sample ID: LCSD 880-49447/2-A

# Matrix: Solid

Analysis Batch: 49735						Prep	Batch:	49447
	Spike	LCSD LCS	D			%Rec		RPD
Analyte	Added	Result Qual	lifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1239	mg/Kg		124	70 - 130	9	35
Toluene	0.100	0.1039	mg/Kg		104	70 - 130	4	35
Ethylbenzene	0.100	0.1134	mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2319	mg/Kg		116	70 - 130	4	35
o-Xylene	0.100	0.1103	mg/Kg		110	70 - 130	4	35

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

# Lab Sample ID: 890-4353-A-34-A MS

#### Matrix: Solid Analysis Potoby 40725

Analysis Batch: 49735									Pre	o Batch: 49447
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.100	0.1071		mg/Kg		107	70 - 130	
Toluene	<0.00200	U	0.100	0.1079		mg/Kg		107	70 - 130	

Prep Type: Total/NA

# **Client Sample ID: Method Blank** Prep Type: Total/NA Prep Batch: 49447

Prepared	Analyzed	Dii Fac
03/24/23 14:10	03/28/23 15:20	1
03/24/23 14:10	03/28/23 15:20	1

# **Client Sample ID: Lab Control Sample**

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 49447

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**Client Sample ID: Matrix Spike** 

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

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

Lab Sample ID: 890-4353-A- Matrix: Solid	-34-A MS							Client	Sample ID Prep T	: Matrix Type: To	
Analysis Batch: 49735									Prep	Batch:	49447
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	<0.00200	U	0.100	0.1227		mg/Kg		122	70 - 130		
n-Xylene & p-Xylene	<0.00399	U	0.201	0.2515		mg/Kg		125	70 - 130		
o-Xylene	<0.00200	U	0.100	0.1199		mg/Kg		119	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)		S1+	70 - 130								
1,4-Difluorobenzene (Surr)	94		70 - 130								
Lab Sample ID: 890-4353-A-	34-B MSD					Cli	ent S	ample IC	): Matrix Sp	oike Dur	olicate
Matrix: Solid	0.202									Type: To	
Analysis Batch: 49735										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec	2010111	RPD
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Benzene	<0.00200	U	0.0996	0.1282		mg/Kg		129	70 - 130	18	3
Foluene	<0.00200	U	0.0996	0.1114		mg/Kg		112	70 - 130	3	3
Ethylbenzene	<0.00200	U	0.0996	0.1226		mg/Kg		123	70 - 130	0	3
n-Xylene & p-Xylene	<0.00399	U	0.199	0.2519		mg/Kg		126	70 - 130	0	3
p-Xylene	<0.00200	U	0.0996	0.1190		mg/Kg		120	70 - 130	1	3
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	99		70 _ 130								
ethod: 8015B NM - Die	sel Range O	rganics (C	RO) (GC)								
Lab Sample ID: MB 880-491	43/1-A							Client S	ample ID:		
Matrix: Solid									Prep T	Type: To	tal/N/

# Analysis Batch: 49155

o-Terphenyl

-	МВ	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/21/23 13:58	03/22/23 08:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/21/23 13:58	03/22/23 08:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/21/23 13:58	03/22/23 08:00	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130			03/21/23 13:58	03/22/23 08:00	1

70 - 130

138 S1+

### . Lab Sample ID: LCS 880-49143/2-A Matrix: Solid

#### Analysis Batch: 49155 Prep Batch: 49143 Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 1000 957.6 96 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 916.2 mg/Kg 92 70 - 130 C10-C28)

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 49143

03/22/23 08:00

**Client Sample ID: Lab Control Sample** 

03/21/23 13:58

4 5 6

7

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

o-Terphenyl

## Method: 8015B NM - D

Method: 8015B NM - Dies	sel Range Or	rganics ([	)RO) (GC) ((	Continue	ed)							
		gamoo (L										
Lab Sample ID: LCS 880-491	43/2-A						Client	Sample	e ID: Lab C			
Matrix: Solid										Type: Tot		
Analysis Batch: 49155									Prep	Batch:	49143	
	LCS	LCS										5
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	115		70 _ 130									
o-Terphenyl	135	S1+	70 _ 130									
— —												7
Lab Sample ID: LCSD 880-49	9143/3-A					Clier	nt Sam	nple ID:	Lab Contro	ol Sample	e Dup	
Matrix: Solid									Prep 1	Type: To	tal/NA	8
Analysis Batch: 49155									Prep	Batch:	49143	
			Spike	LCSD	LCSD				%Rec		RPD	Q
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics			1000	941.5		mg/Kg		94	70 - 130	2	20	
(GRO)-C6-C10												
Diesel Range Organics (Over			1000	888.6		mg/Kg		89	70 - 130	3	20	
C10-C28)												
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane			70 - 130									
o-Terphenyl	132	S1+	70 - 130									13
Lab Sample ID: 880-26040-A	11-B MS							Client	Sample ID			
Matrix: Solid										Type: To		
Analysis Batch: 49155									Prep	Batch:	49143	
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics	<49.9	U F2	999	963.1		mg/Kg		94	70 - 130			
(GRO)-C6-C10												
Diesel Range Organics (Over	124		999	919.6		mg/Kg		80	70 - 130			
C10-C28)												
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	100		70 - 130									
1												

### Lab Sample ID: 880-26040-A-11-C MSD Matrix: Solid

#### Analysis Batch: 49155 Prep Batch: 49143 Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added **Result Qualifier** Unit D %Rec Limits RPD Limit <49.9 U F2 998 1211 F2 119 23 20 Gasoline Range Organics mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 124 998 1104 mg/Kg 98 70 - 130 18 20 C10-C28)

70 - 130

	10.50	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	121		70 - 130

99

### **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA

Job ID: 890-4323-1 SDG: 03C1558185

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**Eurofins Carlsbad** 

# **QC Sample Results**

Job ID: 890-4323-1 SDG: 03C1558185

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

# Method: 300.0 - Anions, Ion Chromatography

-												
Lab Sample ID: MB 880-49271/1-A	L .								Client S	ample ID:		
Matrix: Solid										Prep	Type: S	oluble
Analysis Batch: 49506												
Australia		MB MB esult Qual	1 <b>6</b>			- 14	-			<b>A</b> h		D!! F
Analyte Chloride		5.00 U		RL 5.00		nit alla	D	P	repared	Analy: 03/26/23		Dil Fac
		5.00 0		5.00	m	g/Kg				03/20/23	10:07	I
Lab Sample ID: LCS 880-49271/2	Α						Cli	ient	Sample	ID: Lab C	ontrol S	ample
Matrix: Solid										Prep	Type: S	oluble
Analysis Batch: 49506												
			Spike	LC	S LCS					%Rec		
Analyte			Added	Resu	t Qualifie	er Unit		D	%Rec	Limits		
Chloride			250	261.	5	mg/Kg			105	90 _ 110		
Lab Sample ID: LCSD 880-49271/3	3-Δ					CI	ient S	Sam	nle ID: I	Lab Contro	ol Samol	le Dun
Matrix: Solid											Type: S	
Analysis Batch: 49506											.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
· · · · · · · · · · · · · · · · · · ·			Spike	LCS	D LCSD					%Rec		RPD
Analyte			Added	Resu	t Qualifie	er Unit		D	%Rec	Limits	RPD	Limit
Chloride			250	262.	4	mg/Kg		_	105	90 _ 110	0	20
Lab Sample ID: 890-4320-A-6-C M	S								Client	Sample ID	): Matrix	Spike
Matrix: Solid											Type: S	
Analysis Batch: 49506												
	Sample	Sample	Spike	м	S MS					%Rec		
Analyte	Result	Qualifier	Added	Resu	t Qualifie	er Unit		D	%Rec	Limits		
Chloride	148		251	409.	7	mg/Kg		_	104	90 _ 110		
Lab Sample ID: 890-4320-A-6-D M	SD						Clien	t Sa	ample IF	): Matrix S	pike Dur	olicate
Matrix: Solid											Type: S	
Analysis Batch: 49506											.,	
	Sample	Sample	Spike	MS	D MSD					%Rec		RPD
Analyte	Result	Qualifier	Added	Resu	t Qualifie	er Unit		D	%Rec	Limits	RPD	Limit

# **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4323-1 SDG: 03C1558185

GC VOA

### Prep Batch: 49447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-1	SS01	Total/NA	Solid	5035	
890-4323-2	SS02	Total/NA	Solid	5035	
890-4323-3	SS03	Total/NA	Solid	5035	
890-4323-4	SS04	Total/NA	Solid	5035	
890-4323-5	SS05	Total/NA	Solid	5035	
MB 880-49447/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49447/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49447/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4353-A-34-A MS	Matrix Spike	Total/NA	Solid	5035	
890-4353-A-34-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

### Analysis Batch: 49735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-1	SS01	Total/NA	Solid	8021B	49447
890-4323-2	SS02	Total/NA	Solid	8021B	49447
890-4323-3	SS03	Total/NA	Solid	8021B	49447
890-4323-4	SS04	Total/NA	Solid	8021B	49447
890-4323-5	SS05	Total/NA	Solid	8021B	49447
MB 880-49447/5-A	Method Blank	Total/NA	Solid	8021B	49447
LCS 880-49447/1-A	Lab Control Sample	Total/NA	Solid	8021B	49447
LCSD 880-49447/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49447
890-4353-A-34-A MS	Matrix Spike	Total/NA	Solid	8021B	49447
890-4353-A-34-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49447

### Analysis Batch: 49842

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4323-1	SS01	Total/NA	Solid	Total BTEX	
890-4323-2	SS02	Total/NA	Solid	Total BTEX	
890-4323-3	SS03	Total/NA	Solid	Total BTEX	
890-4323-4	SS04	Total/NA	Solid	Total BTEX	
890-4323-5	SS05	Total/NA	Solid	Total BTEX	

### GC Semi VOA

### Prep Batch: 49143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-1	SS01	Total/NA	Solid	8015NM Prep	
890-4323-2	SS02	Total/NA	Solid	8015NM Prep	
890-4323-3	SS03	Total/NA	Solid	8015NM Prep	
890-4323-4	SS04	Total/NA	Solid	8015NM Prep	
890-4323-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-49143/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49143/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26040-A-11-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26040-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Lab Sample ID Client Sample ID Prep Type Matrix Method Prep Batch 890-4323-1 SS01 Total/NA 8015B NM Solid 49143 890-4323-2 SS02 Total/NA Solid 8015B NM 49143

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# **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

# GC Semi VOA (Continued)

## Analysis Batch: 49155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-3	SS03	Total/NA	Solid	8015B NM	49143
890-4323-4	SS04	Total/NA	Solid	8015B NM	49143
890-4323-5	SS05	Total/NA	Solid	8015B NM	49143
MB 880-49143/1-A	Method Blank	Total/NA	Solid	8015B NM	49143
LCS 880-49143/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49143
LCSD 880-49143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49143
880-26040-A-11-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49143
880-26040-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49143

### Analysis Batch: 49233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-1	SS01	Total/NA	Solid	8015 NM	
890-4323-2	SS02	Total/NA	Solid	8015 NM	
890-4323-3	SS03	Total/NA	Solid	8015 NM	
890-4323-4	SS04	Total/NA	Solid	8015 NM	
890-4323-5	SS05	Total/NA	Solid	8015 NM	

# HPLC/IC

### Leach Batch: 49271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4323-1	SS01	Soluble	Solid	DI Leach	
890-4323-2	SS02	Soluble	Solid	DI Leach	
890-4323-3	SS03	Soluble	Solid	DI Leach	
890-4323-4	SS04	Soluble	Solid	DI Leach	
890-4323-5	SS05	Soluble	Solid	DI Leach	
MB 880-49271/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-49271/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-49271/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4320-A-6-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4320-A-6-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

### Analysis Batch: 49506

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4323-1	SS01	Soluble	Solid	300.0	49271
890-4323-2	SS02	Soluble	Solid	300.0	49271
890-4323-3	SS03	Soluble	Solid	300.0	49271
890-4323-4	SS04	Soluble	Solid	300.0	49271
890-4323-5	SS05	Soluble	Solid	300.0	49271
MB 880-49271/1-A	Method Blank	Soluble	Solid	300.0	49271
LCS 880-49271/2-A	Lab Control Sample	Soluble	Solid	300.0	49271
LCSD 880-49271/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	49271
890-4320-A-6-C MS	Matrix Spike	Soluble	Solid	300.0	49271
890-4320-A-6-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	49271

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Job ID: 890-4323-1 SDG: 03C1558185 Project/Site: Indian Draw Deep 7 Com 3

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Job ID: 890-4323-1 SDG: 03C1558185

# Lab Sample ID: 890-4323-1 Matrix: Solid

Lab Sample ID: 890-4323-2

Matrix: Solid

Matrix: Solid

Date Collected: 03/15/23 11:00 Date Received: 03/15/23 14:17

**Client Sample ID: SS01** 

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 19:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49842	03/29/23 12:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 12:56	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	49271	03/22/23 22:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49506	03/26/23 10:41	SMC	EET MID

# **Client Sample ID: SS02**

# Date Collected: 03/15/23 11:25

Date Received: 03/15/23 14:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 19:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49842	03/29/23 12:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 13:17	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	49271	03/22/23 22:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49506	03/26/23 10:46	SMC	EET MID

# **Client Sample ID: SS03**

### Date Collected: 03/15/23 11:10 Date Received: 03/15/23 14:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 20:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49842	03/29/23 12:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 13:40	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	49271	03/22/23 22:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49506	03/26/23 10:51	SMC	EET MID

### **Client Sample ID: SS04** Date Collected: 03/15/23 11:15 Date Received: 03/15/23 14:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 21:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49842	03/29/23 12:47	AJ	EET MID

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Matrix: Solid

Lab Sample ID: 890-4323-4

Lab Sample ID: 890-4323-3

Released to Imaging: 12/19/2023 9:10:17 AM

Project/Site: Indian Draw Deep 7 Com 3

Job ID: 890-4323-1 SDG: 03C1558185

# Lab Sample ID: 890-4323-4

Lab Sample ID: 890-4323-5

Matrix: Solid

### **Client Sample ID: SS04** Date Collected: 03/15/23 11:15 Date Received: 03/15/23 14:17

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 14:02	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	49271	03/22/23 22:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49506	03/26/23 11:05	SMC	EET MID

