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	NAPP2306936047
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

Latitude 32.18238 Longitude -103.68200
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Outrider Fed 28 Pad B	Site Type Well Pad
Date Release Discovered 02/24/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
N	28	24S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 25.36	Volume Recovered (bbls) 25.00
	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)

Cause of Release: During frac operations, incorrect valve placement allowed fluids to release to pad. All free fluids were recovered. A third-party contractor has been retained for remediation purposes.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306936047
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release equal to or greater than 25 barrels.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Yes, by Melanie Collins to ocd.enviro@emnrd.nm.gov, Bratcher, Michael mike.bratcher@emnrd.nm.gov, Hamlet, Robert, Robert.Hamlet@emnrd.nm.gov, Harimon, Jocelyn, Jocelyn.Harimon@emnrd.nm.gov on 02/27/2023 via email.

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

NA

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: Garrett Green Title: SSHE Coordinator

Signature:  Date: 03/09/2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon Date: 03/10/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306936047
District RP	
Facility ID	
Application ID	

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?	>100 (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 **not** 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
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ 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.

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306936047
District RP	
Facility ID	
Application ID	

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: _Garrett Green_____ Title: _SSHE Coordinator_____

Signature:__  _____ Date: ____6/13/2023_____

email: _garrett.green@exxonmobil.com_____ Telephone: ____575-200-0729_____

OCD Only

Received by: Jocelyn Harimon Date: 6/13/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306936047
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: _Garrett Green_____ Title: _SSHE Coordinator_____

Signature: _____ _____ Date: __6/13/2023_____

email: __garrett.green@exxonmobil.com_____ Telephone: ___575-200-0729_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: __06/13/2023___

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: __09/13/2023___

Printed Name: _____ Title: __Environmental Specialist -Adv_____

ENSOLUM

June 13, 2023

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

Re: Closure Request
Outrider Fed 28 Pad B
Incident Number NAPP2306936047
Lea 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 Outrider Fed 28 Pad B (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 produced water at the Site. Based on Site assessment 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 NAPP2306936047.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit N, Section 28, Township 24 South, Range 32 East, in Lea County, New Mexico (32.18238°, -103.68200°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On February 24, 2023, a valve was improperly installed during hydraulic fracturing (frac) operations causing approximately 25.36 barrels (bbls) of produced water to release onto the surface of the well pad. A vacuum truck was immediately dispatched and recovered approximately 25 bbls of produced water. XTO notified the New Mexico Oil Conservation Division (NMOCD) via email on February 27, 2023, and submitted a Release Notification Form C-141 (Form C-141) on March 9, 2023. The release was assigned Incident Number NAPP2306936047.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The nearest groundwater well is permitted by the New Mexico Office of the State Engineer (OSE file number C-4536) and is located approximately 0.48 miles east of the Site. The groundwater well was completed on June 10, 2021, and was drilled to a total depth of 500 feet bgs. The static groundwater level upon completion was 314 feet bgs. All wells used for depth to water determination are depicted on Figure 1 and the Well Record and Log for groundwater well C-4536 is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 3,694 feet north of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT ACTIVITIES

On May 11, 2023, Site assessment activities were conducted at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Eight delineation soil samples (SS01 through SS08) were collected within and around the release extent at a depth of 0.5 feet bgs. Soil samples SS01 through SS04 were collected within the release extent to assess for the presence of absence of soil impacted soil. Soil samples SS05 through SS08 were collected around the release extent to confirm the lateral extent of the release. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photo documentation was conducted during the Site visits 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 (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they were collected may not have equilibrated to 6 degrees Celcius required for shipment and long term storage, but are considered to have been received in acceptable condition by the laboratory.

Laboratory analytical results for delineation samples SS01 through SS08 indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for delineation samples SS05 through SS08 provided lateral delineation of the release to the strictest Table I Closure Criteria. Additional vertical delineation activities were warranted within the release extent to further confirm the absence of impacted soil.

DELINEATION AND SURFACE SCRAPING ACTIVITIES

On May 19, 2023, Ensolum personnel returned to the Site to complete vertical delineation activities to confirm the absence of impacted soil. Four potholes (PH01 through PH04) were advanced by use of heavy equipment at the locations of delineation samples SS01 through SS04, respectively. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 4 feet bgs. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs and are included in Appendix C. The delineation soil samples were field screened, handled, and analyzed as described above. The soil sample locations are depicted on Figure 2. Following the delineation activities, surface scraping was completed via heavy equipment to address visible staining within the release extent. The soil removed from the surface scraping activities was transported and properly disposed of at the R360 Landfill Facility in Hobbs, New Mexico.

Laboratory analytical results for vertical delineation samples PH01 through PH04 indicated all COC concentrations were compliant with the Site 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 resulting from the February 24, 2023 release of produced water. Laboratory analytical results for the delineation soil samples indicated all COC concentrations were in compliance with the Site Closure Criteria. Additionally, the release has been laterally defined to the strictest Table I Closure Criteria by soil samples SS05 through SS08. Surface scraping activities were completed to remove surficial staining within the release extent in the areas of soil samples SS01 through SS04, where elevated chloride concentrations were identified.

Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. Based on laboratory analytical results compliant with the Site Closure Criteria, no further remediation is required. As such, XTO respectfully requests closure for Incident Number NAPP2306936047.

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

Sincerely,
Ensolum, LLC

Mariaha O'Dell

Mariaha D. O'Dell
Associate Geologist

Ashley L. Ager

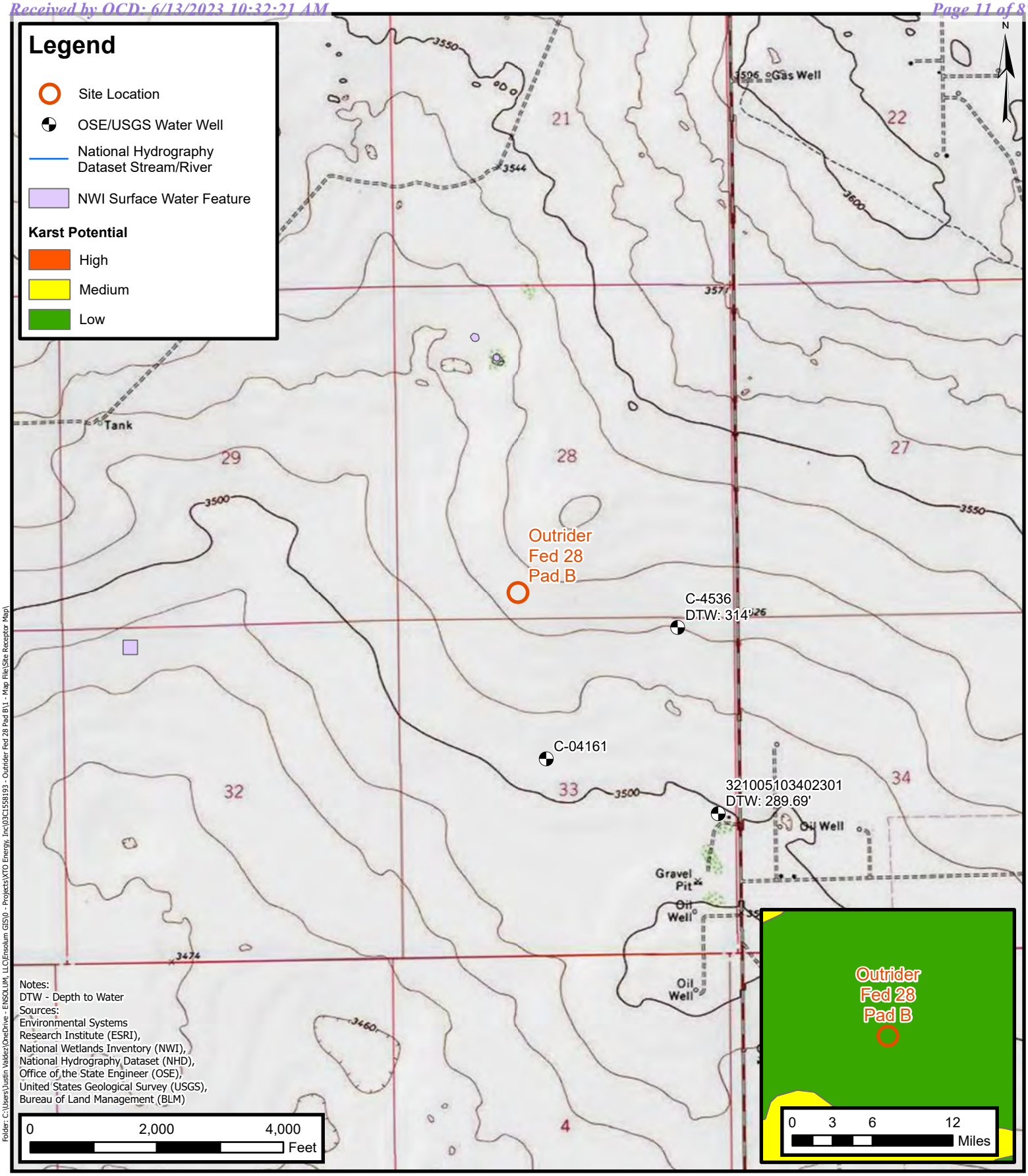
Ashley L. Ager, MS, PG
Principal

cc: Garrett Green, XTO
Shelby Pennington, XTO
BLM

Appendices:

