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	NAPP2135032531
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy OGRID Contact Name Shelby Pennington Contact		
Contact Name Shelby Pennington Contact	Telephone 201 702 0252	
Shelly I changeon	Contact Telephone 281-723-9353	
Contact email shelby.g.pennington@exxonmobil.com Incident	# (assigned by OCD)	
Contact mailing address 6401 Holiday Hill Rd Bldg 5, Midland, Texas, 7970'	7	
Location of Release	Course	
Latitude 32.18183 Longitud		
(NAD 83 in decimal degrees to 5 de	cimal places)	
Site Name Big Sinks 25 Site Typ	e Central Tank Battery	
Date Release Discovered 12/06/2021 API# (if	applicable)	
Unit Letter Section Township Range Co	unty	
O 25 24S 30E E	ddy	
Surface Owner: ☐ State 🗷 Federal ☐ Tribal ☐ Private (Name:)	
Nature and Volume of	f Release	
Material(s) Released (Select all that apply and attach calculations or spec	fic justification for the volumes provided below)	
Crude Oil Volume Released (bbls)	Volume Recovered (bbls)	
Produced Water Volume Released (bbls) 5.0	Volume Recovered (bbls) 5.0	
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)	
G CD 1		
Cause of Release A pinhole leak on a 3" valve released fluids from the water		
recovered. A 48-hour advance liner inspection notice was s determined not to be operating as designed. A third-party c		
determined not to be operating as designed. A tillid-party c	ontactor has occurretained for remediation purposes.	

Received by OCD: 6/2/2022 II:53:00 PMM State of New Mexico Page 2 Oil Conservation Division

I	ag	e	2	eoj	f 1	23	j
						r .	

Incident ID	NAPP2135032531
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	sible party consider this a major release?		
release as defined by	N/A			
19.15.29.7(A) NMAC?				
☐ Yes 🗶 No				
If YES, was immediate no	Lotice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?		
N/A	-	(,,,,,,,,		
	Initial Ro	esponse		
The responsible j	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury		
The source of the rele	ease has been stopped.			
The impacted area ha	s been secured to protect human health and	the environment.		
Released materials ha	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.		
★ All free liquids and reference in the second r	ecoverable materials have been removed and	l managed appropriately.		
If all the actions described	d above have <u>not</u> been undertaken, explain v	why:		
NA				
Per 10 15 20 8 R (4) NM	ΔC the responsible party may commence r	emediation 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 lease attach all information needed for closure evaluation.		
		pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger		
public health or the environr	nent. The acceptance of a C-141 report by the C	CD does not relieve the operator of liability should their operations have		
failed to adequately investig	ate and remediate contamination that pose a thre f a C-141 report does not relieve the operator of	at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws		
and/or regulations.	THE TAXABLE WAS LOVE THE OF STREET			
Printed Name: Shelby Pe	Printed Name: Shelby Pennington Title: Environmental Manager			
XI no	D D			
Signature:	stemto	Date: 12/16/21		
email: shelby.g.penningto	on@exxonmobil.com	Telephone: 281-723-9353		
OCD Only				
Received by: Ramona	ı Marcus	Date: 12/20/2021		
-				

NAPP2135032531

Location:	Big Sinks 25 CTB		
Spill Date:	12/6/2021		
	Area 1		
Approximate A	rea =	28.07	cu.ft.
VOLUME OF LEAK			×-
Total Crude Oil = 0.00 bbls			bbls
Total Produced Water = 5.00 bbls		bbls	
TOTAL VOLUME OF LEAK			
Total Crude Oil= 0.00 bbls			bbls
Total Produced	Water =	5.00	bbls
TOTAL VOLUME RECOVERED			
Total Crude Oil	=	0.00	bbls
Total Produced Water = 5.00 bbls			bbls

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

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

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

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 67366

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road Midland, TX 79707	Action Number: 67366
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	12/20/2021

of New Mexico

Incident ID	NAPP2135032531
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?			
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No ☐ 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?			
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No ☐ Yes ☒ No		
Are the lateral extents of the release within 300 feet of a wetland?			
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		
	☐ 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 X 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 well. 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 	s.		

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

Received by OCD: 6/2/2022 1:53:00 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page	6 oj	f 125

Incident ID	NAPP2135032531
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	tifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In
Printed Name: Adrian Baker	Title: <u>Environmental Coordinator</u>
Signature: Clobian Bajes	Date: <u>5/27/2022</u>
email:adrian.baker@exxonmobil.com	Telephone: 432-236-3808_
OCD Only	
Received by:	Date:

Page 7 of 125

Incident ID	NAPP2135032531
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 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODG	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and remuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification to the Ocean compliance.	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Printed Name:Adrian Baker	Title: <u>Environmental Coordinator</u>
Signature: Clobrian Baks	Date: _5/27/2022
email: <u>adrian.baker@exxonmobil.com</u>	Telephone: <u>432-236-3808</u>
OCD Only	
Received by:	Date:
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date: _ 08/18/2022
Closure Approved by:	Environmental Specialist A



May 27, 2022

District II New Mexico Oil Conservation Division 811 South First Street Artesia, New Mexico 88210

Re: Closure Request

Big Sinks 25 Central Tank Battery Incident Number NAPP2135032531 Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this Closure Request to document site assessment and soil sampling activities performed at the Big Sinks 25 Central Tank Battery (CTB) (Site) in Unit O, Section 25, Township 24 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil resulting from a release of produced water within lined containment at the Site. Based on field observations, field screening activities, and laboratory analytical results, XTO is submitting this Closure Request and requesting closure for Incident Number NAPP2135032531.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Eddy County, New Mexico (32.18183° N, 103.83299°W) and is associated with oil and gas exploration and production operations on Bureau of Land Management (BLM) Federal Land.

On December 6, 2021, a pinhole leak on a 3-inch valve resulted in the release of approximately 5 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; all 5 bbls of produced water were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on December 16, 2021. The release was assigned Incident Number NAPP2135032531.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) 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.

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 705 W. Wadley, Suite 210 | Midland, TX 78209 | ensolum.com Texas PG Firm No. 50588 | Texas PE Firm No. F-21843



Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. On November 19, 2020, a soil boring (C-4484) was drilled within 0.5 miles of the Site utilizing a track-mounted hollow-stem auger rig. Soil boring C-4484 was drilled to a depth of 110 feet bgs. The location of the borehole is approximately 516 feet northeast of the release area and is depicted on Figure 1. A field geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activites. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a freshwater emergent wetland, located approximately 7,519 feet southwest 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). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 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 March 21, 2022, site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Ensolum personnel advanced one borehole (BH01) via hand-auger at the location of the tear in the liner identified during the liner integrity inspection. Two discrete delineation soil samples were collected from the borehole at depths of approximately 0.5 feet and 1-foot bgs. Soil from the borehole was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log, which is included as Appendix B. The borehole was backfilled with soil removed and a XTO contractor repaired the tear in the liner. Four additional assessment samples (SS01 through SS04) were collected around the lined containment from a depth of 0.5 feet bgs to confirm the lateral extent of the release. The borehole and soil sample locations are depicted on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Appendix C.

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 at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of 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.



LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples from borehole BH01 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for soil samples SS01 through SS04, collected around the containment, were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Appendix D.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, Ensolum personnel advanced one borehole (BH01) at the location of the tear in the liner to assess for the presence or absence of impacted soil resulting from the December 6, 2021, produced water release within lined containment. Two delineation soil samples were collected from borehole BH01, at depths of approximately 0.5 feet and 1-foot bgs. Laboratory analytical results for the delineation soil samples indicated that benzene, BTEX, TPH-DRO/TPH-GRO, TPH and chloride concentrations were compliant with the Site Closure Criteria. Additionally, laboratory analytical results for soil samples SS01 through SS04, collected around the containment, were compliant with the most stringent Table 1 Closure Criteria. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts, depth to groundwater greater than 100 feet bgs, and soil sample laboratory analytical results compliant with the Closure Criteria directly beneath the tear in the liner, XTO respectfully requests closure for Incident Number NAPP2135032531.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,

Ensolum, LLC

Kalei Jennings Senior Scientist

Aimee Cole

Senior Managing Scientist

cc: Adrian Baker, XTO

Bureau of Land Management

Appendices:

Figure 1 Site Receptor Map

Figure 2 Delineation Soil Sample Locations
Table 1 Soil Sample Analytical Results

Appendix A Well Record and Log

Appendix B Lithologic Soil Sampling Logs

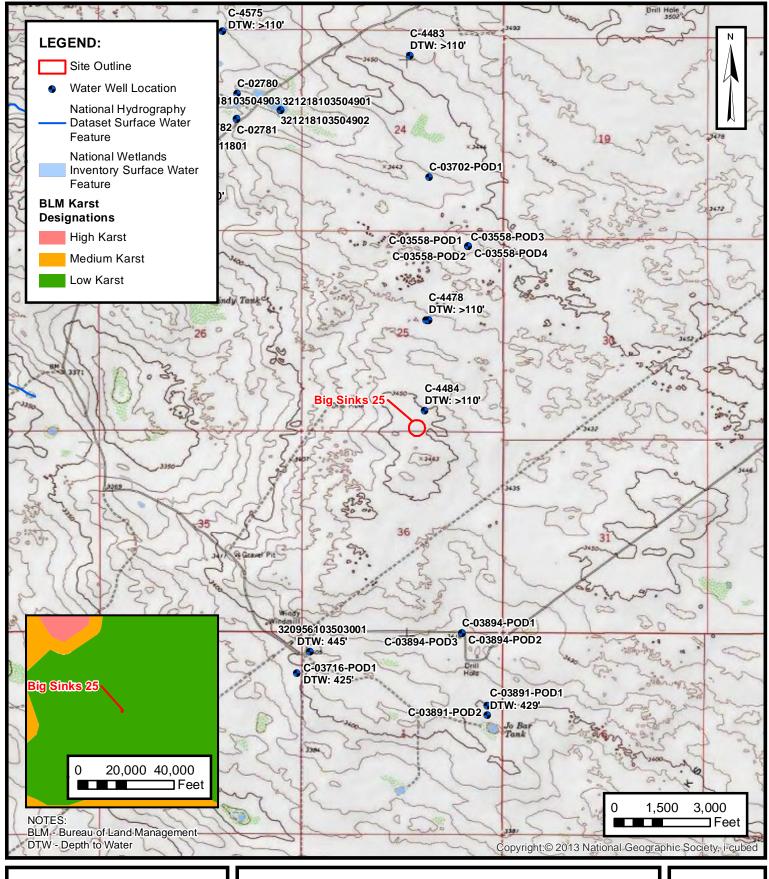
Appendix C Photographic Log

Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix E NMOCD Sample Notification