# **Client Sample ID: SS05** Date Collected: 03/15/23 11:20

### Date Received: 03/15/23 14:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 22:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49842	03/29/23 12:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 14:24	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	49271	03/22/23 22:21	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49506	03/26/23 11:10	SMC	EET MID

### Laboratory References:

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

# Matrix: Solid

**Accreditation/Certification Summary** 

	A	ccreditation/C	ertification Summary		
Client: Ensolum Project/Site: Indian Dra	w Deep 7 Com 3			Job ID: 890-432 SDG: 03C15581	
Laboratory: Eurofi	ns Midland nalytes for this laboratory wer	re covered under each eac	raditation/contification holow		3
Authority		ogram	Identification Number	Expiration Date	4
Texas		LAP	T104704400-22-25	06-30-23	
The following analytes	are included in this report, but	the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for which	5
the agency does not off			ioù by the governing dutionty. This ist ne		
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					11
					13
					14

Eurofins Carlsbad

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Project/Site: Indian Draw Deep 7 Com 3

Client: Ensolum

Job ID: 890-4323-1 SDG: 03C1558185

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 Refe	rences:		
ASTM = A	STM International		
EPA = US	Environmental Protection Agency		
SW846 = '	'Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition	n, November 1986 And Its Updates.	
TAL SOP :	<ul> <li>TestAmerica Laboratories, Standard Operating Procedure</li> </ul>		
Laboratory Re	eferences:		
EET MID =	Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Eurofins Carlsbad

Released to Imaging: 12/19/2023 9:10:17 AM

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

### Job ID: 890-4323-1 SDG: 03C1558185

ab Sample ID.	Client Sample ID	Matrix	Collected	Received	Depth
90-4323-1	SS01	Solid	03/15/23 11:00	03/15/23 14:17	0.5
90-4323-2	SS02	Solid	03/15/23 11:25	03/15/23 14:17	0.5
90-4323-3	SS03	Solid	03/15/23 11:10	03/15/23 14:17	0.5
90-4323-4	SS04	Solid	03/15/23 11:15	03/15/23 14:17	0.5
90-4323-5	SS05	Solid	03/15/23 11:20	03/15/23 14:17	0.5

Curroning       Environment Testing       Insure Curroning of the second and				BIPI 20.51.5		Mar and	Tex 1	MANA	
Work Order No:			Relinquished by: (Signature)	Date/Time	re)	Received Signatu	gnature)	Religquished by; (Si	
Clining interviewent Testing		d conditions the control viously negotiated.	subcontractors. It assigns standard terms an such losses are due to circumstances beyond zed. These terms will be enforced unless pre	rofins Xenco, its affiliates and s anses incurred by the client if s Eurofins Xenco, but not analy	rder from client company to Eu ponsibility for any losses or exp 5 for each sample submitted to	s constitutes a valid purchase o es and shall not assume any resj s each project and a charge of S	nt and relinquishment of sample Biable only for the cost of sample harge of \$85.00 will be applied to	otke: Signature of this docume service. Eurofins Xenco will be Eurofins Xenco. A minimum d	
Euronment Testing     Environment Testing     Numerican Status	1747	li K Se Ag SiO <sub>2</sub> Na Sr Hg: 1631/245.1/	Ca Cr Co Cu Fe Pb Mg M r Co Cu Pb Mn Mo Ni Se	b As Ba Be B Cd Sb As Ba Be Cd C	PM Texas 11 AI S SPLP 6010 : 8RCRA	8RCR	200.8 / 6020: d Metal(s) to be anal	Total 200.7 / 6010 ircle Method(s) and	
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Curofins     Curofic Service			\$						
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Function       Environment Testing       Housen TK811 204 200, Use TK 211 402 200 Midland, TK 211 402 Midland, TK	MAPP2301152626					1 1125	-	C207	
Function       Environment Testing       Clinitary Name       Clinitary Name       Clinitary Name       Clinitary Name       Mondand, TX (21) 204-200, MM (21) 209-2334       Work Order No:         winaget:       Ben Sci um, LLC       Company Name       Environment Testing       Billot: If different       Sci um, LLC       Company Name       Sci Um (Sci um, LLC)       Sci Um (Sci Um, Sci Um, S	Incident #:			XXX			S	SSOI	
Function       Environment Testing       Hourson (X (23) 200-400, Dalla, TX (23) 200-40, Dalla, Dalla, TX (23) 200-40, Dalla, TX (23) 200-	Sample Comments			BT	Grab/ Comp			Sample Identifica	
Environment Testing       Housen Testing       Housen Tr (28) 204200, Data Tr (19) 2030       Work Order No:				10	1.0	Corrected Temperature:		Total Containers:	
Furifing       Environment Testing       Housen, TX (28) 204-200, Dalls, TX (21) 902-030       Work Order No:         Manager:       Bcn       Bc11/L       Bill to: (If different)       Bill to: (If different)<	Zn Acetate+NaUH: Zn			n	e	Temperature Reading:	No Me	Sample Custody Seals:	
Formation       Environment Testing       Houron, TX (28) 240-200, Data, TX (24) 990-2000       Work Order No:         Manager:       Ben, Beli III       Bill to:       If different       E. Paso, TX (91) 240-200, Data, TX (24) 990-2000       Work Order No:         Manager:       En Sci Vam, LLC       Company Name:       XTO       Enc. crg y, IAC       Now Xenco.com       Page       of         Syname:       Sitz Nati I       Park S, Hmy Address:       SitA E. Greece S, Millowick, TX (800) 794-128       Program:       USTPST    Pape    Brownfields    RRC    of         Site of Project:       None: NO       Difficulting:       Instribut day received by       None: NO       Difficulting:	Na 20 203: INADU 3			de	- 0,0 P	Correction Factor:	INIA	Cooler Custody Seals:	
Environment Testing       Housen TX (21) 20-4200, Gallas, TX (21) 300-4200, Gallas, TX (21) 300-4200, Gallas, TX (21) 300-4200, Gallas, TX (210) 300-300       Work Order No:         Manager:       BCn       Be1i 11       Bill to: (if different)       State ZiP:       Carisson d, NN (87) 302-300, Gallas, TX (210) 300-300       Work Order No:       mwx.xenco.com       Page 1of         Manager:       BCn       Be1i 11       Bill to: (if different)       State Creece       State of Project:       www.xenco.com       Page 1of         Manager:       Garissond, NM 882,20       City, State ZiP:       Carissond, NM 882,20       State of Project:       State of Project:       State of Project:       Reporting: Level III	NaHSO 4: NABIS			.7	10	Thermometer ID:	1	Samples Received Intact:	
Fourofins       Environment Testing       Houston TX (281) 20-020, Dalls: TX (214) 902 300       Work Order No::         Manager:       Ben Beli II       EL Paso, TX (915) 585-544. Undock, TX (2010 596-334       EL Paso, TX (915) 585-544. Undock, TX (210) 596-334       Work Order No::         myName:       Fins.ci.u.m., LLC       Company Name:       State of Project:       Work Order Comments         sezue:       Grans.bad, NM 882.2.0       City, State ZIP:       Carls.bad, NM 882.2.0       Work Order Comments         Number:       0.3 CLFS, 0.106,5       Tum Around       Presentitiesens       State of Project:       None: NO         Number:       0.3 CLFS, 0.106,5       Tum Around       Presentitiesens       Address:       State of Project:       None: NO         State of Project:       None: NO       Discuine       Bush       Presentities       Presentities       Presentities       Presentities       None: NO       Discuine         State of Project:       None: NO       Discuine       None: NO       Discuine       Presentities       Presentities       Presentities       None: NO       Discuine         Number:       0.3.4.1.2.057       Due Date:       Trivice/ery 4.300m       Moles.if receivery 4.300m       Moles.if receivery 4.300m       Moles.if receivery 4.300m       Moles.if receivery 4.300m       Moles.if receiv	H3PO4: HP					No	Temp Blank:	SAMPLE RECEIPT	
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Fouring       Environment Testing       Housen, TX (281) 240-200, Calls: TX (214) 920-300       Work Order No:         Manager:       Ben Beli II       Housen, TX (281) 240-4200, Calls: TX (214) 920-300       Work Order No:         Manager:       Ben Beli II       Bill to: (if different)       Garcett       Greene         Star       Star       Star       Star       Montonic, TX (210) 599-344         Manager:       Ben Beli II       Bill to: (if different)       Garcett       Greene         Star       Star       Star       Star       Montonic, TX (200) 794-126         Manager:       Ben Beli II       Bill to: (if different)       Garcett       Greene       Work Order Comments         Star       Groupiny Name:       Star       Star       Work Order Comments       Program:       Ust/PST         PRP        Brownfields         RRC           ster       PRO 1.0 A.3       Fmail:       bite:1110: existor       Carls back, NM 882.26       Deliverables:       EDD         ADaPT         Other:         Number:       0.3 C155, 01.05, 5       Envisitor       Fmail       bite:1110: existor       Preservative Coll       None: No       Di         Number:       0.3 C155, 01.05, 5       Envisitor       Fmail       None: No       Di       None:		-			he day received by				
Seurofins       Environment Testing       Houston, TX (281) 240-4200, Dallas, TX (214) 992-0300       Work Order No:         Manager:       Ben Seli II       Bill to: (if different)       Garrada, IX (213) 745-540, San Antonio, TX (210) 599-3334       Work Order No:         Manager:       Ben Seli II       Bill to: (if different)       Garrada, IX (213) 92-7550, Carlsbad, IMI (573) 988-3199       www.xenco.com       Page 1       of         Manager:       Carlsbad, NM (573) 92-7550, Carlsbad, IMI (573) 988-3199       www.xenco.com       Page 1       of         Manager:       Garrada, NM 882,2,0       City, State ZIP:       Carlsbad, NM (573) 982-7550, Carlsbad, NM (573) 988-3199       www.xenco.com       Page 1       of         Mane:       Q89.9.854.0.853, Hwy       Address:       310.4 E Greene 54       Reporting: Level III    Level III    PST/UST    TRP          State of Project:       Reporting: Level III    Level III    PST/UST    TRP          ADaPT    Other:       Deliverables: EDD    ADaPT    Other:       Deliverables: EDD    ADaPT    Other:       Deliverables: EDD    ADaPT    Other:       Preservative Co         Name:       Indian Draw Deco, Tuge    Righ       Envite       Preservative Co       Analysis REQUEST       None: NO       Di						12059			
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			uuy				20		

3/29/2023

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# Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4323 List Number: 1 Creator: Clifton, Cloe

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	

Job Number: 890-4323-1 SDG Number: 03C1558185

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Eurofins Carlsbad Released to Imaging: 12/19/2023 9:10:17 AM

14

Job Number: 890-4323-1 SDG Number: 03C1558185

List Source: Eurofins Midland

List Creation: 03/17/23 11:17 AM

# Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 4323 List Number: 2 Creator: Rodriguez, Leticia

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

Received by OCD: 6/23/2023 1:34:15 PM



**Environment Testing** 

# **ANALYTICAL REPORT**

# PREPARED FOR

Attn: Ben Belill Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 3/29/2023 2:58:35 PM

# JOB DESCRIPTION

Indian Draw Deep 7 Com 3 SDG NUMBER 03C1558185

# **JOB NUMBER**

890-4324-1

D FOF Ben Beli Ensolur enfeld S Suite 40 as 7970 2:58:35 P

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information.

Received by OCD: 6/23/2023 1:34:15 PM

1

# **Eurofins Carlsbad**

Job Notes

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

RAMER

Generated 3/29/2023 2:58:35 PM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

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QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19

	Definitions/Glossary		
Client: Ensolur		Job ID: 890-4324-1	
	dian Draw Deep 7 Com 3	SDG: 03C1558185	
Qualifiers			3
GC VOA			
Qualifier	Qualifier Description		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		5
GC Semi VOA			
Qualifier	Qualifier Description		
F2	MS/MSD RPD exceeds control limits		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			8
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		9
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		4
DER	Duplicate Error Ratio (normalized absolute difference)		1
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) Most Probable Number MPN 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

Practical Quantitation Limit PQL

PRES Presumptive QC Quality Control RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry) RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)

TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Carlsbad

Job ID: 890-4324-1 SDG: 03C1558185

### Job ID: 890-4324-1

### Laboratory: Eurofins Carlsbad

#### Narrative

Job Narrative 890-4324-1

### Receipt

The sample was received on 3/15/2023 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

### **Receipt Exceptions**

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-4324-1).

### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS06 (890-4324-1), (890-4353-A-34-C), (890-4353-A-34-A MS) and (890-4353-A-34-B MSD). 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 880-49143 and analytical batch 880-49155 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-49143/2-A) and (LCSD 880-49143/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-49143 and analytical batch 880-49155 was outside control limits. Sample non-homogeneity is suspected.

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.