ENSOLUM

FIGURES



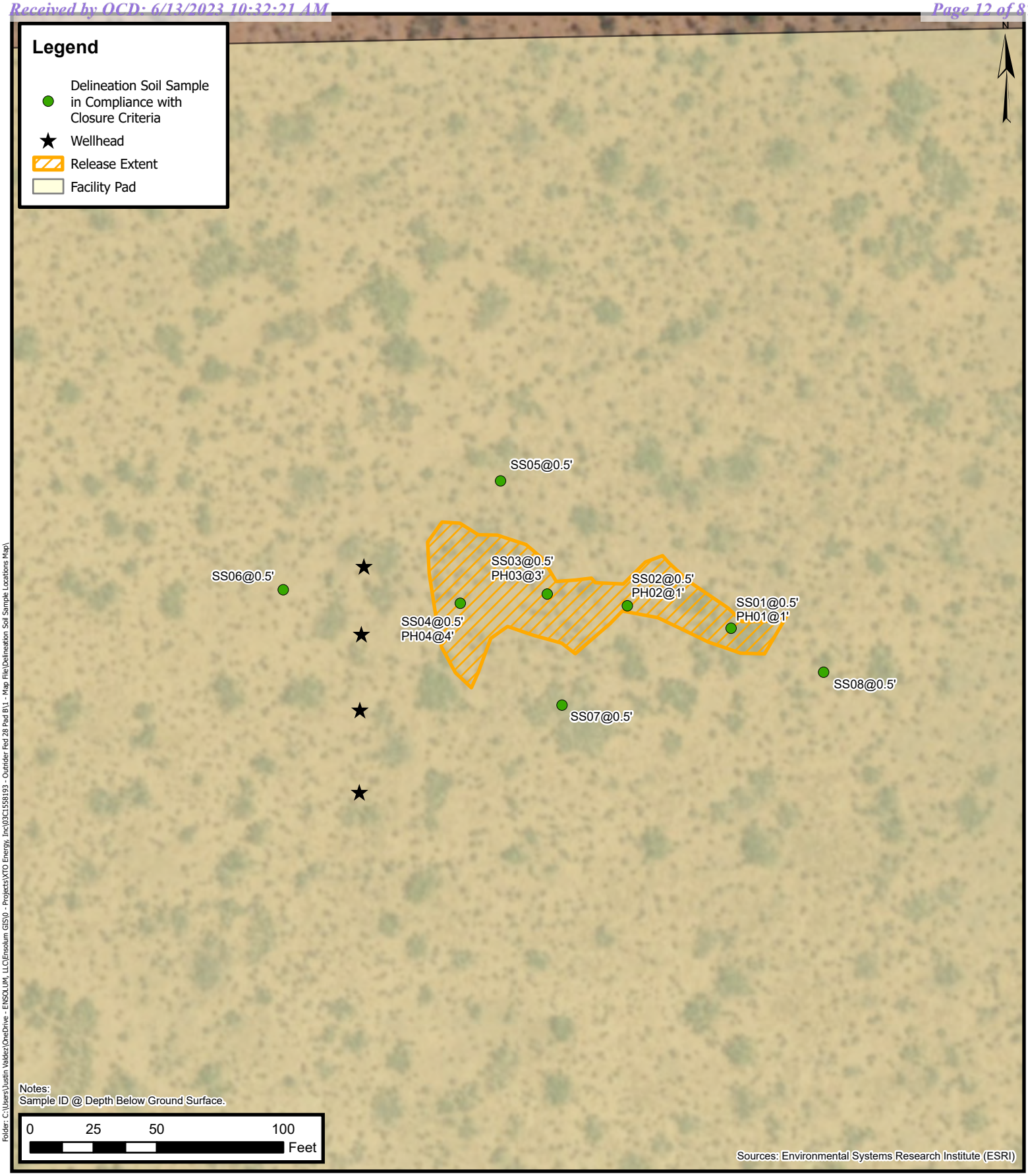
Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558193 - Outrider Fed 28 Pad B\1 - Map File\Site Receptor Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
Outrider Fed 28 Pad B
Incident Number: NAPP2306936047
Unit N, Sec. 28, T24S, R32E
Lea County, New Mexico

FIGURE 1



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558193 - Outrider Fed 28 Pad B\1 - Map File\Delineation Soil Sample Locations Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations

XTO Energy, Inc
Outrider Fed 28 Pad B
Incident Number: NAPP2306936047
Unit N, Sec. 28, T24S, R32E
Lea County, New Mexico

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Outrider Fed 28 Pad B
XTO Energy, Inc
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
SS01	05/11/2023	0.5	<0.00199	<0.00398	55.1	<50.0	<50.0	55.1	55.1	9,330
PH01	05/19/2023	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	220
SS02	05/11/2023	0.5	<0.00200	<0.00399	<49.8	220	<49.8	220	220	10,900
PH02	05/19/2023	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	188
SS03	05/11/2023	0.5	<0.00198	<0.00397	59.7	61.7	<50.0	121	121	18,500
PH03	05/19/2023	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	124
SS04	05/11/2023	0.5	<0.00200	<0.00401	<49.9	103	<49.9	103	103	13,900
PH04	05/19/2023	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,350
SS05	05/11/2023	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	525
SS06	05/11/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	556
SS07	05/11/2023	0.5	<0.00199	<0.00398	<49.9	50.5	<49.9	50.5	50.5	575
SS08	05/11/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	592

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

ENSOLUM

APPENDIX A

Referenced Well Records

OSE DIT JUL 9 2021 PM1:52

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIT JUN 2L 2021 PM10:14

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
~~C-4536~~ POD 1	20E37	C-4536

WELL OWNER NAME(S)	PHONE (OPTIONAL)
BASIN PROPERTIES RANCHES LLC	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
3300 N A STREET, BLDG 1, STE 220	MIDLAND	TX	79705

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	10	50.8	N
	LONGITUDE	103	40	25.9	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD1706	Bryce Wallace	Elite Drillers Corporation

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
06/09/21	06/10/21	500	500	314

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): 314

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	20	12 3/4	STEEL	N/A	8.28	.337	
0	300	7 7/8	SDR17 PVC	SPLINE	4.3	SDR17	
300	500	7 7/8	SDR17 PVC	SPLINE	4.3	SDR17	.032

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	20	12 3/4	CEMENT	10	TOP FILL
0	20	7 7/8	CEMENT	6	TOP FILL
300	500	7 7/8	8/16 SILICA SAND	46	TOP FILL

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4536-POD1	POD NO. 1	TRN NO. 695378	
LOCATION STK 24.32.33.122		WELL TAG ID NO. 20E37	PAGE 1 OF 2

OSE DIT JUL 9 2021 PM1:53

OSE DIT JUN 21 2021 PM10:14

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	3	3	RED SAND	Y ✓ N	
3	12	9	CALICHE	Y ✓ N	
12	180	168	RED CLAY	Y ✓ N	
180	235	415	TAN SANDSTONE	Y ✓ N	
235	480	245	TAN SANDSTONE & CLAY STRINGERS	✓ Y N	4.00
480	500	20	RED CLAY WITH SAND STRINGERS	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☑ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 4.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Bryce Wallace — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

06/16/2021 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4536-POD1	POD NO. 1	TRN NO. 695378	
LOCATION STK-24.32.33.122		WELL TAG ID NO. 20E37	PAGE 2 OF 2

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc
Outrider Fed 28 Pad B
Incident Number NAPP2306936047

Photograph 1 Date: 05/11/2023
Description: Site assessment, release extent area.
View: South

Photograph 2 Date: 05/11/2023
Description: Site assessment, release extent area.
View: West

Photograph 3 Date: 05/19/2023
Description: Delineation activities, PH01 through PH04
View: East

Photograph 4 Date: 05/19/2023
Description: Surface scraping activities
View: West

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: PH01	Date: 05/19/2023
	Site Name: Outrider Fed 28 Pad B	
	Incident Number: NAPP2306936047	
	Job Number: 03C1558193	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Backhoe
Coordinates: 32.182333, -103.681890	Hole Diameter: N/A	Total Depth: 1.0'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All Cl- field screenings completed with a +40% correction factor.

Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	0-0.5', CALICHE, moist, tan, unconsolicated fill, no odor, trace tan - light brown staining.
M	12,712	0.9	Y	SS01	0.5	0.5	SP	0.5'-1', SAND, moist, brown, very fine grained, poorly graded, no stain, no odor.
M	207	0.0	N	PH01	1	1		

TD @ 1' bgs.

ENSOLUM

	Sample Name: PH02	Date: 05/19/2023
	Site Name: Outrider Fed 28 Pad B	
	Incident Number: NAPP2306936047	
	Job Number: 03C1558193	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Backhoe
Coordinates: 32.182358, -103.682023	Hole Diameter: N/A	Total Depth: 1.0'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All Cl- field screenings completed with a +40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	0-0.5', CALICHE, moist, tan, unconsolicated fill, no odor, trace tan - light brown staining.
M	19,297	0.6	Y	SS02	0.5	0.5	SP	0.5'-1', SAND, moist, brown, very fine grained, poorly graded, no stain, no odor.
M	173	0.0	N	PH02	1	1		

TD @ 1' bgs.

ENSOLUM

	Sample Name: PH03	Date: 05/19/2023
	Site Name: Outrider Fed 28 Pad B	
	Incident Number: NAPP2306936047	
	Job Number: 03C1558193	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Backhoe
Coordinates:32,18237, -103.68212	Hole Diameter: N/A	Total Depth: 3.0'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All Cl- field screenings completed with a +40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	0-0.5', CALICHE, moist, tan, unconsolicated fill, no odor, trace tan - light brown staining.
M	19,297	0.6	Y	SS03	0.5	0.5	SP	0.5'-3', SAND, moist, brown, very fine grained, poorly graded, no stain, no odor.
M	1,590	0.0	N			1		
M	1,831	0.0	N			2		
M	<168	0.0	N	PH03	3	3		

TD @ 3' bgs.

ENSOLUM

	Sample Name: PH04	Date: 05/19/2023
	Site Name: Outrider Fed 28 Pad B	
	Incident Number: NAPP2306936047	
	Job Number: 03C1558193	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Connor Whitman	Method: Backhoe
Coordinates: 32.18236, -103.68224	Hole Diameter: N/A	Total Depth: 4.0'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All Cl- field screenings completed with a +40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	0-0.5', CALICHE, moist, tan, unconsolicated fill, no odor, trace tan - light brown staining.
M	17,673	0.7	Y	SS04	0.5	0.5	SP	0.5'-3', SAND, moist, brown, very fine grained, poorly graded, no stain, no odor.
M	2,576	0.0	N		1	1		
M	1,478	0.0	N		2	2		
M	2,100	0.0	N		3	3	SP	3-4', SAND, moist, brown, very fine grained, poorly graded, trace clay, no stain, no odor.
M	1,708	0.0	N	PH04	4	4	CCHE	@4', CALICHE, moist, off white-tan, moderately consolidated, abundant fine grain sand.

TD @ 4' bgs.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 5/18/2023 6:17:26 PM Revision 1

JOB DESCRIPTION

Outrider Fed 28 Pad B
SDG NUMBER 03C1558193

JOB NUMBER

890-4651-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

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

Authorization

Generated
5/18/2023 6:17:26 PM
Revision 1

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

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Laboratory Job ID: 890-4651-1
SDG: 03C1558193

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Job ID: 890-4651-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4651-1

REVISION

The report being provided is a revision of the original report sent on 5/17/2023. The report (revision 1) is being revised due to Revised report to re-run sample for verification per client request..

Receipt
The samples were received on 5/11/2023 3:10 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 9.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4651-1), SS02 (890-4651-2), SS03 (890-4651-3), SS04 (890-4651-4), SS05 (890-4651-5), SS06 (890-4651-6), SS07 (890-4651-7) and SS08 (890-4651-8).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-53453 recovered above the upper control limit for Toluene and m-Xylene & p-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-53453 recovered above the upper control limit for m-Xylene & p-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-4651-1), SS02 (890-4651-2), SS03 (890-4651-3), SS04 (890-4651-4), SS05 (890-4651-5), SS06 (890-4651-6), SS07 (890-4651-7), SS08 (890-4651-8), (890-4651-A-1-G MS) and (890-4651-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-53495 and analytical batch 880-53453 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch laboratory control sample duplicate and matrix spike duplicate (LCSD/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-53495 and analytical batch 880-53453 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCSD) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-53379 and analytical batch 880-53324 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS03 (890-4651-3) and SS04 (890-4651-4). 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.

HPLC/IC
Method 300_ORGFM_28D: Samples ran within hold. SS05 (890-4651-5), SS06 (890-4651-6), SS07 (890-4651-7) and SS08 (890-4651-8)

Case Narrative

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Job ID: 890-4651-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-53260 and 880-53260 and analytical batch 880-53531 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.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-53361 and analytical batch 880-53529 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.

Method 300_ORGFM_28D: Samples ran within hold. SS01 (890-4651-1), SS02 (890-4651-2), SS03 (890-4651-3) and SS04 (890-4651-4)

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

Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS01

Date Collected: 05/11/23 07:20
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 01:27	1
Toluene	<0.00199	U F1 *+	0.00199		mg/Kg		05/16/23 15:10	05/17/23 01:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 01:27	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 01:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 01:27	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*157*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 01:27*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*05/16/23 15:10*	*05/17/23 01:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**55.1**		50.0		mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**55.1**		50.0		mg/Kg		05/15/23 12:47	05/15/23 16:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 16:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*05/15/23 12:47*	*05/15/23 16:32*	*1*
o-Terphenyl	*101*		*70 - 130*	*05/15/23 12:47*	*05/15/23 16:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9330**	**H F1**	250		mg/Kg			05/16/23 19:57	50

Client Sample ID: SS02

Date Collected: 05/11/23 07:25
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:52	1
Toluene	<0.00200	U *+	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:52	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		05/16/23 15:10	05/17/23 01:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:52	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		05/16/23 15:10	05/17/23 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*166*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 01:52*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS02

Date Collected: 05/11/23 07:25
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-2
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*05/16/23 15:10*	*05/17/23 01:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**220**		49.8	mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/15/23 12:47	05/15/23 17:37	1
Diesel Range Organics (Over C10-C28)	**220**		49.8	mg/Kg		05/15/23 12:47	05/15/23 17:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/15/23 12:47	05/15/23 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*126*		*70 - 130*	*05/15/23 12:47*	*05/15/23 17:37*	*1*
o-Terphenyl	*96*		*70 - 130*	*05/15/23 12:47*	*05/15/23 17:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10900**	**H**	248	mg/Kg			05/16/23 20:13	50

Client Sample ID: SS03

Date Collected: 05/11/23 07:30
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		05/16/23 15:10	05/17/23 02:18	1
Toluene	<0.00198	U *+	0.00198	mg/Kg		05/16/23 15:10	05/17/23 02:18	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/16/23 15:10	05/17/23 02:18	1
m-Xylene & p-Xylene	<0.00397	U *+	0.00397	mg/Kg		05/16/23 15:10	05/17/23 02:18	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/16/23 15:10	05/17/23 02:18	1
Xylenes, Total	<0.00397	U *+	0.00397	mg/Kg		05/16/23 15:10	05/17/23 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*163*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 02:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*05/16/23 15:10*	*05/17/23 02:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**121**		50.0	mg/Kg			05/16/23 11:52	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS03
Date Collected: 05/11/23 07:30
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**59.7**		50.0		mg/Kg		05/15/23 12:47	05/15/23 17:59	1
Diesel Range Organics (Over C10-C28)	**61.7**		50.0		mg/Kg		05/15/23 12:47	05/15/23 17:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*05/15/23 12:47*	*05/15/23 17:59*	*1*
o-Terphenyl	*106*		*70 - 130*	*05/15/23 12:47*	*05/15/23 17:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18500**		250		mg/Kg			05/18/23 15:47	50