FIGURES



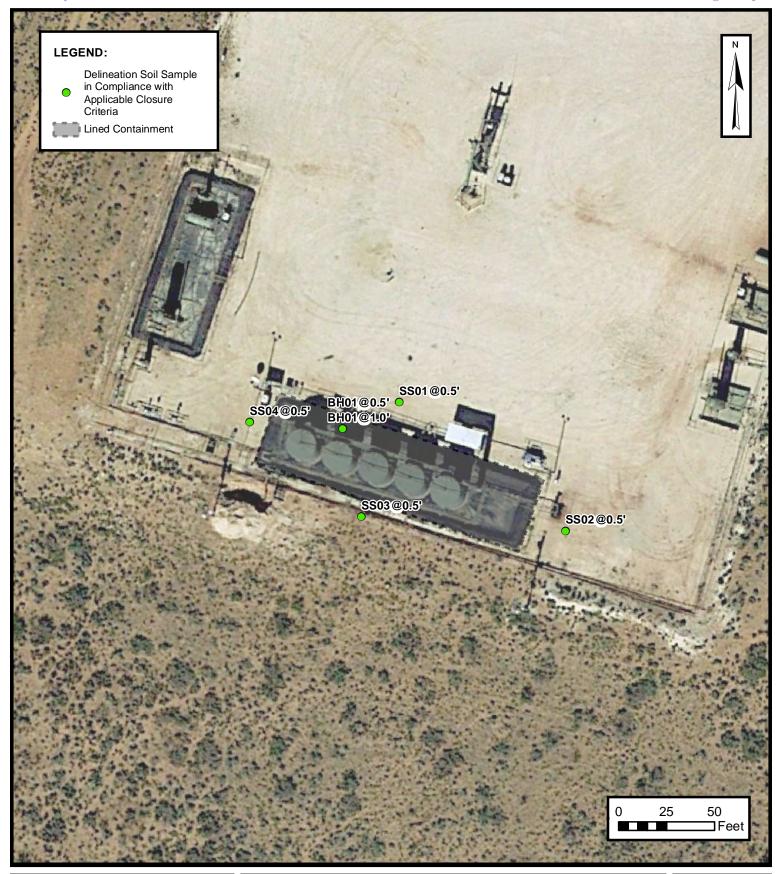


SITE RECEPTOR MAP

XTO ENERGY, INC BIG SINKS 25 CTB NAPP2135032531 Unit O, Sec 25, T24S, R30E Eddy County, New Mexico FIGURE

1

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DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC BIG SINKS 25 CTB NAPP2135032531 Unit O, Sec 25, T24S, R30E Eddy County, New Mexico **FIGURE**

2



TABLES

Received by OCD: 6/2/2022 1:53:00 PM



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS XTO Energy, Inc. - Big Sinks 25 CTB Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 (Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Delineation S	oil Sample Analyti	cal Results				
BH01	03/21/2022	0.5	< 0.00200	< 0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	3,470
BH01A	03/21/2022	1	< 0.00202	< 0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	3,820
SS01	05/11/2022	0.5	< 0.00200	< 0.00399	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	341
SS02	05/11/2022	0.5	< 0.00199	< 0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	23.5
SS03	05/11/2022	0.5	< 0.00198	< 0.00397	<50.0	<50.0	<50.0	< 50.0	< 50.0	11.5
SS04	05/11/2022	0.5	< 0.00200	< 0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	16.8

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics
DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria for Soils Impacted by a Release

Ensolum 1 of 1



APPENDIX A

Well Record and Log



2904 W 2nd St. Roswell, NM 8820 I voice: 575.624.2420 fax: 575.624.2421 www.atkinseng.com

12/16/2020

DII-NMOSE 1900 W 2nd Street Roswell, NM 88201 CONT. T.

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4484 Pod1

OSE DII DEC 17 2020 PM1:54

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4484 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

Lucas Middleton

Enclosures: as noted above

Gason Maddin



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 MMAC

I. GEN	ERAL / WELL OWNERSHIP:			and land lane for the delta the
State Er	ngineer Well Number: C-4484-POD1			DSE DIT DEC 17 2020 PM 1 5
Well ov	vner: XTO ENERGY (Kyle Littrell)		Phon	e No.: 432.682.8873
Mailing	address: 6401 Holiday Hill Dr.			
City: N	/lidland	State	Texas	Zip code:
II. WE	LL PLUGGING INFORMATION:			
1)	Name of well drilling company that plugged	i well:	Jackie D. Atkins (Atkins F	Engineering Associates Inc.)
2)	New Mexico Well Driller License No.: 124	49		Expiration Date:
3)	Well plugging activities were supervised by Shane Elridge	the foll	owing well driller(s)/rig s	supervisor(s):
4)	Date well plugging began: 11/24/2020		Date well plugging	concluded: 11/24/2020
5)	GPS Well Location: Latitude: Longitude:	32 -104	deg,10min, deg,49min,	
6)	Depth of well confirmed at initiation of plug by the following manner: weighted tape	gging as	:110 ft below gro	ound level (bgl),
7)	Static water level measured at initiation of p	lugging	:n/a ft bgl	
8)	Date well plugging plan of operations was a	pprove	l by the State Engineer:	09/29/2020
9)	Were all plugging activities consistent with differences between the approved plugging	an appr plan an	oved plugging plan? I the well as it was plugge	Yes If not, please descried (attach additional pages as needed)

Version: September 8, 2009

Page 1 of 2

Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of <u>Material Placed</u> (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
_	0-10' Hydrated Bentonite	Approx. 26 gallons	26 gallons	Augers	DEC 17 2020 pm1:54
-	10'-110' Drill Cuttings	Approx. 163 gallons	163 gallons	Boring	COST
_					
ç 					
-					
_					
8-					
0					
_					
A-					
·-					
); =					
_			BY AND OBTAIN B05 = gallons		
		cubic feet x 7.4 cubic yards x 201.9			

III. SIGNATURE:

I, Jackie D. Atkins , say that I an	m familiar with the rules of the Office of the State
Engineer pertaining to the plugging of wells and that each and all of the	
are true to the best of my knowledge and belief.	
Jack Atkins	12/14/2020
Signatur	re of Well Driller Date

Version: September 8, 2009 Page 2 of 2

2020-12-15_C-4484_POD1_OSE_Well Record and Log_plu111-forsign

Final Audit Report 2020-12-15

Created: 2020-12-15

By: Lucas Middleton (lucas@atkinseng.com)

Status: Signed

Transaction ID: CBJCHBCAABAAANKxvz7Cz5AW2X_3AXsy-0IZtcoSCffp

OSEDITOEC 17 2020 PM1:55

(4

"2020-12-15_C-4484_POD1_OSE_Well Record and Log_plu111 -forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2020-12-15 8:39:41 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2020-12-15 8:40:15 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com) 2020-12-15 11:13:01 PM GMT- IP address; 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com)

 Signature Date: 2020-12-15 11:14:05 PM GMT Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2020-12-15 - 11:14:05 PM GMT