Project/Site: Indian Draw Deep 7 Com 3

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

Job ID: 890-4324-1 SDG: 03C1558185

# **Client Sample ID: SS06**

Date Collected: 03/15/23 11:05 Date Received: 03/15/23 14:17

Sample Depth: 0.5

Client: Ensolum

# Lab Sample ID: 890-4324-1

Matrix: Solid

5 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/24/23 14:10	03/28/23 18:53	1
Surrogate	%Recovery		Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130			03/24/23 14:10	03/28/23 18:53	1
1,4-Difluorobenzene (Surr)	102		70 - 130			03/24/23 14:10	03/28/23 18:53	1
Method: TAL SOP Total BTEX - To		vulation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398		0.00398	mg/Kg			03/29/23 12:47	1
	0.00000	0	0.00000				00,20,20	
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/22/23 16:11	1
Method: SW846 8015B NM - Dies			· · · ·					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 14:46	1
(GRO)-C6-C10	<49.9		49.9	malka		03/21/23 13:58	03/22/23 14:46	1
Diesel Range Organics (Over C10-C28)	~49.9	0	49.9	mg/Kg		03/21/23 13:30	03/22/23 14.40	I
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/21/23 13:58	03/22/23 14:46	1
, , , , , , , , , , , , , , , , , , ,				0 0				
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			03/21/23 13:58	03/22/23 14:46	1
o-Terphenyl	94		70 - 130			03/21/23 13:58	03/22/23 14:46	1
Method: EPA 300.0 - Anions, Ion		-						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	254		5.02	mg/Kg			03/22/23 20:04	1

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

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-4324-1	SS06	150 S1+	102	
890-4353-A-34-A MS	Matrix Spike	143 S1+	94	
890-4353-A-34-B MSD	Matrix Spike Duplicate	138 S1+	99	
LCS 880-49447/1-A	Lab Control Sample	114	102	
LCSD 880-49447/2-A	Lab Control Sample Dup	114	107	
MB 880-49447/5-A	Method Blank	92	81	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

# Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
mple ID	Client Sample ID	(70-130)	(70-130)	
)-A-11-B MS	Matrix Spike	100	99	
)-A-11-C MSD	Matrix Spike Duplicate	122	121	
24-1	SS06	86	94	
9143/2-A	Lab Control Sample	115	135 S1+	
880-49143/3-A	Lab Control Sample Dup	111	132 S1+	
80-49143/1-A	Method Blank	117	138 S1+	

### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-4324-1 SDG: 03C1558185

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Prep Type: Total/NA

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

Lab Sample ID: MB 880-49447/5-A
Matrix: Solid

### Analysis Batch: 49735

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/24/23 14:10	03/28/23 15:20	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			03/24/23 14:10	03/28/23 15:20	1
1,4-Difluorobenzene (Surr)	81		70 - 130			03/24/23 14:10	03/28/23 15:20	1

### Lab Sample ID: LCS 880-49447/1-A Matrix: Solid

# Analysis Batch: 49735

Spike	ECS	LCS			%Rec
Analyte Added	l Result	Qualifier Uni	it D	%Rec	Limits
Benzene 0.100	0.1130	mg	/Kg	113	70 - 130
Toluene 0.100	0.09973	mg	/Kg	100	70 - 130
Ethylbenzene 0.100	0.1082	mg	/Kg	108	70 - 130
m-Xylene & p-Xylene 0.200	0.2222	mg	/Kg	111	70 - 130
o-Xylene 0.100	0.1057	mg	/Kg	106	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

### Lab Sample ID: LCSD 880-49447/2-A

### Matrix: Solid

Analysis Batch: 49735						Prep	Batch:	49447
	Spike	LCSD LCS	D			%Rec		RPD
Analyte	Added	Result Qual	lifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1239	mg/Kg		124	70 - 130	9	35
Toluene	0.100	0.1039	mg/Kg		104	70 - 130	4	35
Ethylbenzene	0.100	0.1134	mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2319	mg/Kg		116	70 - 130	4	35
o-Xylene	0.100	0.1103	mg/Kg		110	70 - 130	4	35

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

# Lab Sample ID: 890-4353-A-34-A MS

#### Matrix: Solid Analysis Potoby 40725

Analysis Batch: 49735									Pre	p Batch: 49447
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.100	0.1071		mg/Kg		107	70 - 130	
Toluene	<0.00200	U	0.100	0.1079		mg/Kg		107	70 - 130	

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Prep Type: Total/NA

**Client Sample ID: Matrix Spike** 

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

# Method: 8021B - Volatile Organic Compounds (GC) (Continued) Lab Sample ID: 890-4353-A-34-A MS

Lab Sample ID: 890-4353-A-3 Matrix: Solid Analysis Batch: 49735	34-A MS							Client	Sample ID: Matri Prep Type: T Prep Batch	otal/NA
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00200	U	0.100	0.1227		mg/Kg		122	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.201	0.2515		mg/Kg		125	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1199		mg/Kg		119	70 - 130	
	MS	MS								

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)		S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

### Lab Sample ID: 890-4353-A-34-B MSD Matrix: Solid

1,4-Difluorobenzene (Surr)

Analysis Batch: 49735									Prep	Batch:	49447	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00200	U	0.0996	0.1282		mg/Kg		129	70 - 130	18	35	
Toluene	<0.00200	U	0.0996	0.1114		mg/Kg		112	70 - 130	3	35	
Ethylbenzene	<0.00200	U	0.0996	0.1226		mg/Kg		123	70 - 130	0	35	
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2519		mg/Kg		126	70 - 130	0	35	
o-Xylene	<0.00200	U	0.0996	0.1190		mg/Kg		120	70 - 130	1	35	
	MSD	MSD										
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130									

70 - 130

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

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#### Lab Sample ID: MB 880-49143/1-A **Client Sample ID: Method Blank** Matrix: Solid Prep Type: Total/NA Analysis Batch: 49155 Prep Batch: 49143 MB MB Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte <50.0 U 03/21/23 13:58 50.0 03/22/23 08:00 Gasoline Range Organics mg/Kg 1 (GRO)-C6-C10 03/21/23 13:58 03/22/23 08:00 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 1 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 03/21/23 13:58 03/22/23 08:00 mg/Kg 1 MB MB %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 1-Chlorooctane 117 70 - 130 03/21/23 13:58 03/22/23 08:00 1 o-Terphenyl 138 S1+ 70 - 130 03/21/23 13:58 03/22/23 08:00 1 Lab Sample ID: LCS 880-49143/2-A Client Sample ID: Lab Control Sample

### Matrix: Solid Analysis Batch: 49155

Analysis Batch: 49155							Prep	o Batch: 49143
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	957.6		mg/Kg		96	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	916.2		mg/Kg		92	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

## Method: 8015B NM - Diese

Method: 8015B NM - Dies	sel Range O	rganics (D	)RO) (GC) ((	Continue	ed)							
Lab Sample ID: LCS 880-491 Matrix: Solid Analysis Batch: 49155	143/2-A						Client	t Sample		ontrol S Type: To Batch:	tal/NA	
	LCS	LCS										
Surrogate	%Recovery	Qualifier	Limits									E
1-Chlorooctane			70 - 130									
o-Terphenyl	135	S1+	70 - 130									Ē
Lab Sample ID: LCSD 880-4	9143/3-A					Clie	nt Sam	nple ID:	Lab Contro	l Sampl	e Dup	
Matrix: Solid									Prep 1	Type: To	tal/NA	
Analysis Batch: 49155									Prep	Batch:	49143	
			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	941.5		mg/Kg		94	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)			1000	888.6		mg/Kg		89	70 - 130	3	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	111		70 - 130									
o-Terphenyl	132	S1+	70 - 130									
Lab Sample ID: 880-26040-A	A-11-B MS							Client	Sample ID	: Matrix	Spike	
Matrix: Solid Analysis Batch: 49155										ype: To Batch:		
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	999	963.1		mg/Kg		94	70 - 130			
Diesel Range Organics (Over C10-C28)	124		999	919.6		mg/Kg		80	70 - 130			
	MS	MS										
0	0/ <b>D</b>	0 ""										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	99		70 - 130

### Lab Sample ID: 880-26040-A-11-C MSD Matrix: Solid

Analysis Batch: 49155									Prep	Batch:	49143
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	998	1211	F2	mg/Kg		119	70 - 130	23	20
Diesel Range Organics (Over C10-C28)	124		998	1104		mg/Kg		98	70 - 130	18	20
	MSD	MSD									

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	121		70 - 130

**Client Sample ID: Matrix Spike Duplicate** 

Prep Type: Total/NA

# **QC Sample Results**

Job ID: 890-4324-1 SDG: 03C1558185

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

# Method: 300.0 - Anions, Ion Chromatography

_											
Lab Sample ID: MB 880-48964/1-	-A							Client	Sample ID	: Method	Blank
Matrix: Solid									Prej	o Type: S	oluble
Analysis Batch: 49308											
		MB MB									
Analyte	Re	esult Qualifi	er	RL	Unit	t	<u>D</u>	Prepared	Anal	yzed	Dil Fac
Chloride	<	5.00 U		5.00	mg/	Kg			03/22/2	3 18:22	1
Lab Sample ID: LCS 880-48964/2	2-A						Clie	ent Samp	le ID: Lab (	Control S	ample
Matrix: Solid									Prej	o Type: S	oluble
Analysis Batch: 49308											
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits		
Chloride			250	250.8		mg/Kg		100	90 _ 110		
Lab Sample ID: LCSD 880-48964	/3-A					CI	ient S	ample ID	Lab Contr	ol Samp	le Dup
Matrix: Solid									Pre	o Type: S	oluble
Analysis Batch: 49308											
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	RPD	Limit
Chloride			250	245.5		mg/Kg		98	90 _ 110	2	20
Lab Sample ID: 880-26152-A-5-C	MS							Clier	t Sample I	D: Matrix	Spike
Matrix: Solid									Prej	o Type: S	oluble
Analysis Batch: 49308											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D %Rec	Limits		
Chloride	23.9		248	287.2		mg/Kg		106	90 - 110		
- Lab Sample ID: 880-26152-A-5-D	MSD						Client	Sample	D: Matrix S	Spike Duj	plicate
Matrix: Solid										· o Type: S	
Analysis Batch: 49308											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D %Rec	Limits	RPD	Limit
Chloride	23.9		248	281.4		mg/Kg		104	90 - 110	2	20

# **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

4 5 6

Job ID: 890-4324-1 SDG: 03C1558185

# GC VOA

### Prep Batch: 49447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
390-4324-1	SS06	Total/NA	Solid	5035	
MB 880-49447/5-A	Method Blank	Total/NA	Solid	5035	
_CS 880-49447/1-A	Lab Control Sample	Total/NA	Solid	5035	
CSD 880-49447/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
90-4353-A-34-A MS	Matrix Spike	Total/NA	Solid	5035	
390-4353-A-34-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 49735					
.ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
90-4324-1	SS06	Total/NA	Solid	8021B	4944
/IB 880-49447/5-A	Method Blank	Total/NA	Solid	8021B	4944
CS 880-49447/1-A	Lab Control Sample	Total/NA	Solid	8021B	4944
CSD 880-49447/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4944
90-4353-A-34-A MS	Matrix Spike	Total/NA	Solid	8021B	4944
90-4353-A-34-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	4944
nalysis Batch: 49841					
_ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
390-4324-1	SS06	Total/NA	Solid	Total BTEX	
C Semi VOA					

### Prep Batch: 49143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4324-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-49143/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49143/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26040-A-11-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26040-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 49155

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4324-1	SS06	Total/NA	Solid	8015B NM	49143
MB 880-49143/1-A	Method Blank	Total/NA	Solid	8015B NM	49143
LCS 880-49143/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49143
LCSD 880-49143/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49143
880-26040-A-11-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49143
880-26040-A-11-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49143
Analysis Batch: 49233					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch

Total/NA

Solid

8015 NM

# 890-4324-1

# HPLC/IC

# Leach Batch: 48964

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4324-1	SS06	Soluble	Solid	DI Leach	
MB 880-48964/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48964/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48964/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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SS06

# **QC** Association Summary

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

# HPLC/IC (Continued)

### Leach Batch: 48964 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
880-26152-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-26152-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Analysis Batch: 49308					

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-4324-1	SS06	Soluble	Solid	300.0	48964	
MB 880-48964/1-A	Method Blank	Soluble	Solid	300.0	48964	
LCS 880-48964/2-A	Lab Control Sample	Soluble	Solid	300.0	48964	8
_CSD 880-48964/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48964	
380-26152-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	48964	9
880-26152-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48964	
					-	

Job ID: 890-4324-1

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SDG: 03C1558185

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Project/Site: Indian Draw Deep 7 Com 3

**Client Sample ID: SS06** 

Client: Ensolum

Job ID: 890-4324-1 SDG: 03C1558185

# Lab Sample ID: 890-4324-1 Matrix: Solid

Date Collected: 03/15/23 11:05 Date Received: 03/15/23 14:17

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	49447	03/24/23 14:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49735	03/28/23 18:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49841	03/29/23 12:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49233	03/22/23 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49143	03/21/23 13:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49155	03/22/23 14:46	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	48964	03/22/23 12:00	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49308	03/22/23 20:04	SMC	EET MID

### Laboratory References:

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

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Released to Imaging: 12/19/2023 9:10:17 AM

**Accreditation/Certification Summary** 

	A	ccreditation/C	ertification Summary		
Client: Ensolum Project/Site: Indian Dra	w Deep 7 Com 3			Job ID: 890-432 SDG: 03C1558	
Laboratory: Eurofi	ns Midland nalytes for this laboratory wer	re covered under each eac	raditation/contification holow		3
Authority		ogram	Identification Number	Expiration Date	_ 4
Texas		LAP	T104704400-22-25	06-30-23	
The following analytes	are included in this report, but	the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for which	5
the agency does not off			ioù by the governing dutionty. This ist ne		
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					11
					13
					14

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Project/Site: Indian Draw Deep 7 Com 3

Client: Ensolum

Job ID: 890-4324-1 SDG: 03C1558185

Nethod	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
3015B 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
3015NM Prep	Microextraction	SW846	EET MID
OI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
	Environmental Protection Agency "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third E-	dition, November 1986 And Its Updates.	
	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third E = TestAmerica Laboratories, Standard Operating Procedure	dition, November 1986 And Its Updates.	
Laboratory R			
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440	)	

Eurofins Carlsbad

# **Sample Summary**

Job ID: 890-4324-1 SDG: 03C1558185

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-4324-1	SS06	Solid	03/15/23 11:05	03/15/23 14:17	0.5	4
						5
						8
						9
						12
						13