Client Sample ID: SS04
Date Collected: 05/11/23 07:35
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 02:44	1
Toluene	<0.00200	U *+	0.00200		mg/Kg		05/16/23 15:10	05/17/23 02:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 02:44	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		05/16/23 15:10	05/17/23 02:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 02:44	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		05/16/23 15:10	05/17/23 02:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*178*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 02:44*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*05/16/23 15:10*	*05/17/23 02:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**103**		49.9		mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/15/23 12:47	05/15/23 18:20	1
Diesel Range Organics (Over C10-C28)	**103**		49.9		mg/Kg		05/15/23 12:47	05/15/23 18:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/15/23 12:47	05/15/23 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*05/15/23 12:47*	*05/15/23 18:20*	*1*
o-Terphenyl	*102*		*70 - 130*	*05/15/23 12:47*	*05/15/23 18:20*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS04
Date Collected: 05/11/23 07:35
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13900	H	249		mg/Kg			05/16/23 20:23	50

Client Sample ID: SS05
Date Collected: 05/11/23 07:40
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/16/23 15:10	05/17/23 03:09	1
Toluene	<0.00202	U *+	0.00202		mg/Kg		05/16/23 15:10	05/17/23 03:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/16/23 15:10	05/17/23 03:09	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		05/16/23 15:10	05/17/23 03:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/16/23 15:10	05/17/23 03:09	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		05/16/23 15:10	05/17/23 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*158*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 03:09*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/16/23 15:10*	*05/17/23 03:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 18:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 18:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*05/15/23 12:47*	*05/15/23 18:41*	*1*
o-Terphenyl	*92*		*70 - 130*	*05/15/23 12:47*	*05/15/23 18:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	525	H	5.04		mg/Kg			05/17/23 00:18	1

Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS06

Date Collected: 05/11/23 07:45
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 03:35	1
Toluene	<0.00199	U *+	0.00199		mg/Kg		05/16/23 15:10	05/17/23 03:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 03:35	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 03:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 03:35	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*180*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 03:35*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*05/16/23 15:10*	*05/17/23 03:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:03*	*1*
o-Terphenyl	*90*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**556**	**H**	5.05		mg/Kg			05/17/23 00:24	1

Client Sample ID: SS07

Date Collected: 05/11/23 07:50
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 04:01	1
Toluene	<0.00199	U *+	0.00199		mg/Kg		05/16/23 15:10	05/17/23 04:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 04:01	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 04:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/16/23 15:10	05/17/23 04:01	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		05/16/23 15:10	05/17/23 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*156*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 04:01*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS07

Date Collected: 05/11/23 07:50
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-7
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*05/16/23 15:10*	*05/17/23 04:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.5**		49.9	mg/Kg			05/16/23 11:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		05/15/23 12:47	05/15/23 19:24	1
Diesel Range Organics (Over C10-C28)	**50.5**		49.9	mg/Kg		05/15/23 12:47	05/15/23 19:24	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/15/23 12:47	05/15/23 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:24*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**575**	**H**	4.99	mg/Kg			05/17/23 00:29	1

Client Sample ID: SS08

Date Collected: 05/11/23 07:55
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/16/23 15:10	05/17/23 04:26	1
Toluene	<0.00201	U *+	0.00201	mg/Kg		05/16/23 15:10	05/17/23 04:26	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/16/23 15:10	05/17/23 04:26	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402	mg/Kg		05/16/23 15:10	05/17/23 04:26	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/16/23 15:10	05/17/23 04:26	1
Xylenes, Total	<0.00402	U *+	0.00402	mg/Kg		05/16/23 15:10	05/17/23 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*170*	*S1+*	*70 - 130*	*05/16/23 15:10*	*05/17/23 04:26*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*05/16/23 15:10*	*05/17/23 04:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/17/23 15:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/16/23 11:52	1

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Client Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS08

Date Collected: 05/11/23 07:55
Date Received: 05/11/23 15:10
Sample Depth: 0.5

Lab Sample ID: 890-4651-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:46	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/15/23 12:47	05/15/23 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:46*	*1*
o-Terphenyl	*87*		*70 - 130*	*05/15/23 12:47*	*05/15/23 19:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**592**	**H**	5.00		mg/Kg			05/17/23 00:34	1

Surrogate Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4651-1	SS01	157 S1+	82
890-4651-1 MS	SS01	146 S1+	102
890-4651-1 MSD	SS01	137 S1+	80
890-4651-2	SS02	166 S1+	82
890-4651-3	SS03	163 S1+	88
890-4651-4	SS04	178 S1+	91
890-4651-5	SS05	158 S1+	76
890-4651-6	SS06	180 S1+	83
890-4651-7	SS07	156 S1+	73
890-4651-8	SS08	170 S1+	87
LCS 880-53495/1-A	Lab Control Sample	143 S1+	89
LCSD 880-53495/2-A	Lab Control Sample Dup	119	98
MB 880-53382/5-A	Method Blank	83	76
MB 880-53495/5-A	Method Blank	85	76

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4651-1	SS01	129	101
890-4651-1 MS	SS01	121	88
890-4651-1 MSD	SS01	125	90
890-4651-2	SS02	126	96
890-4651-3	SS03	136 S1+	106
890-4651-4	SS04	131 S1+	102
890-4651-5	SS05	123	92
890-4651-6	SS06	121	90
890-4651-7	SS07	119	88
890-4651-8	SS08	117	87
LCS 880-53379/2-A	Lab Control Sample	108	86
LCSD 880-53379/3-A	Lab Control Sample Dup	113	88
MB 880-53379/1-A	Method Blank	177 S1+	144 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-53382/5-A
Matrix: Solid
Analysis Batch: 53453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53382

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/15/23 13:08	05/16/23 11:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/15/23 13:08	05/16/23 11:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/15/23 13:08	05/16/23 11:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/15/23 13:08	05/16/23 11:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/15/23 13:08	05/16/23 11:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/15/23 13:08	05/16/23 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*05/15/23 13:08*	*05/16/23 11:44*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/15/23 13:08*	*05/16/23 11:44*	*1*

Lab Sample ID: MB 880-53495/5-A
Matrix: Solid
Analysis Batch: 53453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53495

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/16/23 15:10	05/17/23 01:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/16/23 15:10	05/17/23 01:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/16/23 15:10	05/17/23 01:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*05/16/23 15:10*	*05/17/23 01:01*	*1*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*05/16/23 15:10*	*05/17/23 01:01*	*1*

Lab Sample ID: LCS 880-53495/1-A
Matrix: Solid
Analysis Batch: 53453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53495

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1280		mg/Kg		128	70 - 130		
Toluene			0.100	0.1330	*+	mg/Kg		133	70 - 130		
Ethylbenzene			0.100	0.1209		mg/Kg		121	70 - 130		
m-Xylene & p-Xylene			0.200	0.2739	*+	mg/Kg		137	70 - 130		
o-Xylene			0.100	0.1251		mg/Kg		125	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-53495/2-A
Matrix: Solid
Analysis Batch: 53453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53495

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1172		mg/Kg		117	70 - 130	9	35

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

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

Lab Sample ID: LCSD 880-53495/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 53453 — **Prep Batch: 53495**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1192		mg/Kg		119	70 - 130	11	35
Ethylbenzene			0.100	0.1089		mg/Kg		109	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.2476		mg/Kg		124	70 - 130	10	35
o-Xylene			0.100	0.1134		mg/Kg		113	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-4651-1 MS — **Client Sample ID: SS01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 53453 — **Prep Batch: 53495**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0998	0.1283		mg/Kg		129	70 - 130
Toluene	<0.00199	U F1 *+	0.0998	0.1339	F1	mg/Kg		134	70 - 130
Ethylbenzene	<0.00199	U	0.0998	0.1167		mg/Kg		117	70 - 130
m-Xylene & p-Xylene	<0.00398	U *+	0.200	0.2596		mg/Kg		130	70 - 130
o-Xylene	<0.00199	U	0.0998	0.1180		mg/Kg		118	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-4651-1 MSD — **Client Sample ID: SS01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 53453 — **Prep Batch: 53495**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.1065		mg/Kg		108	70 - 130	19	35
Toluene	<0.00199	U F1 *+	0.0990	0.1114		mg/Kg		112	70 - 130	18	35
Ethylbenzene	<0.00199	U	0.0990	0.08992		mg/Kg		91	70 - 130	26	35
m-Xylene & p-Xylene	<0.00398	U *+	0.198	0.2126		mg/Kg		107	70 - 130	20	35
o-Xylene	<0.00199	U	0.0990	0.09987		mg/Kg		101	70 - 130	17	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*