OSEDJI DEC 17 2020 PM1:55



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us



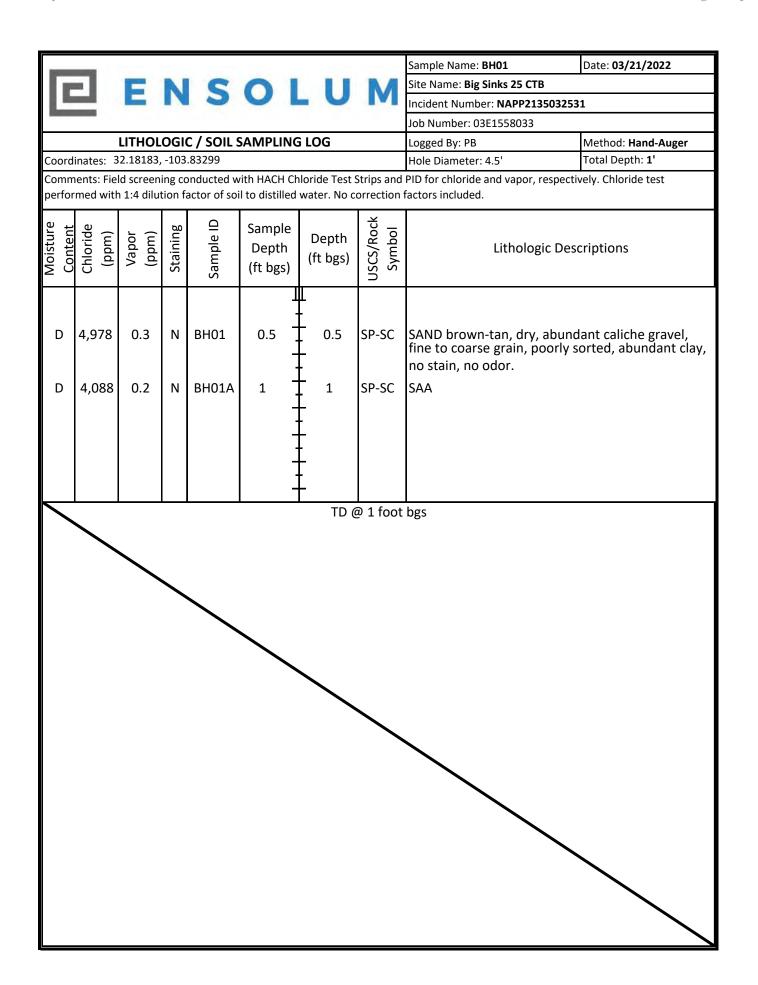
_											
NO	OSE POD NO. POD1 (BF	-	.)		VELL TAG ID NO /a).		OSE FILE NO(S).	P	
OCATI	WELL OWNE							PHONE (OPTI	ONAL)		
GENERAL AND WELL LOCATION	WELL OWNE 6401 Holida							CITY Midland		TX 79707	ZIP
QNI	WELL		DF	GREES	MINUTES	SECONI					
WIT V	LOCATION	Luz	TTUDE	32°	10'	59.14	N		' REQUIRED: ONE TEN' QUIRED: WGS 84	TH OF A SECOND	
NER	(FROM GPS	LOI	NGITUDE	-104°	49'	56.41					
1. G			NG WELL LOCATION TO T24S R30E	STREET ADDRES	SS AND COMMO	N LANDMA	RKS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE	
	LICENSE NO.		NAME OF LICENSED						NAME OF WELL DR		
	124				ckie D. Atkins					gineering Associates, l	
	DRILLING ST 11/19/2		DRILLING ENDED 11/19/2020	DEPTH OF COMP	y well materi			LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOUNTERED (FT) n/a	
z	COMPLETED	WELL IS:	ARTESIAN	7 DRY HOLE	SHALLO	OW (UNCON	FINED)		STATIC WATER LEV	/EL IN COMPLETED WE n/a	ELL (FT)
TIO	DRILLING FL	UID:	✓ AIR	MUD	ADDITIV	VES – SPECI	FY:		li.		
RM	DRILLING MI	ETHOD:	ROTARY	HAMMER	CABLE	rool	✓ OTHE	R – SPECIFY:	Hollo	w Stem Auger	
INFO	DEPTH (feet bgl)	BORE HOLE		ATERIAL AN	D/OR	C/	ASING	CASING	CASING WALL	SLOT
2. DRILLING & CASING INFORMATION	FROM	то	DIAM (inches)	(include eac	GRADE ch casing string ctions of screen		CON	NECTION TYPE ling diameter)	INSIDE DIAM. (inches)	THICKNESS (inches)	SIZE (inches)
& CA	0	110	±8.5		oring- HSA		(add coup.			-	-
NG.											
HLL						-					
2. DE		-	1			-					
0											
						-					
1											
	DEPTH (feet hal)	BORE HOLE	r ret	'ANNULAR S	DAI MAT	EDIAI A	AND	AMOUNT	метно	D OF
VΓ	FROM	TO	DIAM. (inches)	II .	EL PACK SIZE				(cubic feet)	PLACEN	
ANNULAR MATERIAL											
MA											
LAR											
NNO											
3. A											
_											
	OSE INTERI	NAL USE			POD NO	<u> </u>		WR-20		& LOG (Version 06/3	0/17)
	ATION				TODIN	<i>.</i>	-	WELL TAGII		PAGE	1 OF 2

	DEPTH (feet bgl)		COLOR AN	D TYPE OF MATERL	I. ENCOUN	TERED -		WAT	LEB .	ESTIMATED YIELD FOR
	FROM	то	THICKNESS (feet)	INCLUDE WATE	ER-BEARING CAVITI	S OR FRAC	CTURE ZONES		BEAR (YES	ING?	WATER- BEARING ZONES (gpm)
	0	1	1	Sand, Fi	ne-grained,poorly-grade	d, Reddish-	Brown		Y	/N	7
	1	4	3	Sand, Fine-gra	ined,poorly-graded, wit	caliche, Re	ddish-Brown		Y	/ N	M H
	4	34	30	Calic	he, well consolidated, (ff-white, mo	oist		Y	√ N	1
	34	91	57	Sandstone, Fine-graine	d, poorly-graded, poorl	consolidate	d , Light Bronw	-Tan	Y	√N	
	91	110	19	Sandstone, Fine-graine	d, poorly-graded, mode	ately consol	idated, Light B	ronw-	Y	√N	
н									Y	N	
4. HYDROGEOLOGIC LOG OF WELL									Y	N	
OF									Y	N	
507									Y	N	
iiC.									Y	N	
TOO									Y	N	
GEO									Y	N	
RO									Y	N	
HXI									Y	N	
4									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
									Y	N	
	METHOD U	SED TO E	STIMATE YIELI	OF WATER-BEARING	G STRATA:			TOTAL			
	PUM		AIR LIFT	BAILER OT	THER - SPECIFY:			WELL	YIELD	(gpm):	0.00
NO	WELL TES	T TEST	RESULTS - ATT RT TIME, END TI	ACH A COPY OF DAT ME, AND A TABLE SI	A COLLECTED DUR HOWING DISCHARG	NG WELL '	TESTING, INC WDOWN OVE	LUDING R THE T	J DISCI TESTIN	HARGE N G PERIO	ИЕТНОD, D.
TEST; RIG SUPERVISION	MISCELLA	NEOUS IN	fe	emporary well materia et below ground surfa ogs adapted from LTF	ice, then hydrated bei	oil boring b tonite chip	eckfilled usin s from ten feet	g drill c	euttings ground	from tot surface	tal depth to ten to surface.
S. TEST	PRINT NAM		DRILL RIG SUPE	RVISOR(S) THAT PRO	VIDED ONSITE SUPE	RVISION O	F WELL CONS	TRUCT	TON O	THER TH	AN LICENSEE
SIGNATURE	CORRECT I AND THE P	RECORD (ERMIT HO	OF THE ABOVE I	FIES THAT, TO THE B DESCRIBED HOLE AN 30 DAYS AFTER COM	D THAT HE OR SHE	WILL FILE	GE AND BELI THIS WELL R	EF, THE ECORD	FORE WITH	GOING I THE STA	S A TRUE AND ATE ENGINEER
6. SIGN	Jack A		THE OF DRIFT	Jac ER / PRINT SIGNEE	ckie D. Atkins	_	-		12/1	4/20 DATE	
		AMDIG	I OKE OF DRILLI	EK / FRINT SIONEE	I M MAILE					- 216	
	R OSE INTER E NO.	NAL USE			POD NO.		WR-20 WEL	L RECO	ORD &	LOG (Ver	rsion 06/30/2017
-	CATION				102110.	******	TAGIDNO				PAGE 2 OF 2



APPENDIX B

Lithologic Soil Sampling Logs





APPENDIX C

Photographic Log

ENSOLUM

Photographic Log

XTO Energy, Inc.
Big Sinks 25 CTB
Incident Number NAPP2135032531





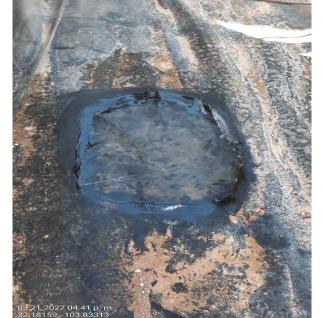
Photograph 1 Date: March 21, 2022

Description: View of hole during liner inspection.

Photograph 2 Date: May 11, 2022

Description: View during sampling activities near SS01.





Photograph 3 Date: May 11, 2022

Photograph 4
Date: May 11, 2022

Description: View during sampling activities near SS03. Description: View of patched liner after delineation.



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2119-1

Laboratory SDG: 31403236.022.0129 task 21.02

Client Project/Site: Big Sinks 25

For:

WSP USA Inc. 2777 N. Stemmons Freeway Suite 1600 Dallas, Texas 75207

Attn: Kalei Jennings

MAMER

Authorized for release by: 3/24/2022 4:27:14 PM

Jessica Kramer, Project Manager (432)704-5440

jessica.kramer@eurofinset.com

LINKS

Review your project results through

Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 8/18/2022 3:44:35 PM

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

intended to be the legally binding equivalent of a traditionally handwritten signature.

This report has been electronically signed and authorized by the signatory. Electronic signature is

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__

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11

12

Client: WSP USA Inc. Project/Site: Big Sinks 25 Laboratory Job ID: 890-2119-1 SDG: 31403236.022.0129 task 21.02

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Surrogate Summary	
QC Sample Results	
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	
Sample Summary	
Chain of Custody	

2

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13

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Qualifiers

GC VOA Qualifier

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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)

Estimated Detection Limit (Dioxin) **EDL** LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

QC

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

NEG Negative / Absent Positive / Present POS **PQL Practical Quantitation Limit**

PRES Presumptive

Quality Control RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: WSP USA Inc. Job ID: 890-2119-1 SDG: 31403236.022.0129 task 21.02 Project/Site: Big Sinks 25

Job ID: 890-2119-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2119-1

Receipt

The samples were received on 3/22/2022 10:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C