		14 8 C 3	2.6	lucip	7	mean
Date/Time	) Received by: (Signature)	Date/Time Relinquished by: (Signature)		Received by: (Signature)	nature)	Relinquished by: (Signature)
	erns and conditions beyond the control liess previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco. But not analyzed. These terms will be enforced unless previously nego	er from client company to Eurofins X nsibility for any losses or expenses in for each sample submitted to Eurofi	les constitutes a valid purchase ord oles and shall not assume any respo to each project and a charge of \$5	t and relinquishment of sampi lable only for the cost of samp arge of \$85.00 will be applied to	ke: Signature of this documen ervke. Eurofins Xenco will be i urofins Xenco. A minimum cha
Sn U V Zn 70 / 7471	Ag Mn Mo Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn i Se Ag Tl U Hg: 1631/245.1/7470	B Cd Ca Cr Co Cu Fe Pb N 2 Cd Cr Co Cu Pb Mn Mo N	M Texas 11 AI Sb As Ba Be PLP 6010 : 8RCRA Sb As Ba Be	8RCR.	200.8 / 6020: Metal(s) to be ana	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
moburblensolum	3					
1122241001						
ost Center						
NAPP2301152626	Z	> MAC				
Incident #:	15	XXX	0.51612	3/15/23 1105	S	3055
Sample Comments		BT CF 890-4324 Chain of	Depth Grab/ # of Comp Cont	Date Time Sampled Sampled	tion Matrix	Sample Identification
NaOH+Ascorbic Acid: SAPC		H	1.0	Corrected Temperature:		Total Containers:
Zn Acetate+NaOH: Zn	Zn A			Temperature Reading:		Sample Custody Seals:
Na2S2O3: NaSO 3	Naz	de		Correction Factor:		Cooler Custody Seals:
NaHSO .: NABIS	NaH	5	L	nometer l	Yes No	Samples Received Intact:
H <sub>3</sub> PO 4: HP	H <sub>3</sub> P		Yes No	Yes No Wet Ice:	Temp Blank:	SAMPLE RECEIPT
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na	H <sub>2</sub> S		the lab, if received by 4:30pm		MERCIUTA LUBAR IS	PO #:
0	Coo			05%	32.41260, -104.	
None: NO DI Water: H <sub>2</sub> O	Non		Rush Code		301558185	Project Number: 0
Preservative Codes	ST	ANALYSIS REQUEST	Turn Around	7 Com 3	Inclian Draw Deep	Project Name:
] Other:	Deliverables: EDD ADaPT	ensolum. win	bbenne	1852 Email:	989-854-085	Phone:
PST/UST TRRP L Level IV	Reporting: Level II Level III PST/U	Carlsbad, NM 88720	City, State ZIP:		bood.	City, State ZIP:
		3104 E Greene St		Parks Havy	3122 Nat'	Address:
elds RRC Superfund	Program: UST/PST PRP Brownfields	XTO Energy	Company Name:	LLC .	Ensolum	Company Name:
ents	Work Order Comments	GarettGreen	Bill to: (if different)	-	Ben Belill	Project Manager:
Page of	www.xenco.com	Hobbs, NM (5/5) 392-7550, Carisbad, NM (5/5) 988-3199	Hobbs, NM (575)			
		EL Paso, 1X (915) 585-3443, LUDDOCK, 1X (806) 794-1296	EL Paso, 1X (915)			
					Xenco	

3/29/2023

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**Environment Testi** 

Chain of Custody Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

# Login Sample Receipt Checklist

Client: Ensolum

### Login Number: 4324 List Number: 1 Creator: Clifton, Cloe

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	

Job Number: 890-4324-1 SDG Number: 03C1558185

### List Source: Eurofins Carlsbad
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Job Number: 890-4324-1 SDG Number: 03C1558185

List Source: Eurofins Midland

List Creation: 03/17/23 11:17 AM

#### Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4324 List Number: 2 Creator: Rodriguez, Leticia

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 6/23/2023 1:34:15 PM



**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Ben Belill Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 4/8/2023 8:08:10 AM

## JOB DESCRIPTION

Indian Draw Deep 7 Com 3 SDG NUMBER 03C1558185

## **JOB NUMBER**

890-4407-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information.

Received by OCD: 6/23/2023 1:34:15 PM

## **Eurofins Carlsbad**

Job Notes

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

RAMER

Generated 4/8/2023 8:08:10 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

SDG: 03C1558185

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Indicates the analyte was analyzed for but not detected.

Client: Ensol Project/Site:	Job ID: 890-4407-1 SDG: 03C1558185		
Qualifiers			3
GC VOA			
Qualifier	Qualifier Description		4
F1	MS and/or MSD recovery exceeds control limits.		
F2	MS/MSD RPD exceeds control limits		5
S1-	Surrogate recovery exceeds control limits, low biased.		

GC Semi VOA

U

GC Selli VU	A	
Qualifier	Qualifier Description	
*+	LCS and/or LCSD is outside acceptance limits, high biased.	
S1+	Surrogate recovery exceeds control limits, high biased.	8
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		9
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	40
CFL	Contains Free Liquid	13
CFU	Colony Forming Unit	

G	ossarv	1

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	

#### Job ID: 890-4407-1 SDG: 03C1558185

#### Job ID: 890-4407-1

#### Laboratory: Eurofins Carlsbad

#### Narrative

Job Narrative 890-4407-1

#### Receipt

The samples were received on 3/24/2023 12:12 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-4407-1), BH02 (890-4407-2), BH03 (890-4407-3), BH05 (890-4407-4) and BH04 (890-4407-5).

#### GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH02 (890-4407-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-50231 and analytical batch 880-50458 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.

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: Surrogate recovery for the following samples were outside control limits: (CCV 880-49995/5), (LCS 880-49932/2-A) and (LCSD 880-49932/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (880-26347-A-4-A). 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: BH01 (890-4407-1) and BH05 (890-4407-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The method blank for preparation batch 880-49932 and analytical batch 880-49995 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-49932 and analytical batch 880-49995 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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 duplicate (MSD) recoveries for preparation batch 880-50330 and analytical batch 880-50341 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.BH04 (890-4407-5) and (890-4407-A-5-H MSD)

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

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

Result Qualifier

RL

Unit

D

Job ID: 890-4407-1 SDG: 03C1558185

Analyzed

## **Client Sample ID: BH01**

Date Collected: 03/24/23 09:20 Date Received: 03/24/23 12:12

Sample Depth: 2'

Analyte

Client: Ensolum

Lab Sample ID: 890-4407-1

Prepared

Matrix: Solid

Dil Fac

5

Analyte Chloride	53.8		5.04				04/05/23 22:26	
		Qualifier	RL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: EPA 300.0 - Anions, Io	n Chromatogram	hy - Solubl	e					
p-Terphenyl	136	S1+	70 - 130			03/30/23 12:21	03/31/23 18:47	1
1-Chlorooctane	111		70 - 130			03/30/23 12:21	03/31/23 18:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/23 12:21	03/31/23 18:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9	mg/Kg		03/30/23 12:21	03/31/23 18:47	1
(GRO)-C6-C10	~+0.0	0	40.0	mg/rtg				
Analyte Gasoline Range Organics	<b>Result</b> <49.9	Qualifier		Unit mg/Kg	<u> </u>	Prepared 03/30/23 12:21	Analyzed 03/31/23 18:47	Dil Fa
Method: SW846 8015B NM - Die			· · ·	11-14		Durant	American	D!!
otal TPH	<49.9	U	49.9	mg/Kg			04/03/23 14:09	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Dies								
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/07/23 18:45	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: TAL SOP Total BTEX -	Total BTEX Calo	culation						
1,4-Difluorobenzene (Surr)	94		70 - 130			04/03/23 15:44	04/06/23 16:40	1
4-Bromofluorobenzene (Surr)	91		70 - 130			04/03/23 15:44	04/06/23 16:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 15:44	04/06/23 16:40	1
p-Xylene	<0.00199		0.00199	mg/Kg		04/03/23 15:44	04/06/23 16:40	-
n-Xylene & p-Xylene	<0.00398		0.00398	mg/Kg		04/03/23 15:44	04/06/23 16:40	~
Ethylbenzene	<0.00199		0.00199	mg/Kg		04/03/23 15:44	04/06/23 16:40	
	<0.00199		0.00199	mg/Kg		04/03/23 15:44	04/06/23 16:40	
Foluene								

Date Collected: 03/24/23 09:30 Date Received: 03/24/23 12:12

Sample Depth: 2'

Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/03/23 15:44	04/06/23 17:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			04/03/23 15:44	04/06/23 17:00	1

Eurofins Carlsbad

Released to Imaging: 12/19/2023 9:10:17 AM

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

Method: TAL SOP Total BTEX - Total BTEX Calculation

%Recovery Qualifier

66 S1-

Result Qualifier

#### **Client Sample Results**

Limits

70 - 130

RL

Job ID: 890-4407-1 SDG: 03C1558185

Analyzed

04/06/23 17:00

Analyzed

Lab Sample ID: 890-4407-3

Matrix: Solid

#### **Client Sample ID: BH02**

Date Collected: 03/24/23 09:30 Date Received: 03/24/23 12:12

Sample Depth: 2'

1,4-Difluorobenzene (Surr)

Client: Ensolum

Surrogate

Analyte

Lab Sample

D

Unit

Prepared

04/03/23 15:44

Prepared

Total BTEX	<0.00399	U	0.00399	mg/Kg			04/07/23 18:45	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			04/03/23 14:09	1
– Method: SW846 8015B NM - Diese	I Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *+	50.0	mg/Kg		03/30/23 12:21	03/31/23 19:08	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U *+	50.0	mg/Kg		03/30/23 12:21	03/31/23 19:08	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/23 12:21	03/31/23 19:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			03/30/23 12:21	03/31/23 19:08	1
o-Terphenyl	127		70 - 130			03/30/23 12:21	03/31/23 19:08	1
_ Method: EPA 300.0 - Anions, Ion C	hromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.6		4.99	mg/Kg			04/05/23 22:31	1

#### **Client Sample ID: BH03**

Date Collected: 03/24/23 09:40 Date Received: 03/24/23 12:12 Sample Depth: 2'

#### 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 04/03/23 15:44 04/06/23 17:21 Toluene <0.00200 U 0.00200 04/03/23 15:44 04/06/23 17:21 mg/Kg 1 Ethylbenzene <0.00200 U 0.00200 mg/Kg 04/03/23 15:44 04/06/23 17:21 <0.00401 U 0.00401 04/03/23 15:44 04/06/23 17:21 m-Xylene & p-Xylene mg/Kg 1 o-Xylene <0.00200 U 0.00200 mg/Kg 04/03/23 15:44 04/06/23 17:21 Xylenes, Total <0.00401 U 0.00401 mg/Kg 04/03/23 15:44 04/06/23 17:21 1 %Recovery Surrogate Qualifier Limits Dil Fac Prepared Analvzed 70 - 130 04/03/23 15:44 4-Bromofluorobenzene (Surr) 97 04/06/23 17.21 1 1,4-Difluorobenzene (Surr) 96 70 - 130 04/03/23 15:44 04/06/23 17:21 1 Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte **Result Qualifier** RL Unit D Dil Fac Prepared Analyzed Total BTEX <0.00401 Ū 0.00401 04/07/23 18:45 mg/Kg 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 04/03/23 14:09 1

**Eurofins Carlsbad** 

Released to Imaging: 12/19/2023 9:10:17 AM

Job ID: 890-4407-1 SDG: 03C1558185

Lab Sample ID: 890-4407-3

Analyzed

Lab Sample ID: 890-4407-4

## Client Sample ID: BH03

Date Collected: 03/24/23 09:40 Date Received: 03/24/23 12:12

Sample Depth: 2'

Client: Ensolum

<b>—</b>		
Method: SW846 8015B NM - Die	sel Range Organics (DRO) (G	iC)
Analyte	Result Qualifier	RL

Gasoline Range Organics	<49.9	U *+	49.9	mg/Kg	03/30/23 12:21	03/31/23 19:29	1
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.9	U *+	49.9	mg/Kg	03/30/23 12:21	03/31/23 19:29	1
C10-C28)							
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	03/30/23 12:21	03/31/23 19:29	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130		03/30/23 12:21	03/31/23 19:29	1
o-Terphenyl	120		70 - 130		03/30/23 12:21	03/31/23 19:29	1

Unit

D

Prepared

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.0	4.97	mg/Kg			04/05/23 22:36	1

#### Client Sample ID: BH05

#### Date Collected: 03/24/23 10:05

Date Received: 03/24/23 12:12

#### Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/03/23 15:44	04/06/23 17:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			04/03/23 15:44	04/06/23 17:41	1
1,4-Difluorobenzene (Surr)	72		70 - 130			04/03/23 15:44	04/06/23 17:41	1
_ Method: TAL SOP Total BTEX	Total BTEX Cal	sulation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

## Total BTEX <0.00396</th> U 0.00396 mg/Kg 04/07/23 18:45

#### 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			04/03/23 14:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *+	49.9	mg/Kg		03/30/23 12:21	03/31/23 19:51	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U *+	49.9	mg/Kg		03/30/23 12:21	03/31/23 19:51	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/23 12:21	03/31/23 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			03/30/23 12:21	03/31/23 19:51	1
o-Terphenyl	141	S1+	70 - 130			03/30/23 12:21	03/31/23 19:51	1

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		Clier	nt Sample Re	sults				
Client: Ensolum			-				Job ID: 890	-4407-
Project/Site: Indian Draw Deep 7 Co	om 3						SDG: 03C1	155818
Client Sample ID: BH05						Lab Sar	nple ID: 890-	4407-
Date Collected: 03/24/23 10:05								x: Soli
Date Received: 03/24/23 12:12								
Sample Depth: 2'								
_								
Method: EPA 300.0 - Anions, Ion		hy - Solub Qualifier	le RL	Unit	D	Prepared	Analyzed	Dil F
Analyte Chloride	Kesun 40.1	Quanner	5.00	mg/Kg		Frepareu	04/05/23 22:41	
-	40.1		0.00					
Client Sample ID: BH04						Lab Sar	nple ID: 890-	4407
Date Collected: 03/24/23 10:15							Matri	ix: Sol
Date Received: 03/24/23 12:12								
Sample Depth: 2'								
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC	)					
Analyte		Qualifier	, RL	Unit	D	Prepared	Analyzed	Dil F
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 15:44	04/06/23 18:02	
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 15:44	04/06/23 18:02	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 15:44	04/06/23 18:02	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 15:44	04/06/23 18:02	
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 15:44	04/06/23 18:02	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 15:44	04/06/23 18:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
4-Bromofluorobenzene (Surr)	96		70 - 130			04/03/23 15:44	04/06/23 18:02	
1,4-Difluorobenzene (Surr)	92		70 - 130			04/03/23 15:44	04/06/23 18:02	
Method: TAL SOP Total BTEX - T					_			
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/07/23 18:45	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Total TPH	<50.0	U	50.0	mg/Kg			04/03/23 14:09	
- Mothod: SW/946 9015D NM Dieg								
Method: SW846 8015B NM - Dies Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics			50.0	0mt mg/Kg		03/30/23 12:21	03/31/23 20:12	
(GRO)-C6-C10	~50.0	0 +	50.0	ilig/itg		05/50/25 12.21	03/31/23 20.12	
Diesel Range Organics (Over	<50.0	U *+	50.0	mg/Kg		03/30/23 12:21	03/31/23 20:12	
C10-C28)				- •				
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/23 12:21	03/31/23 20:12	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
1-Chlorooctane	105		70 - 130			03/30/23 12:21	03/31/23 20:12	
o-Terphenyl	129		70 - 130			03/30/23 12:21	03/31/23 20:12	
-								
	0							
Method: EPA 300.0 - Anions, Ion Analyte		hy - Solub Qualifier	le RL	Unit	D	Prepared	Analyzed	Dil F