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

Lab Sample ID: MB 880-53379/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 53324 — **Prep Batch: 53379**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 14:57	1

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

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

Lab Sample ID: MB 880-53379/1-A
Matrix: Solid
Analysis Batch: 53324

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53379

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 14:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/15/23 12:47	05/15/23 14:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*177*	*S1+*	*70 - 130*	*05/15/23 12:47*	*05/15/23 14:57*	*1*
o-Terphenyl	*144*	*S1+*	*70 - 130*	*05/15/23 12:47*	*05/15/23 14:57*	*1*

Lab Sample ID: LCS 880-53379/2-A
Matrix: Solid
Analysis Batch: 53324

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53379

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	945.0		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	983.1		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Lab Sample ID: LCSD 880-53379/3-A
Matrix: Solid
Analysis Batch: 53324

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53379

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	930.1		mg/Kg		93	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	972.8		mg/Kg		97	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: 890-4651-1 MS
Matrix: Solid
Analysis Batch: 53324

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 53379

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	55.1		997	962.5		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	857.2		mg/Kg		84	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

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

Lab Sample ID: 890-4651-1 MSD
Matrix: Solid
Analysis Batch: 53324

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 53379

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	55.1		997	984.7		mg/Kg		93	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	882.1		mg/Kg		87	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*125*		*70 - 130*
o-Terphenyl	*90*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-53361/1-A
Matrix: Solid
Analysis Batch: 53529

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/16/23 19:40	1

Lab Sample ID: LCS 880-53361/2-A
Matrix: Solid
Analysis Batch: 53529

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	242.6		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-53361/3-A
Matrix: Solid
Analysis Batch: 53529

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	242.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 890-4651-1 MS
Matrix: Solid
Analysis Batch: 53529

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	9330	H F1	12500	15990	F1	mg/Kg		53	90 - 110		

Lab Sample ID: 890-4651-1 MSD
Matrix: Solid
Analysis Batch: 53529

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	9330	H F1	12500	16050	F1	mg/Kg		54	90 - 110	0	20

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-53260/1-A
Matrix: Solid
Analysis Batch: 53531

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/16/23 22:05	1

Lab Sample ID: LCS 880-53260/2-A
Matrix: Solid
Analysis Batch: 53531

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	258.3		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-53260/3-A
Matrix: Solid
Analysis Batch: 53531

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	259.4		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-4642-A-5-D MS
Matrix: Solid
Analysis Batch: 53531

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	5040	F1	2510	6793	F1	mg/Kg		70	90 - 110		

Lab Sample ID: 890-4642-A-5-E MSD
Matrix: Solid
Analysis Batch: 53531

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5040	F1	2510	6811	F1	mg/Kg		71	90 - 110	0	20

Lab Sample ID: MB 880-53653/1-A
Matrix: Solid
Analysis Batch: 53664

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/18/23 13:38	1

Lab Sample ID: LCS 880-53653/2-A
Matrix: Solid
Analysis Batch: 53664

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	258.0		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-53653/3-A
Matrix: Solid
Analysis Batch: 53664

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	260.1		mg/Kg		104	90 - 110	1	20

QC Sample Results

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-4671-A-3-E MS
Matrix: Solid
Analysis Batch: 53664

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	145		248	404.9		mg/Kg		105	90 - 110		

Lab Sample ID: 890-4671-A-3-F MSD
Matrix: Solid
Analysis Batch: 53664

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	145		248	404.9		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

GC VOA

Prep Batch: 53382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-53382/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 53453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	8021B	53495
890-4651-2	SS02	Total/NA	Solid	8021B	53495
890-4651-3	SS03	Total/NA	Solid	8021B	53495
890-4651-4	SS04	Total/NA	Solid	8021B	53495
890-4651-5	SS05	Total/NA	Solid	8021B	53495
890-4651-6	SS06	Total/NA	Solid	8021B	53495
890-4651-7	SS07	Total/NA	Solid	8021B	53495
890-4651-8	SS08	Total/NA	Solid	8021B	53495
MB 880-53382/5-A	Method Blank	Total/NA	Solid	8021B	53382
MB 880-53495/5-A	Method Blank	Total/NA	Solid	8021B	53495
LCS 880-53495/1-A	Lab Control Sample	Total/NA	Solid	8021B	53495
LCSD 880-53495/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	53495
890-4651-1 MS	SS01	Total/NA	Solid	8021B	53495
890-4651-1 MSD	SS01	Total/NA	Solid	8021B	53495

Prep Batch: 53495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	5035	
890-4651-2	SS02	Total/NA	Solid	5035	
890-4651-3	SS03	Total/NA	Solid	5035	
890-4651-4	SS04	Total/NA	Solid	5035	
890-4651-5	SS05	Total/NA	Solid	5035	
890-4651-6	SS06	Total/NA	Solid	5035	
890-4651-7	SS07	Total/NA	Solid	5035	
890-4651-8	SS08	Total/NA	Solid	5035	
MB 880-53495/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-53495/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-53495/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4651-1 MS	SS01	Total/NA	Solid	5035	
890-4651-1 MSD	SS01	Total/NA	Solid	5035	

Analysis Batch: 53610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	Total BTEX	
890-4651-2	SS02	Total/NA	Solid	Total BTEX	
890-4651-3	SS03	Total/NA	Solid	Total BTEX	
890-4651-4	SS04	Total/NA	Solid	Total BTEX	
890-4651-5	SS05	Total/NA	Solid	Total BTEX	
890-4651-6	SS06	Total/NA	Solid	Total BTEX	
890-4651-7	SS07	Total/NA	Solid	Total BTEX	
890-4651-8	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 53324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	8015B NM	53379

QC Association Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

GC Semi VOA (Continued)

Analysis Batch: 53324 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-2	SS02	Total/NA	Solid	8015B NM	53379
890-4651-3	SS03	Total/NA	Solid	8015B NM	53379
890-4651-4	SS04	Total/NA	Solid	8015B NM	53379
890-4651-5	SS05	Total/NA	Solid	8015B NM	53379
890-4651-6	SS06	Total/NA	Solid	8015B NM	53379
890-4651-7	SS07	Total/NA	Solid	8015B NM	53379
890-4651-8	SS08	Total/NA	Solid	8015B NM	53379
MB 880-53379/1-A	Method Blank	Total/NA	Solid	8015B NM	53379
LCS 880-53379/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	53379
LCSD 880-53379/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	53379
890-4651-1 MS	SS01	Total/NA	Solid	8015B NM	53379
890-4651-1 MSD	SS01	Total/NA	Solid	8015B NM	53379

Prep Batch: 53379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	8015NM Prep	
890-4651-2	SS02	Total/NA	Solid	8015NM Prep	
890-4651-3	SS03	Total/NA	Solid	8015NM Prep	
890-4651-4	SS04	Total/NA	Solid	8015NM Prep	
890-4651-5	SS05	Total/NA	Solid	8015NM Prep	
890-4651-6	SS06	Total/NA	Solid	8015NM Prep	
890-4651-7	SS07	Total/NA	Solid	8015NM Prep	
890-4651-8	SS08	Total/NA	Solid	8015NM Prep	
MB 880-53379/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-53379/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-53379/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4651-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-4651-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 53470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Total/NA	Solid	8015 NM	
890-4651-2	SS02	Total/NA	Solid	8015 NM	
890-4651-3	SS03	Total/NA	Solid	8015 NM	
890-4651-4	SS04	Total/NA	Solid	8015 NM	
890-4651-5	SS05	Total/NA	Solid	8015 NM	
890-4651-6	SS06	Total/NA	Solid	8015 NM	
890-4651-7	SS07	Total/NA	Solid	8015 NM	
890-4651-8	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 53260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-5	SS05	Soluble	Solid	DI Leach	
890-4651-6	SS06	Soluble	Solid	DI Leach	
890-4651-7	SS07	Soluble	Solid	DI Leach	
890-4651-8	SS08	Soluble	Solid	DI Leach	
MB 880-53260/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-53260/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-53260/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

HPLC/IC (Continued)