GC VOA

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

GC Semi VOA

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

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

Eurofins Carlsbad 3/24/2022

Matrix: Solid

Lab Sample ID: 890-2119-1

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2119-1

 Project/Site: Big Sinks 25
 SDG: 31403236.022.0129 task 21.02

Client Sample ID: BH01

Date Collected: 03/21/22 11:32 Date Received: 03/22/22 10:42

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		03/23/22 07:30	03/23/22 16:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			03/23/22 07:30	03/23/22 16:47	1
1,4-Difluorobenzene (Surr)	109		70 - 130			03/23/22 07:30	03/23/22 16:47	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			03/23/22 18:20	1
Method: 8015 NM - Diesel Range					_			
_			DI	11-:4	_	Duamawad	Amakamad	Dil Faa
Analyte		Qualifier		Unit mg/Kg	<u>D</u>	Prepared	Analyzed 03/24/22 16:08	
Analyte Total TPH	Result	Qualifier		Unit mg/Kg	<u>D</u>	Prepared		
Analyte Total TPH		Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH	Result <49.8 ge Organics (Di	Qualifier U			<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics	Result <49.8 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.8	mg/Kg			03/24/22 16:08	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.8 ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U	49.8	mg/Kg		Prepared	03/24/22 16:08 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D) Result <49.8 49.8	Qualifier U RO) (GC) Qualifier U	49.8 RL 49.8	mg/Kg Unit mg/Kg		Prepared 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D) Result <49.8 49.8	Qualifier U RO) (GC) Qualifier U	49.8 RL 49.8	mg/Kg Unit mg/Kg		Prepared 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ran	Result <49.8	Qualifier U RO) (GC) Qualifier U U	49.8 RL 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/23/22 11:44 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00 03/23/22 12:00	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.8	Qualifier U RO) (GC) Qualifier U U	49.8 RL 49.8 49.8 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/23/22 11:44 03/23/22 11:44 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00 03/23/22 12:00 03/23/22 12:00	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.8	Qualifier U RO) (GC) Qualifier U U	49.8 RL 49.8 49.8 49.8 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/23/22 11:44 03/23/22 11:44 03/23/22 11:44 Prepared	03/24/22 16:08 Analyzed 03/23/22 12:00 03/23/22 12:00 03/23/22 12:00 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.8	Qualifier U RO) (GC) Qualifier U U Qualifier	49.8 49.8 49.8 49.8 49.8 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/23/22 11:44 03/23/22 11:44 03/23/22 11:44 Prepared 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00 03/23/22 12:00 Analyzed 03/23/22 12:00	1 Dil Fac 1 1 1 1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U RO) (GC) Qualifier U U Qualifier	49.8 49.8 49.8 49.8 49.8 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 03/23/22 11:44 03/23/22 11:44 03/23/22 11:44 Prepared 03/23/22 11:44	03/24/22 16:08 Analyzed 03/23/22 12:00 03/23/22 12:00 Analyzed 03/23/22 12:00	Dil Fac Dil Fac Dil Fac Dil Fac Dil Fac

Client Sample ID: BH01A

Date Collected: 03/21/22 11:37 Date Received: 03/22/22 10:42

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/23/22 07:30	03/23/22 17:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 130			03/23/22 07:30	03/23/22 17:08	

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Lab Sample ID: 890-2119-2

Matrix: Solid

3

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I

Matrix: Solid

Lab Sample ID: 890-2119-2

03/23/22 21:04

Client Sample Results

 Client: WSP USA Inc.
 Job ID: 890-2119-1

 Project/Site: Big Sinks 25
 SDG: 31403236.022.0129 task 21.02

Client Sample ID: BH01A

Date Collected: 03/21/22 11:37 Date Received: 03/22/22 10:42

Sample Depth: 1

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130			03/23/22 07:30	03/23/22 17:08	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			03/23/22 18:20	1
Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			03/24/22 16:08	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: 8015B NM - Diesel Ran	ge Organics (DI	RO) (GC)						
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		03/23/22 11:44	03/23/22 13:02	1
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		03/23/22 11:44	03/23/22 13:02	,
C10-C28)				99				
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/23/22 11:44	03/23/22 13:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	92		70 - 130			03/23/22 11:44	03/23/22 13:02	-
o-Terphenyl	103		70 - 130			03/23/22 11:44	03/23/22 13:02	

25.0

mg/Kg

3820

Eurofins Carlsbad

Surrogate Summary

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-12600-A-1-J MS	Matrix Spike	106	103	
880-12600-A-1-K MSD	Matrix Spike Duplicate	106	111	
890-2119-1	BH01	106	109	
890-2119-2	BH01A	104	108	
LCS 880-21854/1-A	Lab Control Sample	102	110	
LCSD 880-21854/2-A	Lab Control Sample Dup	102	109	
MB 880-21854/5-B	Method Blank	103	104	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

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

				Percent Surrogate Recovery (Acceptance Limits
		1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
0-2119-1	BH01	84	94	
-2119-1 MS	BH01	101	107	
-2119-1 MSD	BH01	100	106	
-2119-2	BH01A	92	103	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

OTPH = o-Terphenyl

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

Matrix: Solid Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		1CO2	OTPH2					
Lab Sample ID	Client Sample ID	(70-130)	(70-130)					
LCS 880-22186/2-A	Lab Control Sample	93	101					
LCSD 880-22186/3-A	Lab Control Sample Dup	93	100					
MB 880-22186/1-A	Method Blank	98	114					
Surrogate Legend								
1CO = 1-Chlorooctane								

Eurofins Carlsbad

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-21854/5-B

Matrix: Solid Analysis Batch: 22183 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21854

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/22 07:30	03/23/22 11:59	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/23/22 07:30	03/23/22 11:59	1

мв мв

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03	3/23/22 07:30	03/23/22 11:59	1
1,4-Difluorobenzene (Surr)	104		70 - 130	03	3/23/22 07:30	03/23/22 11:59	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-21854/1-A Matrix: Solid

Analysis Batch: 22183

Prep Type: Total/NA Prep Batch: 21854

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09671		mg/Kg		97	70 - 130	
Toluene	0.100	0.09718		mg/Kg		97	70 - 130	
Ethylbenzene	0.100	0.09994		mg/Kg		100	70 - 130	
m-Xylene & p-Xylene	0.200	0.2047		mg/Kg		102	70 - 130	
o-Xylene	0.100	0.1013		mg/Kg		101	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	102	70 - 130
1,4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: LCSD 880-21854/2-A

Matrix: Solid

Analysis Batch: 22183

Client	Sample	ID: Lab	Control	Sample	Dup

Prep Type: Total/NA

Prep Batch: 21854

	Spike	LCSD	LCSD				%Rec.		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09015		mg/Kg		90	70 - 130	7	35
Toluene	0.100	0.09019		mg/Kg		90	70 - 130	7	35
Ethylbenzene	0.100	0.09346		mg/Kg		93	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1922		mg/Kg		96	70 - 130	6	35
o-Xylene	0.100	0.09452		mg/Kg		95	70 - 130	7	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1.4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 880-12600-A-1-J MS

Matrix: Solid

Analysis Batch: 22183

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

Prep Batch: 21854

	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1 F2	0.100	0.04998	F1	mg/Kg		50	70 - 130	
Toluene	< 0.00199	U F1	0.100	0.05467	F1	mg/Kg		54	70 - 130	

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Prep Batch: 21854

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

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

Client Sample ID: Matrix Spike Lab Sample ID: 880-12600-A-1-J MS Prep Type: Total/NA

Matrix: Solid Analysis Batch: 22183

Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D < 0.00199 U F1 0.100 0.05527 F1 55 70 - 130 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00398 U F1 0.201 0.1120 F1 mg/Kg 56 70 - 130 <0.00199 UF1 0.100 0.05918 F1 59 70 - 130 o-Xylene mg/Kg

MS MS

Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 106 1,4-Difluorobenzene (Surr) 70 - 130 103

Lab Sample ID: 880-12600-A-1-K MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 22183

Prep Batch: 21854 Sample Sample Spike MSD MSD %Rec. Result Qualifier Result Qualifier %Rec RPD babbA Limits Limit Analyte Unit D Benzene <0.00199 U F1 F2 0.101 0.07415 F2 mg/Kg 73 70 - 130 39 35 Toluene <0.00199 U F1 0.101 0.06882 F1 mg/Kg 68 70 - 130 23 35 Ethylbenzene 0.101 0.06557 F1 65 70 - 130 17 35 < 0.00199 U F1 mg/Kg m-Xylene & p-Xylene <0.00398 UF1 0.202 0.1344 F1 mg/Kg 67 70 - 130 18 35 0 101 0.06757 F1 67 70 - 130 o-Xylene <0.00199 U.F.1 mg/Kg 13 35

MSD MSD Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 106 70 - 130 1,4-Difluorobenzene (Surr) 111 70 - 130

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

Matrix: Solid

Analysis Batch: 22176

Lab Sample ID: MB 880-22186/1-A Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 22186 мв мв

Result Qualifier RL Unit D Prepared Dil Fac Analyte Analyzed 03/23/22 08:44 <50.0 U 50.0 03/23/22 10:59 Gasoline Range Organics mg/Kg (GRO)-C6-C10 03/23/22 10:59 Diesel Range Organics (Over <50.0 U 50.0 03/23/22 08:44 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 03/23/22 08:44 03/23/22 10:59 mg/Kg

MB MB

%Recovery Limits Dil Fac Qualifier Prepared Surrogate Analyzed 1-Chlorooctane 98 70 - 130 03/23/22 08:44 03/23/22 10:59 114 70 - 130 03/23/22 08:44 03/23/22 10:59 o-Terphenyl

Lab Sample ID: LCS 880-22186/2-A

Matrix: Solid

Analysis Batch: 22176 Prep Batch: 22186 LCS LCS %Rec. Spike Analyte Added Result Qualifier Unit %Rec Limits 1000 109 1095 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 900.2 mg/Kg 90 70 - 130 C10-C28)

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

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

Lab Sample ID: LCS 880-22186/2-A **Client Sample ID: Lab Control Sample Matrix: Solid**

Prep Type: Total/NA Analysis Batch: 22176 Prep Batch: 22186

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-22186/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 22176 Prep Batch: 22186

Spike LCSD LCSD %Rec. RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics 1000 1155 115 70 - 130 5 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 935.4 mg/Kg 94 20 70 - 130C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 93 70 - 130 1-Chlorooctane 70 - 130 o-Terphenyl 100

Lab Sample ID: 890-2119-1 MS **Client Sample ID: BH01 Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 22176 Prep Batch: 22186 Sample Sample Spike MS MS %Rec.