04/05/23 16:10

Chloride

5.01

mg/Kg

57.1 F1

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

				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-26348-A-1-C MS	Matrix Spike	117	105	
880-26348-A-1-D MSD	Matrix Spike Duplicate	88	113	
890-4407-1	BH01	91	94	
890-4407-2	BH02	90	66 S1-	
890-4407-3	BH03	97	96	
890-4407-4	BH05	86	72	
890-4407-5	BH04	96	92	
LCS 880-50231/1-A	Lab Control Sample	106	108	
LCSD 880-50231/2-A	Lab Control Sample Dup	105	110	
MB 880-50231/5-A	Method Blank	72	100	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

matrix:	<b>Solia</b>

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-26347-A-4-B MS	Matrix Spike	112	122
880-26347-A-4-C MSD	Matrix Spike Duplicate	109	119
890-4407-1	BH01	111	136 S1+
890-4407-2	BH02	105	127
890-4407-3	BH03	98	120
890-4407-4	BH05	118	141 S1+
890-4407-5	BH04	105	129
LCS 880-49932/2-A	Lab Control Sample	139 S1+	159 S1+
LCSD 880-49932/3-A	Lab Control Sample Dup	167 S1+	187 S1+
MB 880-49932/1-A	Method Blank	104	130

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

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

Lab Sample ID: MB 880-50231/5-A
Matrix: Solid
Analysis Batch: 50458

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/03/23 15:44	04/06/23 10:49	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130			04/03/23 15:44	04/06/23 10:49	1
1,4-Difluorobenzene (Surr)	100		70 - 130			04/03/23 15:44	04/06/23 10:49	1

#### Lab Sample ID: LCS 880-50231/1-A Matrix: Solid

#### Analysis Batch: 50458

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1108		mg/Kg		111	70 - 130	
Toluene	0.100	0.09947		mg/Kg		99	70 - 130	
Ethylbenzene	0.100	0.09904		mg/Kg		99	70 - 130	
m-Xylene & p-Xylene	0.200	0.2101		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.1062		mg/Kg		106	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

#### Lab Sample ID: LCSD 880-50231/2-A

#### Matrix: Solid

Analysis Batch: 50458						Prep	Batch:	50231
	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1217	mg/Kg		122	70 - 130	9	35
Toluene	0.100	0.1090	mg/Kg		109	70 - 130	9	35
Ethylbenzene	0.100	0.1071	mg/Kg		107	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2256	mg/Kg		113	70 - 130	7	35
o-Xylene	0.100	0.1133	mg/Kg		113	70 - 130	6	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

#### Lab Sample ID: 880-26348-A-1-C MS

#### Matrix: Solid aluaia Batabi 50459

Analysis	s Batch: 50458									Prep	Batch: 50231
		Sample	Sample	Spike	MS	MS				%Rec	
Analyte		Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene		<0.00200	U	0.101	0.07376		mg/Kg		73	70 - 130	
Toluene		<0.00200	U F1	0.101	0.06769	F1	mg/Kg		67	70 - 130	

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Prep Type: Total/NA

**Client Sample ID: Matrix Spike** 

5

Prep Type: Total/NA Prep Batch: 50231

**Client Sample ID: Method Blank** 

D	Prepared	Analyzed	Dil Fac	
_	04/03/23 15:44	04/06/23 10:49	1	6
	04/03/23 15:44	04/06/23 10:49	1	
	04/03/23 15:44	04/06/23 10:49	1	7
	04/03/23 15:44	04/06/23 10:49		
	04/03/23 15:44	04/06/23 10:49	1	
	04/03/23 15:44	04/06/23 10:49	1	8
	04/03/23 15.44	04/06/23 10.49	I	
				9
	Prepared	Analyzed	Dil Fac	
	04/03/23 15:44	04/06/23 10:49	1	10
	04/03/23 15:44	04/06/23 10:49	1	
				11
С	lient Sample II	D: Lab Control	Sample	
		Prep Type: 1	fotal/NA	12

Prep Batch: 50231

111	70 - 130	
99	70 - 130	
99	70 - 130	
105	70 - 130	
106	70 - 130	

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

#### Lab Sample ID: 880-26348-A-1-C MS **Client Sample ID: Matrix Spike** Matrix: Solid Prep Type: Total/NA Analysis Batch: 50458 Prep Batch: 50231 Sample Sample Spike MS MS %Rec Analyte **Result Qualifier** Added **Result Qualifier** Unit %Rec Limits D Ethylbenzene <0.00200 UF1 0.101 0.06797 F1 67 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00399 U F1 F2 0.202 0.1397 F1 mg/Kg 69 70 - 130 <0.00200 U F1 F2 0.101 0.07169 71 70 - 130 o-Xylene mg/Kg MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 117 1,4-Difluorobenzene (Surr) 70 - 130 105 Lab Sample ID: 880-26348-A-1-D MSD **Client Sample ID: Matrix Spike Duplicate** Matrix: Solid Prep Type: Total/NA Prep Batch: 50231 Analysis Batch: 50458 Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier %Rec RPD Limit Limits Analyte Unit D Benzene <0.00200 U 0.0990 0.07720 mg/Kg 78 70 - 130 5 35 Toluene <0.00200 UF1 0.0990 0.05793 F1 mg/Kg 59 70 - 130 16 35 Ethylbenzene 0.0990 0.04863 F1 49 70 - 130 35 <0.00200 UF1 mg/Kg 33 m-Xylene & p-Xylene <0.00399 U F1 F2 0.198 0.09196 F1 F2 mg/Kg 46 70 - 130 41 35 <0.00200 U F1 F2 0.0990 47 70 - 130 o-Xylene 0.04671 F1 F2 mg/Kg 42 35 MSD MSD Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 88 70 - 130 1,4-Difluorobenzene (Surr) 113 70 - 130 Method: 8015B NM - Diesel Range Organics (DRO) (GC) Lab Sample ID: MB 880-49932/1-A **Client Sample ID: Method Blank** Matrix: Solid Prep Type: Total/NA Analysis Batch: 49995 Prep Batch: 49932

Т		MB	INIB						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1
	(GRO)-C6-C10								
	Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1
	C10-C28)								
	Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1
		MB	МВ						
	Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
	1-Chlorooctane	104		70 - 130			03/30/23 12:21	03/31/23 09:25	1

70 - 130

130

#### Lab Sample ID: LCS 880-49932/2-A Matrix: Solid

o-Terphenyl

Analysis Batch: 49995							Prep B	atch: 49932
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1204		mg/Kg		120	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1703	*+	mg/Kg		170	70 - 130	
C10-C28)								

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Prep Type: Total/NA

03/31/23 09:25

**Client Sample ID: Lab Control Sample** 

03/30/23 12:21

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

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

lethod: 8015B NM - Dies	-	<u>J</u>	// //									
Lab Sample ID: LCS 880-499	32/2-A						Client	Sample	D: Lab Co			
Matrix: Solid										ype: To		
Analysis Batch: 49995									Prep	Batch:	49932	
	LCS	LCS										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	139	S1+	70 - 130									
o-Terphenyl	159	S1+	70 - 130									
Lab Sample ID: LCSD 880-49	932/3-0					Clie	nt Sam	nla ID: I	Lab Contro	l Samni		
Matrix: Solid	502/0-A					Oner	in our	ipic ib.		ype: To		
Analysis Batch: 49995										Batch:		
			Spike	LCSD	LCSD				%Rec	Batom	RPD	
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	·		1000	1476	*+	mg/Kg		148	70 - 130	20	20	
GRO)-C6-C10												
Diesel Range Organics (Over			1000	2050	*+	mg/Kg		205	70 - 130	18	20	
C10-C28)												
	LCSD	LCSD										
Surrogate	%Recovery		Limits									
-Chlorooctane	167		70 - 130									
p-Terphenyl	187	S1+	70 - 130									
.ab Sample ID: 880-26347-A-	4-B MS							Client	Sample ID	: Matrix	Spike	
Matrix: Solid										ype: To		
Analysis Batch: 49995										Batch:		
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics	<49.9	U *+	999	982.9		mg/Kg		95	70 - 130			
GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U *+	999	1170		mg/Kg		117	70 - 130			
C10-C28)												
	MS	MS										
Surrogate	%Recovery	Qualifier	Limits									
-Chlorooctane	112		70 - 130									
p-Terphenyl	122		70 - 130									
ah Sample ID: 880-26347-A-	4-C MSD						iont Se	amnia IF	)• Matriv Qr	νίκο Πιυ	alicato	
	4-C MSD					CI	ient Sa	ample IE	): Matrix Sp Prep 1			
Lab Sample ID: 880-26347-A- Matrix: Solid Analysis Batch: 49995	4-C MSD					CI	ient Sa	ample IE	Prep T	oike Dup Type: To Batch:	tal/NA	

Analysis Batch: 49995									Prep	Batch:	49932
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+	999	949.3		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+	999	1153		mg/Kg		115	70 _ 130	1	20
	MSD	MSD									

	INISD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	119		70 - 130

Job ID: 890-4407-1 SDG: 03C1558185 Client: Ensolum

#### **QC Sample Results**

Job ID: 890-4407-1 SDG: 03C1558185

Project/Site: Indian Draw Deep 7 Com 3 Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50330/1-A											Client S	Sample ID: N	<b>letho</b>	d Blani
Matrix: Solid												Prep 1		
Analysis Batch: 50341														
		МВ	МВ											
Analyte	R	esult	Qualifier		RL		Unit		D	P	repared	Analyze	ed	Dil Fa
Chloride	·	<5.00	U		5.00		mg/K	g				04/05/23 0	0:12	
Lab Sample ID: LCS 880-50330/2-4 Matrix: Solid	4								CI	ient	Sample	e ID: Lab Co Prep 1		
Analysis Batch: 50341														
				Spike			LCS					%Rec		
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride				250		247.2		mg/Kg			99	90 - 110		
- Lab Sample ID: LCSD 880-50330/3	- <b>A</b>							Cli	ent S	Sam	ple ID:	Lab Control	Samp	ole Du
Matrix: Solid												Prep 1		
Analysis Batch: 50341														
				Spike		LCSD	LCSD					%Rec		RP
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Lim
Chloride				250		242.2		mg/Kg		_	97	90 - 110	2	2
– Lab Sample ID: 890-4407-5 MS Matrix: Solid												Client Sam Prep 1		
Analysis Batch: 50341														
	Sample	Sam	ple	Spike		MS	MS					%Rec		
Analyte	Result	Qua	lifier	Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride	57.1	F1		251		319.6		mg/Kg		_	105	90 - 110		
Lab Sample ID: 890-4407-5 MSD Matrix: Solid												Client Sam Prep 1	-	
Analysis Batch: 50341														
	Sample		•	Spike		MSD				_		%Rec		RPI
Analyte	Result		lifier	Added			Qualifier	Unit		<u>D</u>	%Rec	Limits		Lim
Chloride	57.1	F1		251		338.7	F1	mg/Kg			112	90 - 110	6	2
Lab Sample ID: MB 880-50171/1-A Matrix: Solid											Client S	Sample ID: N Prep 1		
Analysis Batch: 50436												-		
			МВ											
		MB												Dil Fa
Analyte	R		Qualifier		RL		Unit		D	P	repared	Analyze	∋d	
-			Qualifier		<b>RL</b> 5.00		Unit mg/Kg	g	D	Pi	repared	Analyze		
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A		esult	Qualifier					g				04/05/23 2 e ID: Lab Co	ontrol S	Sample
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid		esult	Qualifier					g				04/05/23 2 e ID: Lab Co	ontrol S	Sample
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A		esult	Qualifier			LCS	mg/K	g				04/05/23 2 e ID: Lab Co	ontrol S	Sample
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid		esult	Qualifier	Spike Added			mg/K	g Unit				04/05/23 2 e ID: Lab Co Prep 1	ontrol S	Sample
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid Analysis Batch: 50436		esult	Qualifier	-			LCS	-		ient	Sample	04/05/23 2 e ID: Lab Co Prep 1 %Rec	ontrol S	
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid Analysis Batch: 50436 Analyte Chloride Lab Sample ID: LCSD 880-50171/3	A	esult	Qualifier	Added		Result	LCS	Unit mg/Kg	CI	ient D	Sample %Rec 102	04/05/23 2 e ID: Lab Co Prep 7 %Rec Limits 90 - 110 Lab Control	ontrol § Type: §	Sample Soluble
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid Analysis Batch: 50436 Analyte Chloride Lab Sample ID: LCSD 880-50171/3 Matrix: Solid	A	esult	Qualifier	Added		Result	LCS	Unit mg/Kg	CI	ient D	Sample %Rec 102	04/05/23 2 e ID: Lab Co Prep 7 %Rec Limits 90 - 110 Lab Control	ontrol § Type: §	Sample Soluble
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid Analysis Batch: 50436 Analyte Chloride Lab Sample ID: LCSD 880-50171/3	A	esult	Qualifier	Added 250		<b>Result</b> 254.0	LCS Qualifier	Unit mg/Kg	CI	ient D	Sample %Rec 102	04/05/23 2 e ID: Lab Co Prep 7 %Rec Limits 90 - 110 Lab Control Prep 7	ontrol § Type: §	Sample Soluble Die Dup Soluble
Analyte Chloride Lab Sample ID: LCS 880-50171/2-A Matrix: Solid Analysis Batch: 50436 Analyte Chloride Lab Sample ID: LCSD 880-50171/3 Matrix: Solid	A	esult	Qualifier	Added		Result 254.0	LCS	Unit mg/Kg	CI	ient D	Sample %Rec 102	04/05/23 2 e ID: Lab Co Prep 7 %Rec Limits 90 - 110 Lab Control	ontrol § Type: §	Sample Soluble

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Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4407-1 SDG: 03C1558185