Leach Batch: 53260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4642-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4642-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 53361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Soluble	Solid	DI Leach	
890-4651-2	SS02	Soluble	Solid	DI Leach	
890-4651-4	SS04	Soluble	Solid	DI Leach	
MB 880-53361/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-53361/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-53361/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4651-1 MS	SS01	Soluble	Solid	DI Leach	
890-4651-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 53529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-1	SS01	Soluble	Solid	300.0	53361
890-4651-2	SS02	Soluble	Solid	300.0	53361
890-4651-4	SS04	Soluble	Solid	300.0	53361
MB 880-53361/1-A	Method Blank	Soluble	Solid	300.0	53361
LCS 880-53361/2-A	Lab Control Sample	Soluble	Solid	300.0	53361
LCSD 880-53361/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	53361
890-4651-1 MS	SS01	Soluble	Solid	300.0	53361
890-4651-1 MSD	SS01	Soluble	Solid	300.0	53361

Analysis Batch: 53531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-5	SS05	Soluble	Solid	300.0	53260
890-4651-6	SS06	Soluble	Solid	300.0	53260
890-4651-7	SS07	Soluble	Solid	300.0	53260
890-4651-8	SS08	Soluble	Solid	300.0	53260
MB 880-53260/1-A	Method Blank	Soluble	Solid	300.0	53260
LCS 880-53260/2-A	Lab Control Sample	Soluble	Solid	300.0	53260
LCSD 880-53260/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	53260
890-4642-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	53260
890-4642-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	53260

Leach Batch: 53653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-3	SS03	Soluble	Solid	DI Leach	
MB 880-53653/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-53653/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-53653/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4671-A-3-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4671-A-3-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 53664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4651-3	SS03	Soluble	Solid	300.0	53653
MB 880-53653/1-A	Method Blank	Soluble	Solid	300.0	53653
LCS 880-53653/2-A	Lab Control Sample	Soluble	Solid	300.0	53653

QC Association Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

HPLC/IC (Continued)

Analysis Batch: 53664 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-53653/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	53653
890-4671-A-3-E MS	Matrix Spike	Soluble	Solid	300.0	53653
890-4671-A-3-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	53653

Lab Chronicle

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS01
Date Collected: 05/11/23 07:20
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 01:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 16:32	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	53361	05/15/23 11:42	KS	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	53529	05/16/23 19:57	CH	EET MID

Client Sample ID: SS02
Date Collected: 05/11/23 07:25
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 01:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 17:37	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	53361	05/15/23 11:42	KS	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	53529	05/16/23 20:13	CH	EET MID

Client Sample ID: SS03
Date Collected: 05/11/23 07:30
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 02:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 17:59	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	53653	05/18/23 10:23	CH	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	53664	05/18/23 15:47	SMC	EET MID

Client Sample ID: SS04
Date Collected: 05/11/23 07:35
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 02:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS04
Date Collected: 05/11/23 07:35
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 18:20	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	53361	05/15/23 11:42	KS	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	53529	05/16/23 20:23	CH	EET MID

Client Sample ID: SS05
Date Collected: 05/11/23 07:40
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 03:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 18:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	53260	05/12/23 13:01	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53531	05/17/23 00:18	CH	EET MID

Client Sample ID: SS06
Date Collected: 05/11/23 07:45
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 03:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 19:03	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	53260	05/12/23 13:01	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53531	05/17/23 00:24	CH	EET MID

Client Sample ID: SS07
Date Collected: 05/11/23 07:50
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 04:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 19:24	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Client Sample ID: SS07
Date Collected: 05/11/23 07:50
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	53260	05/12/23 13:01	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53531	05/17/23 00:29	CH	EET MID

Client Sample ID: SS08
Date Collected: 05/11/23 07:55
Date Received: 05/11/23 15:10

Lab Sample ID: 890-4651-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	53495	05/16/23 15:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	53453	05/17/23 04:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			53610	05/17/23 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			53470	05/16/23 11:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	53379	05/15/23 12:47	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53324	05/15/23 19:46	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	53260	05/12/23 13:01	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53531	05/17/23 00:34	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

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

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Outrider Fed 28 Pad B

Job ID: 890-4651-1
SDG: 03C1558193

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4651-1	SS01	Solid	05/11/23 07:20	05/11/23 15:10	0.5
890-4651-2	SS02	Solid	05/11/23 07:25	05/11/23 15:10	0.5
890-4651-3	SS03	Solid	05/11/23 07:30	05/11/23 15:10	0.5
890-4651-4	SS04	Solid	05/11/23 07:35	05/11/23 15:10	0.5
890-4651-5	SS05	Solid	05/11/23 07:40	05/11/23 15:10	0.5
890-4651-6	SS06	Solid	05/11/23 07:45	05/11/23 15:10	0.5
890-4651-7	SS07	Solid	05/11/23 07:50	05/11/23 15:10	0.5
890-4651-8	SS08	Solid	05/11/23 07:55	05/11/23 15:10	0.5

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Chain of Custody

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

www.xenco.com Page 1 of 1

Work Order No: _____

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Outrider Fed 28 Pad B	Turn Around	☑ Routine ☐ Rush
Project Number:	03C1558193	Due Date:	
Project Location:	32.18238,-103.68200	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

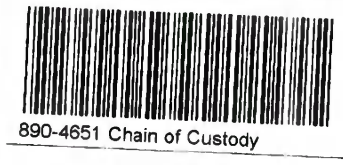
SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM0057
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	9.2
Total Containers:		Corrected Temperature:	9.0

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS01	S	5/11/2023	7:20	0.5'	Grab/	1		x	x	x
SS02	S	5/11/2023	7:25	0.5'	Grab/	1		x	x	x
SS03	S	5/11/2023	7:30	0.5'	Grab/	1		x	x	x
SS04	S	5/11/2023	7:35	0.5'	Grab/	1		x	x	x
SS05	S	5/11/2023	7:40	0.5'	Grab/	1		x	x	x
SS06	S	5/11/2023	7:45	0.5'	Grab/	1		x	x	x
SS07	S	5/11/2023	7:50	0.5'	Grab/	1		x	x	x
SS08	S	5/11/2023	7:55	0.5'	Grab/	1		x	x	x

ANALYSIS REQUEST



Sample Comments

Incident ID:
NAPP2306936047
Cost Center:
2221531001
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			5-11-23 1510	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4651-1
SDG Number: 03C1558193

Login Number: 4651
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4651-1
SDG Number: 03C1558193

Login Number: 4651
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 05/15/23 08:35 AM

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 <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 5/26/2023 4:42:15 PM

JOB DESCRIPTION

Outrider 28 Pad B
SDG NUMBER 03C1558193

JOB NUMBER

890-4701-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

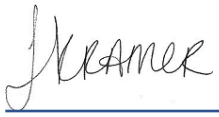
Eurofins Carlsbad

Job Notes

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

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

Authorization



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5/26/2023 4:42:15 PM

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

Client: Ensolum
Project/Site: Outrider 28 Pad B

Laboratory Job ID: 890-4701-1
SDG: 03C1558193

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Job ID: 890-4701-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4701-1

Receipt
The samples were received on 5/22/2023 8:16 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-4701-1), PH02 (890-4701-2), PH03 (890-4701-3) and PH04 (890-4701-4).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-53970/5-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-53947 and analytical batch 880-53936 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH02 (890-4701-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-53947 and analytical batch 880-53936 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample duplicate (LCSD) recovery is within acceptance limits.

Method 8015MOD_NM: LCS biased high for Diesel Range Organics (Over C10-C28). Since only an acceptable LCS or LCSD is required per the method, the LCSD shows recovery for the batch and the data has been qualified and reported.(LCS 880-53947/2-A)

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-53879 and analytical batch 880-53997 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.The associated samples are: (880-28639-A-1-A), (880-28639-A-1-B MS) and (880-28639-A-1-C MSD).