	•	•	•							
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.8	U	998	876.0		mg/Kg		88	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.8	U	998	820.7		mg/Kg		79	70 - 130	
C10-C28)										

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 101 o-Terphenyl 107 70 - 130

Lab Sample ID: 890-2119-1 MSD Client Sample ID: BH01 **Matrix: Solid**

Analysis Batch: 22176 Prep Batch: 22186

	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	886.4		mg/Kg		89	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	<49.8	U	999	821.1		mg/Kg		79	70 - 130	0	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	106		70 - 130

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Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-22210/1-A

Matrix: Solid

Analysis Batch: 22211

мв мв

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 03/23/22 14:12

Lab Sample ID: LCS 880-22210/2-A

Matrix: Solid

Analysis Batch: 22211

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 268.8 mg/Kg 108 90 - 110

Lab Sample ID: LCSD 880-22210/3-A

Matrix: Solid

Analysis Batch: 22211

LCSD LCSD %Rec. RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 270.3 108 20 mg/Kg 90 - 110

Lab Sample ID: 880-12712-A-1-F MS

Matrix: Solid

Analysis Batch: 22211

MS MS Sample Sample Spike %Rec. Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits 1250 Chloride 1500 2878 110 90 - 110 mg/Kg

Lab Sample ID: 880-12712-A-1-G MSD

Matrix: Solid

Analysis Batch: 22211

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1250 1500 2877 mg/Kg 110 90 - 110 20

QC Association Summary

Job ID: 890-2119-1 Client: WSP USA Inc. Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

GC VOA

Prep Batch: 21854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	5035	
890-2119-2	BH01A	Total/NA	Solid	5035	
MB 880-21854/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-21854/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-21854/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-12600-A-1-J MS	Matrix Spike	Total/NA	Solid	5035	
880-12600-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 22183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	8021B	21854
890-2119-2	BH01A	Total/NA	Solid	8021B	21854
MB 880-21854/5-B	Method Blank	Total/NA	Solid	8021B	21854
LCS 880-21854/1-A	Lab Control Sample	Total/NA	Solid	8021B	21854
LCSD 880-21854/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	21854
880-12600-A-1-J MS	Matrix Spike	Total/NA	Solid	8021B	21854
880-12600-A-1-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	21854

Analysis Batch: 22233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	Total BTEX	
890-2119-2	BH01A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 22176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	8015B NM	22186
890-2119-2	BH01A	Total/NA	Solid	8015B NM	22186
MB 880-22186/1-A	Method Blank	Total/NA	Solid	8015B NM	22186
LCS 880-22186/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	22186
LCSD 880-22186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	22186
890-2119-1 MS	BH01	Total/NA	Solid	8015B NM	22186
890-2119-1 MSD	BH01	Total/NA	Solid	8015B NM	22186

Prep Batch: 22186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	8015NM Prep	
890-2119-2	BH01A	Total/NA	Solid	8015NM Prep	
MB 880-22186/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-22186/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-22186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2119-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-2119-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 22287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Total/NA	Solid	8015 NM	
890-2119-2	BH01A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

HPLC/IC

Leach Batch: 22210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Soluble	Solid	DI Leach	
890-2119-2	BH01A	Soluble	Solid	DI Leach	
MB 880-22210/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-22210/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-22210/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-12712-A-1-F MS	Matrix Spike	Soluble	Solid	DI Leach	
880-12712-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 22211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2119-1	BH01	Soluble	Solid	300.0	22210
890-2119-2	BH01A	Soluble	Solid	300.0	22210
MB 880-22210/1-A	Method Blank	Soluble	Solid	300.0	22210
LCS 880-22210/2-A	Lab Control Sample	Soluble	Solid	300.0	22210
LCSD 880-22210/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	22210
880-12712-A-1-F MS	Matrix Spike	Soluble	Solid	300.0	22210
880-12712-A-1-G MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	22210

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Client Sample ID: BH01

Lab Sample ID: 890-2119-1

Matrix: Solid

Date Collected: 03/21/22 11:32 Date Received: 03/22/22 10:42

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			21854	03/23/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	22183	03/23/22 16:47	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22233	03/23/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22287	03/24/22 16:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22186	03/23/22 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1	22176	03/23/22 12:00	AJ	XEN MID
Soluble	Leach	DI Leach			22210	03/23/22 16:28	SC	XEN MID
Soluble	Analysis	300.0		5	22211	03/23/22 20:55	SC	XEN MID

Client Sample ID: BH01A Lab Sample ID: 890-2119-2 Date Collected: 03/21/22 11:37

Matrix: Solid

Date Received: 03/22/22 10:42

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			21854	03/23/22 07:30	KL	XEN MID
Total/NA	Analysis	8021B		1	22183	03/23/22 17:08	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	22233	03/23/22 18:20	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	22287	03/24/22 16:08	AJ	XEN MID
Total/NA	Prep	8015NM Prep			22186	03/23/22 11:44	DM	XEN MID
Total/NA	Analysis	8015B NM		1	22176	03/23/22 13:02	AJ	XEN MID
Soluble	Leach	DI Leach			22210	03/23/22 16:28	SC	XEN MID
Soluble	Analysis	300.0		5	22211	03/23/22 21:04	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: WSP USA Inc.
 Job ID: 890-2119-1

 Project/Site: Big Sinks 25
 SDG: 31403236.022.0129 task 21.02

e: Big Sinks 25 SDG: 3140323

Laboratory: Eurofins Midland

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

Authority	Pi	rogram	Identification Number	Expiration Date			
Texas	N	ELAP	T104704400-21-22	06-30-22			
The following analytes the agency does not of	•	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo			
the agency does not of	ler ceruncation.						
Analysis Method	Prep Method	Matrix	Analyte				
0 ,		Matrix Solid	Analyte Total TPH				

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1

Method Summary

Client: WSP USA Inc. Job ID: 890-2119-1 Project/Site: Big Sinks 25 SDG: 31403236.022.0129 task 21.02

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
3015NM Prep	Microextraction	SW846	XEN MID
OI Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc. Project/Site: Big Sinks 25 Job ID: 890-2119-1

SDG: 31403236.022.0129 task 21.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2119-1	BH01	Solid	03/21/22 11:32	03/22/22 10:42	0.5
890-2119-2	BH01A	Solid	03/21/22 11:37	03/22/22 10:42	1

Reportir	Carlsbad, NM 88220	City, State ZIP: Carlsbad, NM 88220	City State ZIP: Midland Texas 79705	City State ZIP:
State	3104 E Greene ST	Address:	3300 North A Street Building 1, unit 222	Address:
Progran	XTO Energy INC	Company Name: XTO Energy INC		Company Name: WSP USA
	Adrian Baker	Bill to: (if different) Adrian Baker		Project Manager: Kalei Jennings
320-2000)	Hobbs,NM (575-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	7550) Phoenix,AZ (480		1
	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296	,TX (432-704-5440) EL		LA
	Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334	TX (281) 240-4200 Dall	KIZIIII	

Phone:

Big Sinks 25 817-683-2503

31403236.022.0129 Task 21.02

Rush: 2

Routine

Turn Around

ANALYSIS REQUEST

Work Order Notes

Sampler's Name: P.O. Number: Project Number: Project Name:

C	Chain of Custody	Work Order No:			
louston,TX (281) 240-4200 Da	louston,TX (281) 240-4200 Dallas,TX (214) 902-0300 San Antonio,TX (210) 509-3334			-	
Midland,TX (432-704-5440) E	Midland,TX (432-704-5440) EL Paso,TX (915)585-3443 Lubbock,TX (806)794-1296				
75-392-7550) Phoenix,AZ (48	75-392-7550) Phoenix,AZ (480-355-0900) Atlanta,GA (770-449-8800) Tampa,FL (813-620-2000)	320-2000) <u>www.xenco.com</u> ² age1of1_	Page	1 요	-
Bill to: (if different)	Adrian Baker	Work Order Comments	mments		
Company Name: XTO Energy INC	XTO Energy INC	Program: UST/PST ☐RP ☐rownfields ☐RC ⑤☐perfund ☐	lds ∏C ¶	perfund	
Address:	3104 € Greene ST	State of Project:			
City, State ZIP:	Carlsbad, NM 88220	Reporting:Level II	4	r[hei i∧ [Ш
Email: Kalei.jennings@wsp.com	vsp.com	Deliverables: EDD ADaPT	ADaPT Other:		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subconfractors, it assigns standard refinations of service. Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenco. A minimum charge of \$75,00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Relinquished by: (Signature) Regeived by: (Signature) Date/Time Relinquished by: /Signature) Received	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed								BH01A	BH01	Sample Identification	Sample Custody Seals: Yes No	Cooler Custody Seals: Yes No	Received Intact:	Temperature (°C):	SAMPLE RECEIPT Te	Sampler's Name: Payton Benner
uishment of pst of sample applied to e	6020:) to be an								S	S	Matrix	O (N/A)	· NA	No	10.4	Temp Blank:	
samples constitutes and shall not a sach project and a Regeived to	8R nalyzed								03/21/22	03/21/22	Date Sampled	Tota	Corre	7	I.	Yes No	
mples constitutes a valid purcha and shall not assume any responsh project and a charge of \$5 for Regeived by: (Signature	CRA 13PP TCLP/SPL								11:37	11:32	Time Sampled	Total Containers:	Correction Factor:	ECO-WA	Thermometer ID	Wet Ice:	Due Date:
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ot analyz	Be B								×	×	Chlorid	e (E	PA 3	00.0))		
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Client if such losses These terms will be Reimauished by	Ca Cr r Co Cr																
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	Ou Fe												890				
Signature	Mo Z												-2119				
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2)	7470								DISCRETE	DISCRETE	Sample Comments	lab, if received by 4:30pm	he day				
Date/Time	Zn / 747								ETE.	ETE	mmei	by 4:30	recevie				
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△ Yes △ No	ole Intact	Relinquished by:	- W	N	Empty Kit Relinquished by	Deliverable Requested I, II, III IV Other (specify)	Possible Hazard Identification Unconfirmed	Note: Since aboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody if the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central, LLC.						BH01A (890-2119-2)	BH01 (890-2119-1)		Sample Identification - Client ID (Lab ID)	Sie	Project Name: Big Sinks 25	Email	Phone: 432-704-5440(Tel)	State, Ztp: TX, 79701	City Midland	Address 1211 W Florida Ave,	Company Eurofins Environment Testing South Centr	Client Contact Shipping/Receiving	Client Information (Sub Contract Lab)	1089 N Canal St. Carlsbad, NM 88220 Phone: 575-988-3199 Fax 575-988-3199	Eurofins Carlsbad
	Cata IIIIo.	Date/Time:	Date/Time:	Date/Time ⁻		Primary Deliverable Rank		nt Testing South Cen cove for analysis/test entral LLC attention i						3/21/22	3/21/22	X	Sample Date	SSOW#:	Project #: 89000004	WO#	PO #		TAT Requested (days)	Due Date Requested 3/23/2022		Phone.	Sampler		
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Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2304-1