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

Lab Sample ID: 880-26438-A	-7-E MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep	Type: S	oluble
Analysis Batch: 50436											
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	84.5		251	351.3		mg/Kg		107	90 - 110		
Onionae	04.0		201	001.0							
Lab Sample ID: 880-26438-A			201	001.0		0 0	ent Sa		): Matrix Sp Prep	oike Dup Type: Se	
Lab Sample ID: 880-26438-A Matrix: Solid			201	001.0		0 0	ient Sa			-	
Lab Sample ID: 880-26438-A Matrix: Solid		Sample	Spike		MSD	0 0	ent Sa			-	
Lab Sample ID: 880-26438-A Matrix: Solid Analysis Batch: 50436 Analyte	-7-F MSD Sample	Sample Qualifier		MSD	MSD Qualifier	0 0	ient Sa D		Prep	-	oluble

Eurofins Carlsbad

## **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4407-1

SDG: 03C1558185

#### **GC VOA**

#### Prep Batch: 50231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-1	BH01	Total/NA	Solid	5035	
890-4407-2	BH02	Total/NA	Solid	5035	
890-4407-3	BH03	Total/NA	Solid	5035	
890-4407-4	BH05	Total/NA	Solid	5035	
890-4407-5	BH04	Total/NA	Solid	5035	
MB 880-50231/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50231/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50231/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26348-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-26348-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

#### Analysis Batch: 50458

Lab Control Sample	Iotal/NA	Solid	5035		
Lab Control Sample Dup	Total/NA	Solid	5035		8
Matrix Spike	Total/NA	Solid	5035	_	
Matrix Spike Duplicate	Total/NA	Solid	5035		9
Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
BH01	Total/NA	Solid	8021B	50231	
BH02	Total/NA	Solid	8021B	50231	
BH03	Total/NA	Solid	8021B	50231	
BH05	Total/NA	Solid	8021B	50231	
BH04	Total/NA	Solid	8021B	50231	
Method Blank	Total/NA	Solid	8021B	50231	13
Lab Control Sample	Total/NA	Solid	8021B	50231	
Lab Control Sample Dup	Total/NA	Solid	8021B	50231	
Matrix Spike	Total/NA	Solid	8021B	50231	
Matrix Spike Duplicate	Total/NA	Solid	8021B	50231	
	Matrix Spike Matrix Spike Duplicate Client Sample ID BH01 BH02 BH03 BH05 BH04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike	Matrix SpikeTotal/NAMatrix Spike DuplicateTotal/NAClient Sample IDPrep TypeBH01Total/NABH02Total/NABH03Total/NABH05Total/NABH04Total/NABH04Total/NALab Control SampleTotal/NALab Control Sample DupTotal/NAMatrix SpikeTotal/NA	Matrix SpikeTotal/NASolidMatrix Spike DuplicateTotal/NASolidClient Sample IDPrep TypeMatrixBH01Total/NASolidBH02Total/NASolidBH03Total/NASolidBH05Total/NASolidBH04Total/NASolidBH04Total/NASolidBH04Total/NASolidLab Control SampleTotal/NASolidLab Control Sample DupTotal/NASolidMatrix SpikeTotal/NASolid	Matrix SpikeTotal/NASolid5035Matrix Spike DuplicateTotal/NASolid5035Client Sample IDPrep TypeMatrixMethodBH01Total/NASolid8021BBH02Total/NASolid8021BBH03Total/NASolid8021BBH05Total/NASolid8021BBH04Total/NASolid8021BBH04Total/NASolid8021BBH04Total/NASolid8021BBH05Total/NASolid8021BBH04Total/NASolid8021BLab Control SampleTotal/NASolid8021BLab Control Sample DupTotal/NASolid8021BMatrix SpikeTotal/NASolid8021B	Matrix SpikeTotal/NASolid5035Matrix Spike DuplicateTotal/NASolid5035Client Sample IDPrep TypeMatrixMethodPrep BatchBH01Total/NASolid8021B50231BH02Total/NASolid8021B50231BH03Total/NASolid8021B50231BH05Total/NASolid8021B50231BH04Total/NASolid8021B50231Method BlankTotal/NASolid8021B50231Lab Control SampleTotal/NASolid8021B50231Matrix SpikeTotal/NASolid8021B50231

#### Analysis Batch: 50647

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4407-1	BH01	Total/NA	Solid	Total BTEX	
890-4407-2	BH02	Total/NA	Solid	Total BTEX	
890-4407-3	BH03	Total/NA	Solid	Total BTEX	
890-4407-4	BH05	Total/NA	Solid	Total BTEX	
890-4407-5	BH04	Total/NA	Solid	Total BTEX	

#### GC Semi VOA

#### Prep Batch: 49932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-1	BH01	Total/NA	Solid	8015NM Prep	
890-4407-2	BH02	Total/NA	Solid	8015NM Prep	
890-4407-3	BH03	Total/NA	Solid	8015NM Prep	
890-4407-4	BH05	Total/NA	Solid	8015NM Prep	
890-4407-5	BH04	Total/NA	Solid	8015NM Prep	
MB 880-49932/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49932/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49932/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26347-A-4-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26347-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-1	BH01	Total/NA	Solid	8015B NM	49932
890-4407-2	BH02	Total/NA	Solid	8015B NM	49932

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#### Released to Imaging: 12/19/2023 9:10:17 AM

## **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

#### GC Semi VOA (Continued)

#### Analysis Batch: 49995 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-3	BH03	Total/NA	Solid	8015B NM	49932
890-4407-4	BH05	Total/NA	Solid	8015B NM	49932
890-4407-5	BH04	Total/NA	Solid	8015B NM	49932
MB 880-49932/1-A	Method Blank	Total/NA	Solid	8015B NM	49932
LCS 880-49932/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49932
LCSD 880-49932/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49932
880-26347-A-4-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49932
880-26347-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49932

#### Analysis Batch: 50204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-4407-1	BH01	Total/NA	Solid	8015 NM	
890-4407-2	BH02	Total/NA	Solid	8015 NM	
890-4407-3	BH03	Total/NA	Solid	8015 NM	
890-4407-4	BH05	Total/NA	Solid	8015 NM	
890-4407-5	BH04	Total/NA	Solid	8015 NM	

#### HPLC/IC

#### Leach Batch: 50171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-1	BH01	Soluble	Solid	DI Leach	
890-4407-2	BH02	Soluble	Solid	DI Leach	
890-4407-3	BH03	Soluble	Solid	DI Leach	
890-4407-4	BH05	Soluble	Solid	DI Leach	
MB 880-50171/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50171/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50171/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-26438-A-7-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-26438-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

#### Leach Batch: 50330

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4407-5	BH04	Soluble	Solid	DI Leach	
MB 880-50330/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50330/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50330/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4407-5 MS	BH04	Soluble	Solid	DI Leach	
890-4407-5 MSD	BH04	Soluble	Solid	DI Leach	

#### Analysis Batch: 50341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4407-5	BH04	Soluble	Solid	300.0	50330
MB 880-50330/1-A	Method Blank	Soluble	Solid	300.0	50330
LCS 880-50330/2-A	Lab Control Sample	Soluble	Solid	300.0	50330
LCSD 880-50330/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50330
890-4407-5 MS	BH04	Soluble	Solid	300.0	50330
890-4407-5 MSD	BH04	Soluble	Solid	300.0	50330

#### Job ID: 890-4407-1 SDG: 03C1558185

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## **QC** Association Summary

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4407-1 SDG: 03C1558185

#### HPLC/IC

#### Analysis Batch: 50436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
90-4407-1	BH01	Soluble	Solid	300.0	50171
90-4407-2	BH02	Soluble	Solid	300.0	50171
90-4407-3	BH03	Soluble	Solid	300.0	50171
0-4407-4	BH05	Soluble	Solid	300.0	50171
3 880-50171/1-A	Method Blank	Soluble	Solid	300.0	50171
S 880-50171/2-A	Lab Control Sample	Soluble	Solid	300.0	50171
SD 880-50171/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50171
0-26438-A-7-E MS	Matrix Spike	Soluble	Solid	300.0	50171
0-26438-A-7-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	50171

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Job ID: 890-4407-1 SDG: 03C1558185

#### Lab Sample ID: 890-4407-1 Matrix: Solid

Date Collected: 03/24/23 09:20 Date Received: 03/24/23 12:12

**Client Sample ID: BH01** 

Client: Ensolum

	Batch	Batch		Dil	Initial	itial Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 16:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50647	04/07/23 18:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			50204	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 18:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50171	04/03/23 11:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50436	04/05/23 22:26	SMC	EET MID

#### **Client Sample ID: BH02**

#### Date Collected: 03/24/23 09:30

Date Received: 03/24/23 12:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 17:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50647	04/07/23 18:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			50204	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 19:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50171	04/03/23 11:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50436	04/05/23 22:31	SMC	EET MID

#### **Client Sample ID: BH03**

#### Date Collected: 03/24/23 09:40

#### Date Received: 03/24/23 12:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 17:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50647	04/07/23 18:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			50204	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 19:29	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50171	04/03/23 11:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50436	04/05/23 22:36	SMC	EET MID

#### **Client Sample ID: BH05** Date Collected: 03/24/23 10:05 Date Received: 03/24/23 12:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 17:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50647	04/07/23 18:45	SM	EET MID

**Eurofins Carlsbad** 

Matrix: Solid

# Matrix: Solid

Lab Sample ID: 890-4407-2

Lab Sample ID: 890-4407-3 Matrix: Solid

Lab Sample ID: 890-4407-4

Job ID: 890-4407-1 SDG: 03C1558185

## Lab Sample ID: 890-4407-4

Lab Sample ID: 890-4407-5

Matrix: Solid

Date Collected: 03/24/23 10:05 Date Received: 03/24/23 12:12

**Client Sample ID: BH05** 

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			50204	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 19:51	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	50171	04/03/23 11:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50436	04/05/23 22:41	SMC	EET MID

#### **Client Sample ID: BH04** Date Collected: 03/24/23 10:15

#### Date Received: 03/24/23 12:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 18:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50647	04/07/23 18:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			50204	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 20:12	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50330	04/04/23 16:31	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50341	04/05/23 16:10	SMC	EET MID

#### Laboratory References:

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

Matrix: Solid

**Accreditation/Certification Summary** 

		Accreditation/C	ertification Summary		
Client: Ensolum Project/Site: Indian Dra	aw Deep 7 Com 3			Job ID: 890-4407-1 SDG: 03C1558185	2
Laboratory: Eurof					
Unless otherwise noted, all a 	analytes for this laboratory v	vere covered under each acc	reditation/certification below.		
Authority		Program	Identification Number	Expiration Date	
Texas	1	NELAP	T104704400-22-25	06-30-23	
The following analytes	are included in this report	out the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for which	5
the agency does not of			led by the governing autionty. This list ha		
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
_					
					8
					9
					40
					10
					12
					13

Eurofins Carlsbad

Client: Ensolum

Job ID: 890-4407-1 SDG: 03C1558185

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 Refe	erences:		
ASTM = A	ASTM International		
EPA = US	Environmental Protection Agency		
SW846 =	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Ed	ition, November 1986 And Its Updates.	
TAL SOP	= TestAmerica Laboratories, Standard Operating Procedure		
Laboratory R	eferences:		
EET MID :	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4407-1 SDG: 03C1558185

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
90-4407-1	BH01	Solid	03/24/23 09:20	03/24/23 12:12	2'
90-4407-2	BH02	Solid	03/24/23 09:30	03/24/23 12:12	2'
90-4407-3	BH03	Solid	03/24/23 09:40	03/24/23 12:12	2'
90-4407-4	BH05	Solid	03/24/23 10:05	03/24/23 12:12	2'
90-4407-5	BH04	Solid	03/24/23 10:15	03/24/23 12:12	2'

	6 4			
Received by: (Signature) Date/Time	レater line Relinquished by: (Signature) クリークション・ション・ション・ション・ション・ション・ション・ション・ション・ション・	alt the	Augurala Sa	& MOOND&
ons rol egotlated.	liates and sub re client if suc rt not analyze	irom creat company to Eurofin bility for any losses or expenses each sample submitted to Euro	the cost of samples and shall not assume any respons will be applied to each project and a charge of \$5 for Received by: (Signature)	of service. Eurofins Xenco will be liable only for of Eurofins Xenco. A minimum charge of \$85.00 Rellyquished by: (Signature)
9 Ni K Se Ag SiO <sub>2</sub> Na Sr Tl Sn U V Zn U Hg: 1631/245.1/7470 /7471	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni TCLP/SPLP6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	1 Texas 11 Al Sb , P6010 : 8RCRA Sb	2003 / 6020: 8RCRA 13PPM tal(s) to be analyzed TCLP / SPLF	Circle Method(s) and Metal(s) to be analyzed
mobertacensolumic				
1004100				
Usteenter:	* * *	$\langle \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	1015	5/104
>			5001 5.:01	5048
NAPP2301152626			0940	BH03
Incident #:				BHOJ
Sample Comments	(C	Comp	Sampled 2/0.4/1%	RHOI
NaOH+Ascorbic Acid: SAPC	те рн	Grab/ # of	Matrix Date Time	Sample Identification
Zn Acetate+NaOH: Zn	DNÌ			
Na 25 20 3: NaSO 3		)/	N/N/	
NaHSO 4: NABIS		Paral	IS NO WA Correction Factor:	Ye
-		No.	?	act:
H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na			Yes) No	SAMPLE RECEIPT
HCL: HC HNO 3: HN		TAT starts the day received by the lab, if received by 4:30pm	Merechithen Roberty TAT starts the the lab, if rec	PO #: Moreo
			32.41260,-104,12059 Due Date:	
ervative		Rush Pres.	R	Project Number: 0.3C1
		Turn Around	Indian Draw Deep 1 Com 3 Turn	Project Name: Indian
Deliverables: EDD ADapT Other:			<u>489-854-0852 Email:</u>	Phone: 480
	A NM 89777	City, State ZIP:	p	ate ZIP:
<u>ą</u> .	E Greene St	Address:	Nat I Parks Hury	
UST/PST PRP Brownfields		Company Name:	ium, L	y Name:
Work Order Commants	Garriett Green	Bill to: (if different)	Beilt	
	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Midiand, TX (4 EL Paso, TX (1 Hobbs, NM (1	Environment Testing Xenco	
	Chain of Custody	0		ုံ့ eurofins

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Job Number: 890-4407-1 SDG Number: 03C1558185

List Source: Eurofins Carlsbad

#### Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4407 List Number: 1 Creator: Stutzman, Amanda

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	

Job Number: 890-4407-1 SDG Number: 03C1558185

List Source: Eurofins Midland

List Creation: 03/28/23 01:37 PM

#### Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4407 List Number: 2 Creator: Kramer, Jessica

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").