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

Client Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH01

Date Collected: 05/19/23 11:00
Date Received: 05/22/23 08:16
Sample Depth: 1

Lab Sample ID: 890-4701-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/23/23 11:11	05/25/23 13:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/23/23 11:11	05/25/23 13:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/23/23 11:11	05/25/23 13:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/23/23 11:11	05/25/23 13:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/23/23 11:11	05/25/23 13:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/23/23 11:11	05/25/23 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*05/23/23 11:11*	*05/25/23 13:36*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*05/23/23 11:11*	*05/25/23 13:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			05/26/23 17:23	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			05/24/23 09:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/23/23 08:48	05/23/23 18:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9		mg/Kg		05/23/23 08:48	05/23/23 18:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/23/23 08:48	05/23/23 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*05/23/23 08:48*	*05/23/23 18:25*	*1*
o-Terphenyl	*122*		*70 - 130*	*05/23/23 08:48*	*05/23/23 18:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**220**		5.05		mg/Kg			05/23/23 19:06	1

Client Sample ID: PH02

Date Collected: 05/19/23 10:50
Date Received: 05/22/23 08:16
Sample Depth: 1

Lab Sample ID: 890-4701-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/23/23 11:11	05/25/23 16:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/23/23 11:11	05/25/23 16:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/23/23 11:11	05/25/23 16:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/23/23 11:11	05/25/23 16:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/23/23 11:11	05/25/23 16:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/23/23 11:11	05/25/23 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:00*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH02

Date Collected: 05/19/23 10:50
Date Received: 05/22/23 08:16
Sample Depth: 1

Lab Sample ID: 890-4701-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/26/23 17:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/24/23 09:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		05/23/23 08:48	05/23/23 18:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8	mg/Kg		05/23/23 08:48	05/23/23 18:47	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/23/23 08:48	05/23/23 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*05/23/23 08:48*	*05/23/23 18:47*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*05/23/23 08:48*	*05/23/23 18:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**188**		5.02	mg/Kg			05/23/23 19:11	1

Client Sample ID: PH03

Date Collected: 05/19/23 12:50
Date Received: 05/22/23 08:16
Sample Depth: 3

Lab Sample ID: 890-4701-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/23/23 11:11	05/25/23 16:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/23/23 11:11	05/25/23 16:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/23/23 11:11	05/25/23 16:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/23/23 11:11	05/25/23 16:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/23/23 11:11	05/25/23 16:21	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		05/23/23 11:11	05/25/23 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:21*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/26/23 17:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/24/23 09:55	1

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Client Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH03

Lab Sample ID: 890-4701-3
Matrix: Solid
Date Collected: 05/19/23 12:50
Date Received: 05/22/23 08:16
Sample Depth: 3

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*05/23/23 08:48*	*05/23/23 19:09*	*1*
o-Terphenyl	*126*		*70 - 130*	*05/23/23 08:48*	*05/23/23 19:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**124**		5.04		mg/Kg			05/23/23 19:17	1

Client Sample ID: PH04

Lab Sample ID: 890-4701-4
Matrix: Solid
Date Collected: 05/19/23 12:30
Date Received: 05/22/23 08:16
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/23/23 11:11	05/25/23 16:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/23/23 11:11	05/25/23 16:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/23/23 11:11	05/25/23 16:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/23/23 11:11	05/25/23 16:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/23/23 11:11	05/25/23 16:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/23/23 11:11	05/25/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:41*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*05/23/23 11:11*	*05/25/23 16:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/26/23 17:23	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/24/23 09:55	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*05/23/23 08:48*	*05/23/23 19:31*	*1*
o-Terphenyl	*127*		*70 - 130*	*05/23/23 08:48*	*05/23/23 19:31*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH04
Date Collected: 05/19/23 12:30
Date Received: 05/22/23 08:16
Sample Depth: 4

Lab Sample ID: 890-4701-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1350		4.98		mg/Kg			05/23/23 19:22	1

Surrogate Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4697-A-1-E MS	Matrix Spike	113	103
890-4697-A-1-F MSD	Matrix Spike Duplicate	115	103
890-4701-1	PH01	84	90
890-4701-2	PH02	93	75
890-4701-3	PH03	88	70
890-4701-4	PH04	106	85
LCS 880-53970/1-A	Lab Control Sample	107	91
LCSD 880-53970/2-A	Lab Control Sample Dup	117	99
MB 880-53970/5-A	Method Blank	69 S1-	80

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4700-A-21-B MS	Matrix Spike	115	107
890-4700-A-21-C MSD	Matrix Spike Duplicate	109	98
890-4701-1	PH01	103	122
890-4701-2	PH02	119	134 S1+
890-4701-3	PH03	110	126
890-4701-4	PH04	109	127
LCS 880-53947/2-A	Lab Control Sample	91	99
LCSD 880-53947/3-A	Lab Control Sample Dup	91	98
MB 880-53947/1-A	Method Blank	168 S1+	195 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-53970/5-A
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53970

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/23/23 11:11	05/25/23 11:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/23/23 11:11	05/25/23 11:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/23/23 11:11	05/25/23 11:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/23/23 11:11	05/25/23 11:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/23/23 11:11	05/25/23 11:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/23/23 11:11	05/25/23 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*05/23/23 11:11*	*05/25/23 11:11*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*05/23/23 11:11*	*05/25/23 11:11*	*1*

Lab Sample ID: LCS 880-53970/1-A
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53970

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1073		mg/Kg		107	70 - 130		
Toluene			0.100	0.09785		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.1007		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.2080		mg/Kg		104	70 - 130		
o-Xylene			0.100	0.1051		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 880-53970/2-A
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53970

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1172		mg/Kg		117	70 - 130	9	35
Toluene			0.100	0.1015		mg/Kg		101	70 - 130	4	35
Ethylbenzene			0.100	0.1084		mg/Kg		108	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2291		mg/Kg		115	70 - 130	10	35
o-Xylene			0.100	0.1165		mg/Kg		117	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-4697-A-1-E MS
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 53970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.1171		mg/Kg		117	70 - 130		
Toluene	<0.00199	U	0.0998	0.1083		mg/Kg		108	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

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

Lab Sample ID: 890-4697-A-1-E MS
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 53970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.1155		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2391		mg/Kg		120	70 - 130
o-Xylene	<0.00199	U	0.0998	0.1196		mg/Kg		120	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-4697-A-1-F MSD
Matrix: Solid
Analysis Batch: 54128

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 53970

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1131		mg/Kg		113	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.1023		mg/Kg		102	70 - 130	6	35
Ethylbenzene	<0.00199	U	0.100	0.1112		mg/Kg		111	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2290		mg/Kg		114	70 - 130	4	35
o-Xylene	<0.00199	U	0.100	0.1151		mg/Kg		115	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-53947/1-A
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53947

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 08:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 08:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/23/23 08:48	05/23/23 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*168*	*S1+*	*70 - 130*	*05/23/23 08:48*	*05/23/23 08:52*	*1*
o-Terphenyl	*195*	*S1+*	*70 - 130*	*05/23/23 08:48*	*05/23/23 08:52*	*1*

Lab Sample ID: LCS 880-53947/2-A
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53947

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1061		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1399	*+	mg/Kg		140	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

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

Lab Sample ID: LCS 880-53947/2-A
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53947

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: LCSD 880-53947/3-A
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53947

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1007		mg/Kg		101	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	1300		mg/Kg		130	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-4700-A-21-B MS
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 53947

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1085		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	2390	*+ F1	1000	2847	F1	mg/Kg		46	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-4700-A-21-C MSD
Matrix: Solid
Analysis Batch: 53936

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 53947

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1053		mg/Kg		103	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	2390	*+ F1	998	2702	F1	mg/Kg		31	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	98		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-53879/1-A
Matrix: Solid
Analysis Batch: 53997

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/23/23 16:39	1

Lab Sample ID: LCS 880-53879/2-A
Matrix: Solid
Analysis Batch: 53997

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	254.0		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-53879/3-A
Matrix: Solid
Analysis Batch: 53997

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	253.7		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-28639-A-1-B MS
Matrix: Solid
Analysis Batch: 53997

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	84.6	F1	249	365.4	F1	mg/Kg		113	90 - 110		

Lab Sample ID: 880-28639-A-1-C MSD
Matrix: Solid
Analysis Batch: 53997

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	84.6	F1	249	366.9	F1	mg/Kg		113	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

GC VOA

Prep Batch: 53970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	5035	
890-4701-2	PH02	Total/NA	Solid	5035	
890-4701-3	PH03	Total/NA	Solid	5035	
890-4701-4	PH04	Total/NA	Solid	5035	
MB 880-53970/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-53970/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-53970/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4697-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-4697-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 54128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	8021B	53970
890-4701-2	PH02	Total/NA	Solid	8021B	53970
890-4701-3	PH03	Total/NA	Solid	8021B	53970
890-4701-4	PH04	Total/NA	Solid	8021B	53970
MB 880-53970/5-A	Method Blank	Total/NA	Solid	8021B	53970
LCS 880-53970/1-A	Lab Control Sample	Total/NA	Solid	8021B	53970
LCSD 880-53970/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	53970
890-4697-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	53970
890-4697-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	53970