Laboratory Sample Delivery Group: 03e1558033

Client Project/Site: Big Sinks 25 CTB

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 5/18/2022 12:28:13 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: Big Sinks 25 CTB
Laboratory Job ID: 890-2304-1
SDG: 03e1558033

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Definitions/Glossary

Job ID: 890-2304-1 Client: Ensolum Project/Site: Big Sinks 25 CTB

SDG: 03e1558033

Qualifiers

GC VOA Qualifier

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

GC Semi VOA

Qualifier **Qualifier Description**

*1 LCS/LCSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

DFR 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL 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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB SDG: 03e1558033

Job ID: 890-2304-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2304-1

Receipt

The sample was received on 5/12/2022 11:01 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-25638 and analytical batch 880-25671 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-25531 and analytical batch 880-25492 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-25540 and analytical batch 880-25678 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Matrix: Solid

Lab Sample ID: 890-2304-1

Client Sample Results

Client: Ensolum Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB SDG: 03e1558033

Client Sample ID: SS04

Date Collected: 05/11/22 13:25 Date Received: 05/12/22 11:01

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 14:59	-
Toluene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 14:59	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 14:59	
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/16/22 13:46	05/17/22 14:59	
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 14:59	
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/16/22 13:46	05/17/22 14:59	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	107		70 - 130			05/16/22 13:46	05/17/22 14:59	
1,4-Difluorobenzene (Surr)	99		70 - 130			05/16/22 13:46	05/17/22 14:59	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00401	U	0.00401	mg/Kg			05/17/22 17:09	
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	- Kesuit <49.9		49.9			Frepareu	05/16/22 12:00	Dil Fa
IOIAI IFFI	\49.9	U	49.9	mg/Kg			03/10/22 12.00	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		05/13/22 11:17	05/14/22 02:38	•
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/13/22 11:17	05/14/22 02:38	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/13/22 11:17	05/14/22 02:38	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	106		70 - 130			05/13/22 11:17	05/14/22 02:38	
o-Terphenyl	113		70 - 130			05/13/22 11:17	05/14/22 02:38	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro Analyte	0 . ,	Soluble Qualifier	RL	Unit mg/Kg	D	Prepared	Analyzed 05/17/22 16:27	Dil Fac

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2304-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03e1558033

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

Surrogate Recovery (Acceptance Limits)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-14735-A-3-C MS	Matrix Spike	86	83	
880-14735-A-3-D MSD	Matrix Spike Duplicate	83	80	
890-2304-1	SS04	106	113	
LCS 880-25531/2-A	Lab Control Sample	108	108	
LCSD 880-25531/3-A	Lab Control Sample Dup	105	108	
MB 880-25531/1-A	Method Blank	102	108	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Job ID: 890-2304-1 Client: Ensolum Project/Site: Big Sinks 25 CTB SDG: 03e1558033

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25638/5-A

Lab Sample ID: LCS 880-25638/1-A

Matrix: Solid

Analysis Batch: 25671

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25638

		MB	MB						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
	Toluene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
	Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
	m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
	o-Xylene	<0.00200	U	0.00200	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
	Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/16/22 13:46	05/17/22 12:34	1
ı									

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/16/22 13:46	05/17/22 12:34	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/16/22 13:46	05/17/22 12:34	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25638

Prep Type: Total/NA

Prep Batch: 25638

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits mg/Kg Benzene 0.100 0.1010 101 70 - 130 Toluene 0.100 0.1123 mg/Kg 112 70 - 130 0.100 Ethylbenzene 0.1158 mg/Kg 116 70 - 130 70 - 130 0.200 m-Xylene & p-Xylene 0.2346 mg/Kg 117 0.100 0.1168 70 - 130 o-Xylene mg/Kg 117

LCS LCS

Surrogate	%Recovery Qualif	ier Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: LCSD 880-25638/2-A Client Sample ID: Lab Control Sample Dup

Analysis Batch: 25671

Matrix: Solid

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.09697 mg/Kg 97 70 - 130 35 Toluene 0.100 0.1065 mg/Kg 106 70 - 130 5 35 Ethylbenzene 0.100 0.1108 mg/Kg 111 70 - 130 35 0.200 m-Xylene & p-Xylene 0.2249 mg/Kg 112 70 - 130 35 0.100 0.1119 o-Xylene mg/Kg 112 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1.4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-2303-A-1-E MS

Matrix: Solid

Analysis Batch: 25671

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

Prep Batch: 25638

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F2 F1	0.101	0.06816	F1	mg/Kg		67	70 - 130	
Toluene	<0.00201	U F2 F1	0.101	0.07512		mg/Kg		74	70 - 130	

Eurofins Carlsbad

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QC Sample Results

Job ID: 890-2304-1 Client: Ensolum Project/Site: Big Sinks 25 CTB SDG: 03e1558033

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

Lab Sample ID: 890-2303-A-1-E MS

Lab Sample ID: 890-2303-A-1-F MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 25671

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 25638

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F2 F1	0.101	0.07397		mg/Kg		73	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.202	0.1496		mg/Kg		74	70 - 130	
o-Xylene	<0.00201	U F2 F1	0.101	0.07506		mg/Kg		74	70 - 130	

MS MS

Surrogate	%Recovery C	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 25638

Analysis Batch: 25671 Sample Sample Spike MSD MSD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00201 U F2 F1 0.07943 mg/Kg 79 70 - 130 15 35 Toluene 0.08921 <0.00201 U F2 F1 0.100 mg/Kg 89 70 - 130 17 35 Ethylbenzene <0.00201 UF2F1 0.100 0.09057 mg/Kg 90 70 - 130 20 35 0.200 0.1847 70 - 130 21 35 m-Xylene & p-Xylene <0.00402 U F2 F1 mg/Kg 92 <0.00201 U F2 F1 0.100 0.09235 92 70 - 130 21 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

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

Lab Sample ID: MB 880-25531/1-A

Matrix: Solid

Analysis Batch: 25492

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25531

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/13/22 11:17	05/13/22 21:34	1
o-Terphenyl	108		70 - 130	05/13/22 11:17	05/13/22 21:34	1

Lab Sample ID: LCS 880-25531/2-A

Matrix: Solid

Analysis Batch: 25492

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25531

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	883.9		mg/Kg		88	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1071		mg/Kg		107	70 - 130	
C10-C28)								

C10-C28)

o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB SDG: 03e1558033

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

Lab Sample ID: LCS 880-25531/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25492 Prep Batch: 25531

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

Lab Sample ID: LCSD 880-25531/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25492 Prep Batch: 25531

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1141 *1 114 70 - 13025 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 108 1077 mg/Kg 70 - 13020

LCSD LCSD Surrogate %Recovery Qualifier Limits 105 70 - 130 1-Chlorooctane 108 70 - 130 o-Terphenyl

Lab Sample ID: 880-14735-A-3-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 25492 Prep Batch: 25531 Sample Sample MS MS Spike

Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 1000 817.2 mg/Kg 80 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 945.2 mg/Kg 95 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86

83

Lab Sample ID: 880-14735-A-3-D MSD Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25492 Prep Batch: 25531

MSD MSD RPD Sample Sample Spike %Rec

									,		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U *1	998	812.7		mg/Kg		80	70 - 130	1	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	998	917.5		mg/Kg		92	70 - 130	3	20
C10-C28)											

MSD MSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 83 70 - 130 80 70 - 130 o-Terphenyl

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

 Client: Ensolum
 Job ID: 890-2304-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03e1558033

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25540/1-A

Matrix: Solid

Analysis Batch: 25678

мв мв

 Analyte
 Result Chloride
 Qualifier
 RL Vinit
 Unit Mg/Kg
 Prepared Dil Fac Dil

Lab Sample ID: LCS 880-25540/2-A

Matrix: Solid

Analysis Batch: 25678

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 256.0 mg/Kg 102 90 - 110

Lab Sample ID: LCSD 880-25540/3-A

Matrix: Solid

Analysis Batch: 25678

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 273.7 mg/Kg 109 90 - 110

Lab Sample ID: 890-2302-A-5-C MS

Matrix: Solid

Analysis Batch: 25678

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 71.2 F1 248 357.6 F1 116 90 - 110 mg/Kg

Lab Sample ID: 890-2302-A-5-D MSD

Matrix: Solid

Analysis Batch: 25678

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 71.2 F1 248 305.5 mg/Kg 95 90 - 110 16 20

Eurofins Carlsbad

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2304-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03e1558033

GC VOA

Prep Batch: 25638

Lab Sample ID 890-2304-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 5035	Prep Batch
MB 880-25638/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Total/NA	Solid	8021B	25638
MB 880-25638/5-A	Method Blank	Total/NA	Solid	8021B	25638
LCS 880-25638/1-A	Lab Control Sample	Total/NA	Solid	8021B	25638
LCSD 880-25638/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25638
890-2303-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	25638
890-2303-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25638