**Environment Testing** 

# **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Ben Belill Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 4/8/2023 8:08:10 AM

## **JOB DESCRIPTION**

Indian Draw Deep 7 Com 3 SDG NUMBER 03C1558185

## **JOB NUMBER**

890-4408-1

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**Eurofins Carlsbad** 1089 N Canal St. Carlsbad NM 88220





Received by OCD: 6/23/2023 1:34:15 PM

## **Eurofins Carlsbad**

**Job Notes** 

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

RAMER

Generated 4/8/2023 8:08:10 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Laboratory Job ID: 890-4408-1 SDG: 03C1558185

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Dil Fac

DL, RA, RE, IN

DL

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

ML

MPN

MQL

NC

ND

NEG

POS

PQL PRES

QC RER

RL

RPD

TEF

TEQ

TNTC

**Dilution Factor** 

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent Positive / Present

Presumptive Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

Limit of Quantitation (DoD/DOE)

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

Not Detected at the reporting limit (or MDL or EDL if shown)

Minimum Detectable Activity (Radiochemistry)

	Definitions/Glossary	
Client: Ensolu	Im Job ID: 890-4	1408-1
Project/Site: I	ndian Draw Deep 7 Com 3 SDG: 03C15	58185
Qualifiers		
GC VOA		
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	
F2	MS/MSD RPD exceeds control limits	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VO	Α.	
Qualifier	Qualifier Description	
*_	LCS and/or LCSD is outside acceptance limits, low biased.	
S1-	Surrogate recovery exceeds control limits, low 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)	

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

**Eurofins Carlsbad** 

Job ID: 890-4408-1

#### Job ID: 890-4408-1

#### Laboratory: Eurofins Carlsbad

#### Narrative

Job Narrative 890-4408-1

#### Receipt

The sample was received on 3/24/2023 12:12 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

#### **Receipt Exceptions**

The following sample was received and analyzed from an unpreserved bulk soil jar: BH06 (890-4408-1).

#### GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-50231 and analytical batch 880-50458 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.

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: Surrogate recovery for the following samples were outside control limits: (LCS 880-49973/2-A) and (LCSD 880-49973/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-49973 and analytical batch 880-49993 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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.

Job ID: 890-4408-1 SDG: 03C1558185

## **Client Sample ID: BH06**

Date Collected: 03/24/23 10:25 Date Received: 03/24/23 12:12

Client: Ensolum

Lab Sample ID: 890-4408-1

Analyzed 04/06/23 16:19

04/06/23 16:19

04/06/23 16:19

04/06/23 16:19

04/06/23 16:19

04/06/23 16:19

Analyzed

04/06/23 16:19

04/06/23 16:19

Analyzed

04/07/23 18:45

Matrix: Solid

Dil Fac

1

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

5

Sample Depth: 2'							
Method: SW846 8021B - Volat	ile Organic Comp	ounds (GC)	1				
Analyte	Result	Qualifier	RL	Unit	D	Prepared	
Benzene	<0.00202	U	0.00202	mg/Kg		04/03/23 15:44	(
Toluene	<0.00202	U	0.00202	mg/Kg		04/03/23 15:44	(
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/03/23 15:44	(
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		04/03/23 15:44	(
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/03/23 15:44	(
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		04/03/23 15:44	(
Surrogate	%Recovery	Qualifier	Limits			Prepared	
4-Bromofluorobenzene (Surr)	95		70 - 130			04/03/23 15:44	(
1,4-Difluorobenzene (Surr)	99		70 - 130			04/03/23 15:44	(
Method: TAL SOP Total BTEX	- Total BTEX Cal	culation					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	
Total BTEX	<0.00404	U	0.00404	mg/Kg			(

#### 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			03/31/23 17:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *-	49.9	mg/Kg		03/30/23 13:52	03/31/23 16:01	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U *-	49.9	mg/Kg		03/30/23 13:52	03/31/23 16:01	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/30/23 13:52	03/31/23 16:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			03/30/23 13:52	03/31/23 16:01	1
o-Terphenyl	72		70 - 130			03/30/23 13:52	03/31/23 16:01	1
 Method: EPA 300.0 - Anions, Ion	Chromatograp	ohy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		5.04	mg/Kg			04/04/23 16:09	1

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

-			
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-26348-A-1-C MS	Matrix Spike	117	105
880-26348-A-1-D MSD	Matrix Spike Duplicate	88	113
890-4408-1	BH06	95	99
LCS 880-50231/1-A	Lab Control Sample	106	108
LCSD 880-50231/2-A	Lab Control Sample Dup	105	110
MB 880-50231/5-A	Method Blank	72	100
Surrogate Legend			
BFB = 4-Bromofluorober	nzene (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) 1CO1 OTPH1 (70-130) Lab Sample ID **Client Sample ID** (70-130) 880-26532-A-13-F MS Matrix Spike 113 79 880-26532-A-13-G MSD Matrix Spike Duplicate 114 77 890-4408-1 BH06 72 93 LCS 880-49973/2-A Lab Control Sample 81 65 S1-Lab Control Sample Dup LCSD 880-49973/3-A 76 60 S1-MB 880-49973/1-A Method Blank 110 88

#### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

SDG: 03C1558185

Job ID: 890-4408-1

Prep Type: Total/NA

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Client: Ensolum

#### Job ID: 890-4408-1 SDG: 03C1558185

Project/Site: Indian Draw Deep 7 Com 3

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

Lab Sample ID: MB 880-5023	31/ <b>5-A</b>								Client Sa	mple ID: Metho	
Matrix: Solid										Prep Type:	Total/NA
Analysis Batch: 50458										Prep Batc	h: 50231
	М	B MB									
Analyte	Resu	It Qualifier	F	۲L	Unit		D	Pr	repared	Analyzed	Dil Fac
Benzene	<0.0020	0 U	0.0020	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
Toluene	<0.0020	0 U	0.0020	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
Ethylbenzene	<0.0020	0 U	0.0020	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
m-Xylene & p-Xylene	<0.0040	0 U	0.0040	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
o-Xylene	<0.0020	0 U	0.0020	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
Xylenes, Total	<0.0040	0 U	0.0040	00	mg/ł	٢g		04/03	3/23 15:44	04/06/23 10:49	1
	М	в МВ									
Surrogate	%Recover	y Qualifier	Limits					Pi	repared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	7	2	70 - 130	)				04/03	3/23 15:44	04/06/23 10:49	1
1,4-Difluorobenzene (Surr)	10	0	70 - 130	)				04/0	3/23 15:44	04/06/23 10:49	1
Lab Sample ID: LCS 880-502 Matrix: Solid	231/1 <b>-A</b>						C	lient	Sample I	ID: Lab Control Prep Type:	Total/N/
	231/1-A		Spike	1.00	1.00		CI	lient	Sample I	Prep Type: Prep Batc	Total/NA
Matrix: Solid Analysis Batch: 50458	231/1-A		Spike		LCS	Unit	CI			Prep Type: Prep Batc %Rec	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte	231/1-A		Added	Result	LCS Qualifier	_ Unit	CI	<u>D</u>	%Rec	Prep Type: Prep Batc %Rec Limits	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene	231/1-A 		<b>Added</b> 0.100	<b>Result</b> 0.1108		mg/Kg	C		%Rec	Prep Type: Prep Batc %Rec Limits 70 - 130	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene	231/1-A 		Added	<b>Result</b> 0.1108 0.09947		mg/Kg mg/Kg	CI		%Rec 111 99	Prep Type:           Prep Batc           %Rec           Limits           70 - 130           70 - 130	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene	231/1-A		Added 0.100 0.100 0.100 0.100	<b>Result</b> 0.1108 0.09947 0.09904		mg/Kg mg/Kg mg/Kg	CI		%Rec 111 99 99	Prep Type:           Prep Batc           %Rec           Limits           70 - 130           70 - 130           70 - 130	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	231/1-A		Added 0.100 0.100 0.100 0.200	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg	CI		<b>%Rec</b> 111 99 99 105	Image: Name         Image: Name	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene			Added 0.100 0.100 0.100 0.100	<b>Result</b> 0.1108 0.09947 0.09904		mg/Kg mg/Kg mg/Kg	CI		%Rec 111 99 99	Prep Type:           Prep Batc           %Rec           Limits           70 - 130           70 - 130           70 - 130	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	LCS LC		Added 0.100 0.100 0.100 0.200 0.100	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg	CI		<b>%Rec</b> 111 99 99 105	Image: Name         Image: Name	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate	LCS LC %Recovery Qu	°S valifier	Added 0.100 0.100 0.100 0.200 0.100 Limits	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg	CI		<b>%Rec</b> 111 99 99 105	Image: Name         Image: Name	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	LCS LC %Recovery Qu 106		Added           0.100           0.100           0.100           0.100           0.200           0.100           Limits           70 - 130	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg	CI		<b>%Rec</b> 111 99 99 105	Image: Name         Image: Name	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate	LCS LC %Recovery Qu		Added 0.100 0.100 0.100 0.200 0.100 Limits	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg	C		<b>%Rec</b> 111 99 99 105	Image: Name         Image: Name	Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	LCS LC %Recovery Qu 106 108		Added           0.100           0.100           0.100           0.100           0.200           0.100           Limits           70 - 130	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg		D	%Rec 111 99 99 105 106	Image: Name         Image: Name	Total/NA h: 50231 
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr)	LCS LC %Recovery Qu 106 108		Added           0.100           0.100           0.100           0.100           0.200           0.100           Limits           70 - 130	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg		D	%Rec 111 99 99 105 106	Prep Type: Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130	Total/NA h: 50231 
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-50	LCS LC %Recovery Qu 106 108		Added           0.100           0.100           0.100           0.100           0.200           0.100           Limits           70 - 130	Result 0.1108 0.09947 0.09904 0.2101		mg/Kg mg/Kg mg/Kg mg/Kg		D	%Rec 111 99 99 105 106	Prep Type: Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 80 70 - 130 70 - 130	Total/NA h: 50231       Total/NA
Matrix: Solid Analysis Batch: 50458 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-50 Matrix: Solid	LCS LC %Recovery Qu 106 108		Added           0.100           0.100           0.100           0.100           0.200           0.100           Limits           70 - 130	Result 0.1108 0.09947 0.09904 0.2101 0.1062		mg/Kg mg/Kg mg/Kg mg/Kg		D	%Rec 111 99 99 105 106	Prep Type: Prep Batc %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 70 - 130 Prep Type:	Total/NA h: 50231       Total/NA

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1217		mg/Kg		122	70 - 130	9	35
Toluene	0.100	0.1090		mg/Kg		109	70 - 130	9	35
Ethylbenzene	0.100	0.1071		mg/Kg		107	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2256		mg/Kg		113	70 - 130	7	35
o-Xylene	0.100	0.1133		mg/Kg		113	70 - 130	6	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

## Lab Sample ID: 880-26348-A-1-C MS

## Matrix: Solid

Analysis Batch: 50458									Prep	Batch: 50231
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.101	0.07376		mg/Kg		73	70 - 130	
Toluene	<0.00200	U F1	0.101	0.06769	F1	mg/Kg		67	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

#### **Metho**

ab Sample ID: 880-26348-A	A-1-C MS							Client	Sample ID:	: Matrix	Spike
Aatrix: Solid									Prep T	ype: Tot	tal/NA
Analysis Batch: 50458									Prep	Batch:	50231
-	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	<0.00200	U F1	0.101	0.06797	F1	mg/Kg		67	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.202	0.1397	F1	mg/Kg		69	70 - 130		
o-Xylene	<0.00200	U F1 F2	0.101	0.07169		mg/Kg		71	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	117		70 - 130								
1,4-Difluorobenzene (Surr)	105		70 - 130								
Analysis Batch: 50458	Sample	Sample	Spike	MSD	MSD					ype: Tot Batch:	
		<b>•</b>		Pocult	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Analyte	Result	Qualifier	Added	Result	Quaimer		-				35
,	Result <0.00200		0.0990	0.07720	Quaimer	mg/Kg		78	70 - 130	5	35
Benzene		U				mg/Kg mg/Kg		78 59	70 - 130 70 - 130	5 16	35
Benzene Toluene	<0.00200	U U F1	0.0990	0.07720	F1						
Benzene Toluene Ethylbenzene	<0.00200 <0.00200	U U F1 U F1	0.0990	0.07720 0.05793	F1 F1	mg/Kg		59	70 - 130	16	35
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	<0.00200 <0.00200 <0.00200	U U F1 U F1 U F1 F2	0.0990 0.0990 0.0990	0.07720 0.05793 0.04863	F1 F1 F1 F2	mg/Kg mg/Kg		59 49	70 - 130 70 - 130	16 33	35 35
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	<0.00200 <0.00200 <0.00200 <0.00399 <0.00200	U U F1 U F1 U F1 F2 U F1 F2	0.0990 0.0990 0.0990 0.198	0.07720 0.05793 0.04863 0.09196	F1 F1 F1 F2	mg/Kg mg/Kg mg/Kg		59 49 46	70 - 130 70 - 130 70 - 130	16 33 41	35 35 35
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	<0.00200 <0.00200 <0.00200 <0.00399 <0.00200	U U F1 U F1 U F1 F2 U F1 F2 MSD	0.0990 0.0990 0.0990 0.198	0.07720 0.05793 0.04863 0.09196	F1 F1 F1 F2	mg/Kg mg/Kg mg/Kg		59 49 46	70 - 130 70 - 130 70 - 130 70 - 130	16 33 41	35 35 35
Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	<0.00200 <0.00200 <0.00200 <0.00399 <0.00200 <i>MSD</i>	U U F1 U F1 U F1 F2 U F1 F2 MSD	0.0990 0.0990 0.0990 0.198 0.0990	0.07720 0.05793 0.04863 0.09196	F1 F1 F1 F2	mg/Kg mg/Kg mg/Kg		59 49 46	70 - 130 70 - 130 70 - 130 70 - 130	16 33 41	35 35 35