Analysis Batch: 54280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	Total BTEX	
890-4701-2	PH02	Total/NA	Solid	Total BTEX	
890-4701-3	PH03	Total/NA	Solid	Total BTEX	
890-4701-4	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 53936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	8015B NM	53947
890-4701-2	PH02	Total/NA	Solid	8015B NM	53947
890-4701-3	PH03	Total/NA	Solid	8015B NM	53947
890-4701-4	PH04	Total/NA	Solid	8015B NM	53947
MB 880-53947/1-A	Method Blank	Total/NA	Solid	8015B NM	53947
LCS 880-53947/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	53947
LCSD 880-53947/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	53947
890-4700-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	53947
890-4700-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	53947

Prep Batch: 53947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	8015NM Prep	
890-4701-2	PH02	Total/NA	Solid	8015NM Prep	
890-4701-3	PH03	Total/NA	Solid	8015NM Prep	
890-4701-4	PH04	Total/NA	Solid	8015NM Prep	
MB 880-53947/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-53947/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

GC Semi VOA (Continued)

Prep Batch: 53947 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-53947/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4700-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4700-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Total/NA	Solid	8015 NM	
890-4701-2	PH02	Total/NA	Solid	8015 NM	
890-4701-3	PH03	Total/NA	Solid	8015 NM	
890-4701-4	PH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 53879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Soluble	Solid	DI Leach	
890-4701-2	PH02	Soluble	Solid	DI Leach	
890-4701-3	PH03	Soluble	Solid	DI Leach	
890-4701-4	PH04	Soluble	Solid	DI Leach	
MB 880-53879/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-53879/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-53879/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-28639-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-28639-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 53997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4701-1	PH01	Soluble	Solid	300.0	53879
890-4701-2	PH02	Soluble	Solid	300.0	53879
890-4701-3	PH03	Soluble	Solid	300.0	53879
890-4701-4	PH04	Soluble	Solid	300.0	53879
MB 880-53879/1-A	Method Blank	Soluble	Solid	300.0	53879
LCS 880-53879/2-A	Lab Control Sample	Soluble	Solid	300.0	53879
LCSD 880-53879/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	53879
880-28639-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	53879
880-28639-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	53879

Lab Chronicle

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH01

Date Collected: 05/19/23 11:00
Date Received: 05/22/23 08:16

Lab Sample ID: 890-4701-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	53970	05/23/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54128	05/25/23 13:36	SM	EET MID
Total/NA	Analysis	Total BTEX		1			54280	05/26/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54055	05/24/23 09:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	53947	05/23/23 08:48	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53936	05/23/23 18:25	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	53879	05/22/23 12:18	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53997	05/23/23 19:06	SMC	EET MID

Client Sample ID: PH02

Date Collected: 05/19/23 10:50
Date Received: 05/22/23 08:16

Lab Sample ID: 890-4701-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	53970	05/23/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54128	05/25/23 16:00	SM	EET MID
Total/NA	Analysis	Total BTEX		1			54280	05/26/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54055	05/24/23 09:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	53947	05/23/23 08:48	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53936	05/23/23 18:47	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	53879	05/22/23 12:18	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53997	05/23/23 19:11	SMC	EET MID

Client Sample ID: PH03

Date Collected: 05/19/23 12:50
Date Received: 05/22/23 08:16

Lab Sample ID: 890-4701-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	53970	05/23/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54128	05/25/23 16:21	SM	EET MID
Total/NA	Analysis	Total BTEX		1			54280	05/26/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54055	05/24/23 09:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	53947	05/23/23 08:48	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53936	05/23/23 19:09	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	53879	05/22/23 12:18	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53997	05/23/23 19:17	SMC	EET MID

Client Sample ID: PH04

Date Collected: 05/19/23 12:30
Date Received: 05/22/23 08:16

Lab Sample ID: 890-4701-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	53970	05/23/23 11:11	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54128	05/25/23 16:41	SM	EET MID
Total/NA	Analysis	Total BTEX		1			54280	05/26/23 17:23	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Client Sample ID: PH04

Date Collected: 05/19/23 12:30
Date Received: 05/22/23 08:16

Lab Sample ID: 890-4701-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			54055	05/24/23 09:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	53947	05/23/23 08:48	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	53936	05/23/23 19:31	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	53879	05/22/23 12:18	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	53997	05/23/23 19:22	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Outrider 28 Pad B

Job ID: 890-4701-1
SDG: 03C1558193

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4701-1	PH01	Solid	05/19/23 11:00	05/22/23 08:16	1
890-4701-2	PH02	Solid	05/19/23 10:50	05/22/23 08:16	1
890-4701-3	PH03	Solid	05/19/23 12:50	05/22/23 08:16	3
890-4701-4	PH04	Solid	05/19/23 12:30	05/22/23 08:16	4

eurofins Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

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

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Outrider 28 Pad B	Turn Around	
Project Number:	03C1558193	☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.0	
Total Containers:		Corrected Temperature:	4.8	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
PH01	S	5/19/23	1100	1	G	1		/	/	/
PH02	|	|	1050	1	|	1		/	/	/
PH03	|	|	1250	3	|	1		/	/	/
PH04	|	|	1230	4	|	1		/	/	/

Parameters

890-4701 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
NAPP2306936047

Cost Center:
2221531001

AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		8:16 5/22/23	2	8:16 5.22.23	
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4701-1
SDG Number: 03C1558193

Login Number: 4701
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4701-1
SDG Number: 03C1558193

Login Number: 4701
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 05/23/23 10:47 AM

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 <6mm (1/4").	N/A	

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Green, Garrett J
To: Tacoma Morrissey; Ben Belill
Subject: Fwd: [EXTERNAL] XTO - Sampling Notification (Week of 5/15/23 - 5/19/23)
Date: Friday, May 12, 2023 5:50:39 PM

[**EXTERNAL EMAIL**]

Sent from my iPhone

Begin forwarded message:

From: "Enviro, OCD, EMNRD" <OCD.Enviro@emnrd.nm.gov>
Date: May 12, 2023 at 4:02:13 PM MDT
To: "Green, Garrett J" <garrett.green@exxonmobil.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 5/15/23 - 5/19/23)

External Email - Think Before You Click

Garrett,

Please be aware that notification requirements are **two business days**, per rule. When sampling at multiple sites, a more detailed schedule of days at each site should be provide. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

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, May 11, 2023 11:04 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Tacoma Morrissey <tmorrissey@ensolum.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 5/15/23 - 5/19/23)

All,

XTO plans to complete final sampling activities at the sites listed below for the week of May 15, 2023.

Monday
- Ross Draw 3031/ nAPP2227244441 & NAPP2300442748

Tuesday
- Ross Draw 3031/ nAPP2227244441 and NAPP2300442748
- Outrider Fed 28 Pad B / NAPP2306936047

Wednesday
- Outrider Fed 28 Pad B / NAPP2306936047

Thursday
- Outrider Fed 28 Pad B / NAPP2306936047
- PLU PC 17 BATTERY/ nAPP2233951574

Friday
- Sizzler 2H / NMAP1822337753
- PLU PC 17 BATTERY/ nAPP2233951574
- JRU 108 / nAPP2217931599

Thank you,

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

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

From: Collins, Melanie
To: ocd.enviro (ocd.enviro@emnrd.nm.gov); Bratcher, Michael, EMNRD (mike.bratcher@emnrd.nm.gov); Hamlet, Robert, EMNRD (Robert.Hamlet@emnrd.nm.gov); Harimon, Jocelyn, EMNRD (Jocelyn.Harimon@emnrd.nm.gov)
Cc: Green, Garrett J; Ben Belill; Tacoma Morrissey; DelawareSpills /SM
Subject: XTO - Extension Request - Outrider Fed 28 Pad B - Incident Number NAPP2306936047
Date: Thursday, May 25, 2023 3:20:34 PM
Attachments: image001.png

[**EXTERNAL EMAIL**]

All,

XTO is requesting an extension for the current deadline of May 25, 2023 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Outrider Fed 28 Pad B (Incident Number NAPP2306936047). The release occurred on February 24, 2023, and initial site assessment activities have been completed. However, due to XTO onsite operations, including frac and flowback operations, further remediation activities were postponed to ensure the safety of all onsite personnel. Delineation activities were completed on May 19, 2023, and laboratory analytical results are currently pending. To review the laboratory analytical results and complete additional remediation activities or submit a remediation work plan or closure report, XTO requests an extension until August 23, 2023.

Thanks,

Melanie Collins

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 226898

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 226898
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/13/2023