Analysis Batch: 25765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Total/NA	Solid	8015B NM	25531
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015B NM	25531
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25531
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25531
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25531
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25531

Prep Batch: 25531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Soluble	Solid	DI Leach	
MB 880-25540/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25540/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25540/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB

SDG: 03e1558033

HPLC/IC (Continued)

Leach Batch: 25540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2302-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2302-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 25678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2304-1	SS04	Soluble	Solid	300.0	25540
MB 880-25540/1-A	Method Blank	Soluble	Solid	300.0	25540
LCS 880-25540/2-A	Lab Control Sample	Soluble	Solid	300.0	25540
LCSD 880-25540/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25540
890-2302-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	25540
890-2302-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25540

Date Received: 05/12/22 11:01

Lab Chronicle

Client: Ensolum Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB SDG: 03e1558033

Client Sample ID: SS04 Lab Sample ID: 890-2304-1 Date Collected: 05/11/22 13:25

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	25638	05/16/22 13:46	MR	XEN MID
Total/NA	Analysis	8021B		1			25671	05/17/22 14:59	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25765	05/17/22 17:09	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25629	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 02:38	SM	XEN MID
Soluble	Leach	DI Leach			4.95 g	50 mL	25540	05/13/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			25678	05/17/22 16:27	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2304-1 Project/Site: Big Sinks 25 CTB

SDG: 03e1558033

Laboratory: Eurofins Midland

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

Authority Texas		rogram	Identification Number	Expiration Date
		ELAP	T104704400-21-22	06-30-22
The following analytes	are included in this report, bu	ut the laboratory is not certifi	ed by the governing authority. This list ma	v include analytes fo
the agency does not of	fer certification.	,	, 3 3 ,	.,
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	,
0 ,		Matrix Solid	, , ,	

Method Summary

 Client: Ensolum
 Job ID: 890-2304-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03e1558033

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: Big Sinks 25 CTB

Job ID: 890-2304-1

SDG: 03e1558033

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2304-1	SS04	Solid	05/11/22 13:25	05/12/22 11:01	0.5

Work Order No:

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334

Environment Testing

eurofins ...

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

Chain of Custody

Level IV

Superfund

Revised Date: 08/25/2020 Rev. 2020.

DI Water: H₂O NAPP213633253 MeOH: Me HNO 3: HN NaOH: Na NaOH+Ascorbic Acid: SAPC Sample Comments Preservative Codes Date/Time Incident #: C: 105101 Zn Acetate+NaOH: Zn Reporting: Level II | Level III | PST/UST | TRRP UST/PST | PRP | Brownfields | RRC | Na 25 203: Na SO 3 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Tl Sn U V Zn Other NAHSO .: NABIS Hg: 1631 / 245.1 / 7470 / 7471 H3PO 4: HP None: NO 4250 4: H2 Page Cool: Cool HCL: HC Work Order Comments ADaPT Received by: (Signature) www.xenco.com EDD 101 State of Project: Deliverables: nalyzed. These terms will be enforced unless previously negotiated. TCLP/SPLP6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U deubcontractors. It assigns standard terms and conditions Program: if such losses are due to circumstances beyond the control 890-2304 Chain of Custody 10 00 00 M ANALYSIS REQUEST Relinquished by: (Signature) Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Kiennylf ensolan. Con 2 votice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenço, its affiliates a for service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses ingine to supply the form of the fo 9 dain 12/200 Date/Time 2 Q # of Cont Pres. Code Parameters Bill to: (if different) Company Name: Comp Grab/ City, State ZIP: 10 S 100-W-TAT starts the day received by the lab, if received by 4:30pm 5.0 8 Address: Rush Yes Depth 0,5 Turn Around Received by: (Algorature) Email: Routine 1225 Due Date: Wet Ice: Sampled Temperature Reading: Tlme Correction Factor: Thermometer ID: 5/1/22 Yes (No Date Sampled Kaler Jennings Circle Method(s) and Metal(s) to be analyzed 3 Packer Bu 124 25 Matrix 50 Xenco Temp Blank: Ensolan 200.8 / 6020: Yes No A Yes No N S Les S 4950 Relinguished by: (Signaxure) Sample Identification Samples Received Intact: Total 200.7 / 6010 Sample Custody Seals: Cooler Custody Seals: SAMPLE RECEIPT hus 5504 ampler's Name: Total Containers: roject Manager: Company Name: Project Number Project Location: City, State ZIP: Project Name: Address:

Od

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2304-1 SDG Number: 03e1558033

Login Number: 2304 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2304-1

SDG Number: 03e1558033

Login Number: 2304 **List Source: Eurofins Midland** List Number: 2

List Creation: 05/13/22 10:37 AM

Creator: Rodriguez, Leticia

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

Eurofins Carlsbad

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2305-1

Laboratory Sample Delivery Group: 03E1558033

Client Project/Site: Big Sinks 25 CTB

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 5/19/2022 10:38:05 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: Big Sinks 25 CTB
Laboratory Job ID: 890-2305-1
SDG: 03E1558033

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Definitions/Glossary

Job ID: 890-2305-1 Client: Ensolum Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Description	Qualifier	Qualifier Description
-----------------------	-----------	-----------------------

LCS/LCSD RPD exceeds control limits.

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
ADDIEVIALIOII	These commonly	useu abbi eviations ma	y Oi iiia)	, HOLDE	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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number Method Quantitation Limit MQL

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)

Reporting Limit or Requested Limit (Radiochemistry) RL

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: Big Sinks 25 CTB

Job ID: 890-2305-1

SDG: 03E1558033

Job ID: 890-2305-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2305-1

Receipt

The sample was received on 5/12/2022 11:01 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-25531 and analytical batch 880-25492 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-25540 and analytical batch 880-25678 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum Job ID: 890-2305-1 Project/Site: Big Sinks 25 CTB SDG: 03E1558033

Client Sample ID: SS01 Lab Sample ID: 890-2305-1 Date Collected: 05/11/22 13:40

Matrix: Solid

Date Received: 05/12/22 11:01 Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
Kylenes, Total	<0.00399	U	0.00399	mg/Kg		05/18/22 12:00	05/18/22 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			05/18/22 12:00	05/18/22 17:57	1
1,4-Difluorobenzene (Surr)	94		70 - 130			05/18/22 12:00	05/18/22 17:57	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			05/19/22 11:21	1
Method: 8015 NM - Diesel Range ^{Analyte}	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			05/16/22 12:00	1
			50.0	mg/Kg			05/16/22 12:00	1
Method: 8015B NM - Diesel Ranç	ge Organics (D		50.0	mg/Kg Unit	D	Prepared	05/16/22 12:00 Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 05/13/22 11:17		1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier U*1	RL	Unit	<u>D</u>		Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D Result <50.0	RO) (GC) Qualifier U *1	RL 50.0	Unit mg/Kg	<u>D</u>	05/13/22 11:17	Analyzed 05/14/22 03:21	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (D Result <50.0	RO) (GC) Qualifier U *1 U	RL 50.0	Unit mg/Kg mg/Kg	<u>D</u>	05/13/22 11:17 05/13/22 11:17	Analyzed 05/14/22 03:21 05/14/22 03:21	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	ge Organics (D Result <50.0 <50.0	RO) (GC) Qualifier U *1 U	RL 50.0 50.0 50.0	Unit mg/Kg mg/Kg	<u>D</u>	05/13/22 11:17 05/13/22 11:17 05/13/22 11:17	Analyzed 05/14/22 03:21 05/14/22 03:21 05/14/22 03:21	1 Dil Fac 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U *1 U	FL 50.0 50.0 50.0 Limits	Unit mg/Kg mg/Kg	<u>D</u>	05/13/22 11:17 05/13/22 11:17 05/13/22 11:17 <i>Prepared</i>	Analyzed 05/14/22 03:21 05/14/22 03:21 05/14/22 03:21 Analyzed	Dil Fac 1 1 Dil Fac Dil Fac
Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	ge Organics (D Result <50.0 <50.0 <50.0 <80.0 %Recovery 96 101	RO) (GC) Qualifier U*1 U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	05/13/22 11:17 05/13/22 11:17 05/13/22 11:17 Prepared 05/13/22 11:17	Analyzed 05/14/22 03:21 05/14/22 03:21 05/14/22 03:21 Analyzed 05/14/22 03:21	Dil Fac 1 1 Dil Fac Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D Result <50.0 <50.0 <50.0 **Recovery 96 101 comatography -	RO) (GC) Qualifier U*1 U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	Unit mg/Kg mg/Kg	<u>D</u>	05/13/22 11:17 05/13/22 11:17 05/13/22 11:17 Prepared 05/13/22 11:17	Analyzed 05/14/22 03:21 05/14/22 03:21 05/14/22 03:21 Analyzed 05/14/22 03:21	Dil Fac 1 1 Dil Fac Dil Fac

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2305-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2305-1	SS01	106	94	
890-2306-A-1-D MS	Matrix Spike	101	98	
890-2306-A-1-E MSD	Matrix Spike Duplicate	102	95	
LCS 880-25749/1-A	Lab Control Sample	101	98	
LCSD 880-25749/2-A	Lab Control Sample Dup	97	97	
MB 880-25749/5-A	Method Blank	97	98	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14735-A-3-C MS	Matrix Spike	86	83
880-14735-A-3-D MSD	Matrix Spike Duplicate	83	80
890-2305-1	SS01	96	101
LCS 880-25531/2-A	Lab Control Sample	108	108
LCSD 880-25531/3-A	Lab Control Sample Dup	105	108
MB 880-25531/1-A	Method Blank	102	108

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum Job ID: 890-2305-1 SDG: 03E1558033 Project/Site: Big Sinks 25 CTB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25749/5-A

Matrix: Solid Analysis Batch: 25806 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25749

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/17/22 14:18	05/18/22 13:06	1

MB MB

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	05/17/22 14:18	05/18/22 13:06	1
1,4-Difluorobenzene (Surr)	98	70 - 130	05/17/22 14:18	05/18/22 13:06	1