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

Lab Sample ID: MB 880-49973/1- Matrix: Solid Analysis Batch: 49993						Client Sa	mple ID: Metho Prep Type: 1 Prep Batch	otal/NA
Analyta			RL	11:4	D	Drenered	Analyzed	Dil Fac
Analyte	Result	Qualifier	KL	Unit		Prepared	Analyzed	DIIFac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		03/30/23 13:52	03/31/23 09:25	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		03/30/23 13:52	03/31/23 09:25	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/30/23 13:52	03/31/23 09:25	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			03/30/23 13:52	03/31/23 09:25	1
o-Terphenyl	88		70 - 130			03/30/23 13:52	03/31/23 09:25	1
Lab Sample ID: LCS 880-49973/2	- <b>A</b>				c	lient Sample I	D: Lab Control	Sample

#### Matrix: Solid Prep Type: Total/NA Analysis Batch: 49993 Prep Batch: 49973 LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits 397.2 \*\_ 1000 40 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 538.8 \*mg/Kg 54 70 - 130 C10-C28)

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# **QC Sample Results**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

Lab Sample ID: LCS 880-49973/2-A

Lab Sample ID: LCSD 880-49973/3-A

Lab Sample ID: 880-26532-A-13-F MS

Matrix: Solid

Surrogate 1-Chlorooctane

o-Terphenyl

Analyte

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

Matrix: Solid

Matrix: Solid

Analysis Batch: 49993

Analysis Batch: 49993

Gasoline Range Organics (GRO)-C6-C10

Diesel Range Organics (Over

## Method: 8015B NM - Diesel Range Orga

Com 3									: 03C15		2
Range Or	ganics (E	0RO) (GC) (0	Continue	ed)							3
2-A						Client	Sample		Гуре: To	tal/NA	4
LCS								Ргер	Batch:	49973	5
%Recovery 81	Qualifier	Limits 70 - 130									6
65	S1-	70 - 130 70 - 130									
											7
3/3-A					Clier	nt Sam	ple ID: I		ol Sampl Type: To Batch:	tal/NA	8
		Spike	LCSD	LCSD				%Rec		RPD	0
		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	3
		1000	347.7	*_	mg/Kg		35	70 - 130	13	20	10
		1000	490.0	*_	mg/Kg		49	70 - 130	9	20	11
LCSD	LCSD										40
%Recovery	Qualifier	Limits									12
76		70 - 130									4.0
60	S1-	70 - 130									13
-F MS							Client		: Matrix Type: To	tal/NA	14

Analysis Batch: 49993										Batch: 49973
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U *-	998	1050		mg/Kg		102	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U *-	998	856.6		mg/Kg		86	70 - 130	
C10-C28)										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	79		70 - 130

#### Lab Sample ID: 880-26532-A-13-G MSD Matrix: Solid Analysis Batch: 49993

Analysis Datch. 49995									Frep	Datch.	499/3
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *-	999	1071		mg/Kg		104	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *-	999	853.7		mg/Kg		85	70 - 130	0	20
	MSD	MSD									

Surrogate	%Recovery 0	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	77		70 - 130

# **Client Sample ID: Matrix Spike Duplicate**

Prep Type: Total/NA Pren Batch: 49973

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# **QC Sample Results**

Job ID: 890-4408-1 SDG: 03C1558185

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

# Method: 300.0 - Anions, Ion Chromatography

		<u> </u>												
_ Lab Sample ID: MB 880-50159/1-/ Matrix: Solid	4										Client S	ample ID:		
Analysis Batch: 50391												Prep	Type: S	oluble
Analysis Batch. 50591		мв м	/B											
Analyte	R	esult Q			RL		Unit	•	D	P	repared	Analy	zed	Dil Fac
Chloride		<5.00 U			5.00		mg/				opulou	04/04/23		1
-							Ū	0						
Lab Sample ID: LCS 880-50159/2	-A								Cli	ent	Sample	ID: Lab C	ontrol S	ample
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 50391														
				Spike		LCS	LCS					%Rec		
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride				250		239.1		mg/Kg			96	90 _ 110		
Lab Sample ID: LCSD 880-50159/	2 1							<b>CI</b>	iont S			Lab Contro		
Matrix: Solid	J-A								ient o	am	ipie iD. i		Type: S	
Analysis Batch: 50391												Fieh	rype. S	oluble
Analysis Batch. 00001				Spike		LCSD	LCSD					%Rec		RPD
Analyte				Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limit
Chloride				250		238.0		mg/Kg		_	95	90 _ 110	0	20
- Lak Carriela ID: 000,4400, A 44 D											Olivert	O annu la U		0
Lab Sample ID: 890-4439-A-11-B Matrix: Solid	NIS										Client	Sample ID		
												Prep	Type: S	oluble
Analysis Batch: 50391	Sample	Sample	<u>م</u>	Spike		MS	MS					%Rec		
Analyte		Qualifi		Added			Qualifier	Unit		D	%Rec	Limits		
Chloride	67.5	quant		250		294.5	quainor	mg/Kg		_	91	90 - 110		
-								0 0						
Lab Sample ID: 890-4439-A-11-C	MSD								Client	t Sa	ample IC	: Matrix S	pike Du	plicate
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 50391														
		<u> </u>	-	Spike		MSD	MSD					%Rec		RPD
	Sample	Sample	e	Opine										
Analyte		Qualifie		Added			Qualifier	Unit		D	%Rec	Limits	RPD	Limit

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# **QC Association Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4408-1 SDG: 03C1558185

# **GC VOA**

## Prep Batch: 50231

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4408-1	BH06	Total/NA	Solid	5035	
MB 880-50231/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50231/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50231/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26348-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-26348-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 50458					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4408-1	BH06	Total/NA	Solid	8021B	50231
MB 880-50231/5-A	Method Blank	Total/NA	Solid	8021B	50231
LCS 880-50231/1-A	Lab Control Sample	Total/NA	Solid	8021B	50231
LCSD 880-50231/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50231
880-26348-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	50231
880-26348-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	50231
nalysis Batch: 50646					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4408-1	BH06	Total/NA	Solid	Total BTEX	

### Prep Batch: 49973

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4408-1	BH06	Total/NA	Solid	8015NM Prep	
MB 880-49973/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49973/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49973/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26532-A-13-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26532-A-13-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

#### Analysis Batch: 49993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4408-1	BH06	Total/NA	Solid	8015B NM	49973
MB 880-49973/1-A	Method Blank	Total/NA	Solid	8015B NM	49973
LCS 880-49973/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49973
LCSD 880-49973/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49973
880-26532-A-13-F MS	Matrix Spike	Total/NA	Solid	8015B NM	49973
880-26532-A-13-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49973
Analysis Batch: 50064					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch

Total/NA

Solid

8015 NM

# 890-4408-1 HPLC/IC

#### Leach Batch: 50159

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-4408-1	BH06	Soluble	Solid	DI Leach	
MB 880-50159/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50159/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50159/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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BH06

# HPLC/IC (Continued)

### Leach Batch: 50159 (Continued)

Lab Sample ID 890-4439-A-11-B MS	Client Sample ID Matrix Spike	Prep Type Soluble	Matrix Solid	DI Leach	Prep Batch
890-4439-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Analysis Batch: 50391					

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4408-1	BH06	Soluble	Solid	300.0	50159
MB 880-50159/1-A	Method Blank	Soluble	Solid	300.0	50159
LCS 880-50159/2-A	Lab Control Sample	Soluble	Solid	300.0	50159
LCSD 880-50159/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50159
890-4439-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	50159
890-4439-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	50159

Job ID: 890-4408-1 SDG: 03C1558185

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Project/Site: Indian Draw Deep 7 Com 3

Job ID: 890-4408-1 SDG: 03C1558185

# Lab Sample ID: 890-4408-1

Matrix: Solid

### Client Sample ID: BH06 Date Collected: 03/24/23 10:25

Client: Ensolum

Date Received: 03/24/23 12:12

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	50231	04/03/23 15:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50458	04/06/23 16:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50646	04/07/23 18:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			50064	03/31/23 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49973	03/30/23 13:52	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49993	03/31/23 16:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50159	04/03/23 10:53	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50391	04/04/23 16:09	SMC	EET MID

#### Laboratory References:

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

Eurofins Carlsbad

Released to Imaging: 12/19/2023 9:10:17 AM

		Accreditation/C	ertification Summary		
Client: Ensolum Project/Site: Indian Dra	w Deep 7 Com 3			Job ID: 890-4408-1 SDG: 03C1558185	2
Laboratory: Eurofi Unless otherwise noted, all a		were covered under each acc	reditation/certification below.		
Authority		Program	Identification Number	Expiration Date	
Texas The following analytes the agency does not off	are included in this report,	NELAP but the laboratory is not certif	T104704400-22-25 ied by the governing authority. This list ma	06-30-23 ay include analytes for which	5
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					13

Eurofins Carlsbad

# **Method Summary**

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3 Job ID: 890-4408-1 SDG: 03C1558185

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
SW846 =	Environmental Protection Agency "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Ed = TestAmerica Laboratories, Standard Operating Procedure	ition, November 1986 And Its Updates.	
Laboratory R			

#### Laboratory References:

Eurofins Carlsbad

# **Sample Summary**

Job ID: 890-4408-1 SDG: 03C1558185

Client: Ensolum Project/Site: Indian Draw Deep 7 Com 3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-4408-1	BH06	Solid	03/24/23 10:25	03/24/23 12:12	2'	4
						5
						8
						9
						12
						13

4/8/2023

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Job Number: 890-4408-1 SDG Number: 03C1558185

List Source: Eurofins Carlsbad

# Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4408 List Number: 1 Creator: Stutzman, Amanda

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	
s 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	

Job Number: 890-4408-1 SDG Number: 03C1558185

List Source: Eurofins Midland

List Creation: 03/28/23 01:37 PM

### Login Sample Receipt Checklist

Client: Ensolum

Login Number: 4408 List Number: 2 Creator: Kramer, Jessica

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

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Eurofins Carlsbad Released to Imaging: 12/19/2023 9:10:17 AM

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# APPENDIX E

**NMOCD** Notifications

**Released to Imaging: 12/19/2023 9:10:17 AM** 

From:	Hamlet, Robert, EMNRD
То:	Collins, Melanie
Cc:	Tacoma Morrissey; DelawareSpills /SM; Green, Garrett J; Ashley Ager; Pennington, Shelby G; Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD; Harimon, Jocelyn, EMNRD
Subject:	(Extension Approval) - XTO - Indian Draw Deep 7 Com 3- Incident Number NAPP2301152626
Date:	Wednesday, March 29, 2023 3:10:27 PM
Attachments:	image003.png

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

### RE: Incident #NAPP2301152626

### Melanie,

Your request for an extension to **June 26th, 2023** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced Environmental Bureau EMNRD - Oil Conservation Division 506 W. Texas Ave.| Artesia, NM 88210 575.909.0302 | robert.hamlet@state.nm.us http://www.emnrd.state.nm.us/OCD/



From: Collins, Melanie <melanie.collins@exxonmobil.com>

**Sent:** Tuesday, March 28, 2023 8:48 AM

**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>

Cc: Tacoma Morrissey <tmorrissey@ensolum.com>; DelawareSpills /SM

<DelawareSpills@exxonmobil.com>; Green, Garrett J <garrett.green@exxonmobil.com>; Ashley Ager <aager@ensolum.com>; Pennington, Shelby G <shelby.g.pennington@exxonmobil.com> **Subject:** [EXTERNAL] XTO- Extension Request- Indian Draw Deep 7 Com 3- Incident Number NAPP2301152626

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

All,

XTO is requesting an extension for the current deadline of March 28, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for Indian Draw Deep 7 Com 3 (Incident Number NAPP2301152626). The release was discovered on December 28, 2022.

Initial site assessment activities and remediation activities have been ongoing and based on the most recent laboratory analytical reports, additional work is warranted. In order to complete additional remediation activities and submit a remediation work plan or closure report, XTO requests a 90-day extension of this deadline until June 26, 2023.

Thank you,

Melaníe Collíns Environmental Technician melanie.collins@exxonmobil.com 432-556-3756

From:	Green, Garrett J
To:	Tacoma Morrissey; Ben Belill
Subject:	FW: [EXTERNAL] XTO - Sampling Notification (Week of 3/20/23 - 3/24/23)
Date:	Friday, March 17, 2023 1:38:12 PM

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

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, March 16, 2023 4:33 PM
To: Green, Garrett J <garrett.green@exxonmobil.com>; Bratcher, Michael, EMNRD
<mike.bratcher@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>;
Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 3/20/23 - 3/24/23)

External Email - Think Before You Click

Garrett,

Please be aware that notification requirements are **two business days**, per rule. Please include specific days and times you will be sampling each site. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

Jocelyn Harimon • Environmental Specialist Environmental Bureau EMNRD - Oil Conservation Division 1220 South St. Francis Drive | Santa Fe, NM 87505 (505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov http:// www.emnrd.nm.gov



From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Thursday, March 16, 2023 9:52 AM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>>; Bratcher, Michael, EMNRD
<<u>mike.bratcher@emnrd.nm.gov</u>>; Harimon, Jocelyn, EMNRD <<u>Jocelyn.Harimon@emnrd.nm.gov</u>>;
Hamlet, Robert, EMNRD <<u>Robert.Hamlet@emnrd.nm.gov</u>>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 3/20/23 - 3/24/23)

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 additional site the week of Mar 20, 2023.

- PLU 27 BD 163 / nAPP2226337852
- PLU CVX JV BS 008H / NAB1602154960
- PLU 420H / nAB1834656162
- Perla Verde 31 State battery/ nAPP2303444414
- BEU Hackberry / nAB1726335399
- Remuda 500 CTB / nAPP2303854000 & nAPP2306544797
- Indian Deep Com 7/ NAPP2301152626
- Nash Unit 36 / nAPP2224236187

Thank you,

## **Garrett Green**

Environmental Coordinator Delaware Business Unit (575) 200-0729 <u>Garrett.Green@ExxonMobil.com</u>

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

District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS	
------------	--

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	232271
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2301152626 INDIAN DRAW DEEP 7 COM 3, thank you. This Remediation Closure Report is approved.	12/19/2023

Action 232271

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