Lab Sample ID: LCS 880-25749/1-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25749

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09743		mg/Kg		97	70 - 130	
Toluene	0.100	0.09874		mg/Kg		99	70 - 130	
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.09655		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: LCSD 880-25749/2-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25749

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08840		mg/Kg		88	70 - 130	10	35
Toluene	0.100	0.08787		mg/Kg		88	70 - 130	12	35
Ethylbenzene	0.100	0.1000		mg/Kg		100	70 - 130	13	35
m-Xylene & p-Xylene	0.200	0.1796		mg/Kg		90	70 - 130	13	35
o-Xylene	0.100	0.08469		mg/Kg		85	70 - 130	13	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	97	70 - 130

Lab Sample ID: 890-2306-A-1-D MS

Matrix: Solid

Analysis Batch: 25806

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

Prep Batch: 25749

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.100	0.09042		mg/Kg		90	70 - 130	
Toluene	< 0.00199	U	0.100	0.08913		mg/Kg		88	70 - 130	

Prep Batch: 25749

Prep Type: Total/NA

Prep Batch: 25531

QC Sample Results

Client: Ensolum Job ID: 890-2305-1 SDG: 03E1558033 Project/Site: Big Sinks 25 CTB

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

Lab Sample ID: 890-2306-A-1-D MS Client Sample ID: Matrix Spike **Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 25806

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.100	0.1015		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1822		mg/Kg		91	70 - 130	
o-Xylene	<0.00199	U	0.100	0.08657		mg/Kg		86	70 - 130	

MS MS

Surrogate	%Recovery Quali	ifier Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-2306-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**

Matrix: Solid

Analysis Batch: 25806									Prep Batch: 25749		
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.09636		mg/Kg		96	70 - 130	6	35
Toluene	<0.00199	U	0.100	0.09963		mg/Kg		99	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.100	0.1164		mg/Kg		116	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2064		mg/Kg		103	70 - 130	12	35
o-Xvlene	< 0.00199	U	0.100	0.09745		ma/Ka		97	70 - 130	12	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-25531/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25492

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/13/22 11:17	05/13/22 21:34	1
o-Terphenyl	108		70 - 130	05/13/22 11:17	05/13/22 21:34	1

Lab Sample ID: LCS 880-25531/2-A

Matrix: Solid

Analysis Batch: 25492							Prep E	atch: 25531
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	883.9		mg/Kg		88	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1071		mg/Kg		107	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Job ID: 890-2305-1

Client: Ensolum Project/Site: Big Sinks 25 CTB SDG: 03E1558033

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

Lab Sample ID: LCS 880-25531/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 25492

Prep Type: Total/NA Prep Batch: 25531

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

Lab Sample ID: LCSD 880-25531/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 25492

Prep Type: Total/NA

Prep Batch: 25531 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit

1000 1141 *1 114 70 - 13025 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 108 1077 mg/Kg 70 - 13020

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 105 70 - 130 1-Chlorooctane 108 70 - 130 o-Terphenyl

Lab Sample ID: 880-14735-A-3-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 25492 Prep Batch: 25531 Sample Sample MS MS Spike

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 1000 817.2 mg/Kg 80 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 945.2 mg/Kg 95 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86 o-Terphenyl 83 70 - 130

Lab Sample ID: 880-14735-A-3-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 25492

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U *1 998 812.7 80 Gasoline Range Organics <50.0 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 917.5 mg/Kg 92 70 - 130 3 20

C10-C28)

	MSD MSD	
Surrogate	%Recovery Qualific	er Limits
1-Chlorooctane	83	70 - 130
o-Terphenyl	80	70 - 130

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Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 25531

Client Sample ID: Method Blank

QC Sample Results

 Client: Ensolum
 Job ID: 890-2305-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25540/1-A

Matrix: Solid

Analysis Batch: 25678

Prep Type: Soluble

mg/Kg

102

90 - 110

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed
 Dil Fac

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 05/17/22 13:27
 1

Lab Sample ID: LCS 880-25540/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 25678

Spike LCS LCS %Rec
Analyte Added Result Qualifier Unit D %Rec Limits

250

MB MB

Lab Sample ID: LCSD 880-25540/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

256.0

Analysis Batch: 25678

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 273.7 mg/Kg 109 90 - 110

Lab Sample ID: 890-2302-A-5-C MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Soluble

Matrix: Solid

Chloride

Analysis Batch: 25678

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier %Rec Unit Limits Chloride 71.2 F1 248 357.6 F1 116 90 - 110 mg/Kg

Lab Sample ID: 890-2302-A-5-D MSD

Matrix: Solid

Analysis Batch: 25678

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 71.2 F1 248 305.5 mg/Kg 95 90 - 110 16 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-2305-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

GC VOA

Prep Batch: 25749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	5035	
MB 880-25749/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2306-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2306-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	8021B	25749
MB 880-25749/5-A	Method Blank	Total/NA	Solid	8021B	25749
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	8021B	25749
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25749
890-2306-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	25749
890-2306-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25749

Analysis Batch: 25885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	8015B NM	25531
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015B NM	25531
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25531
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25531
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25531
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25531

Prep Batch: 25531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Soluble	Solid	DI Leach	
MB 880-25540/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25540/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25540/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2305-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

HPLC/IC (Continued)

Leach Batch: 25540 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2302-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2302-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 25678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2305-1	SS01	Soluble	Solid	300.0	25540
MB 880-25540/1-A	Method Blank	Soluble	Solid	300.0	25540
LCS 880-25540/2-A	Lab Control Sample	Soluble	Solid	300.0	25540
LCSD 880-25540/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25540
890-2302-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	25540
890-2302-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25540

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-2305-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

Client Sample ID: SS01 Lab Sample ID: 890-2305-1

Matrix: Solid

Date Collected: 05/11/22 13:40
Date Received: 05/12/22 11:01

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	25749	05/18/22 12:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25806	05/18/22 17:57	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25885	05/19/22 11:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25630	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 03:21	SM	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	25540	05/13/22 12:13	SC	XEN MID
Soluble	Analysis	300.0		1			25678	05/17/22 16:34	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2305-1 Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date 06-30-22	
		ELAP	T104704400-21-22		
The following analytes	are included in this report, but	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for	
the agency does not of			od by the governing addressity. This list his	ly molade analytes for	
the agency does not of Analysis Method		Matrix	Analyte	y moidde driaiytes for	
0 ,	fer certification.	•	, , ,		

Project/Site: Big Sinks 25 CTB

Method Summary

Client: Ensolum

Job ID: 890-2305-1

SDG: 03E1558033

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: Big Sinks 25 CTB

Job ID: 890-2305-1

SDG: 03E1558033

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2305-1	SS01	Solid	05/11/22 13:40	05/12/22 11:01	0.5

Superfund

DI Water: H₂O

HNO₃: HN NaOH: Na MeOH: Me

Revised Date: 08/25/2020 Rev. 2020.

Date/Time

Received by: (Signature)

not analyzed. These terms will be enforced unless previously negotiated

submitted to

Relinquished by: (Signature)

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ates and subcontractors. It assigns standard terms and conditions

client if such losses are due to circumstances beyond the control

totice. Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eupofins Xenco, its affiling the samples and shall not assume any responsibility for any losses or expense, incerpred to

Circle Method(s) and Metal(s) to be analyzed

Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample

Received by: (Signapure)

Relinquished by: (Signature)

5.10-22 1101

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185502531390AN Reporting: Level II | Level III | PST/UST | TRRP | Level IV | Incident #: NaOH+Ascorbic Acid: SAPC Sample Comments Preservative Codes 40:10/10/100 Zn Acetate+NaOH: Zn RRC Na 2 S 2 O 3: Na SO 3 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Tl Sn U V Zn Other: VaHSO 4: NABIS Hg: 1631 / 245.1 / 7470 / 747 H 3PO 4: HP UST/PST | PRP | Brownfields | H2SO4: H2 None: NO Cool: Cool HCL: HC Work Order Comments ADaPT www.xenco.com Work Order No: EDD State of Project: Deliverables: TCLP/SPLP6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 890-2305 Chain of Custody ANALYSIS REQUEST Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Kiennings & ensolum.com Chain of Custody R Adrich R # of Cont Pres. Code Parameters Bill to: (if different) Company Name: Comp Grab/ 5 38 City, State ZIP: 9 TAT starts the day received by the lab, if received by 4:30pm NIMPOO 0.0 Yes (No Rush Address: Depth **Turn Around** 0,0 Email: Routine 1340 Due Date: Corrected Temperature: Wet Ice: Sampled Temperature Reading: Пme **Environment Testing** Correction Factor: Thermometer ID: 127 Yes to Jehnings Date Sampled Big Sinky 25 CTB Parleer 0361658033 Matrix Xenco Yes No NA Temp Blank: 200.8 / 6020: Yes No (N/ Ensolyn (Yes) No 19/e/ 15450 eurofins 🗞 Sample Identification Samples Received Intact: Total 200.7 / 6010 Sample Custody Seals: Cooler Custody Seals: SAMPLE RECEIPT roject Number: **Fotal Containers:** Project Manager: sampler's Name: Company Name: Project Location 550

City, State ZIP:

Phone:

Address:

Project Name:

PO #:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2305-1 SDG Number: 03E1558033

List Number: 1 Creator: Clifton, Cloe

Login Number: 2305 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.	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	

5/19/2022

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2305-1 SDG Number: 03E1558033

Login Number: 2305
List Source: Eurofins Midland
List Number: 2
List Creation: 05/13/22 10:37 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2306-1

Laboratory Sample Delivery Group: 03E1558033

Client Project/Site: Big Sinks 25 CTB

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 5/19/2022 10:38:34 AM

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

Client: Ensolum

Project/Site: Big Sinks 25 CTB

Laboratory Job ID: 890-2306-1

SDG: 03E1558033

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Definitions/Glossary

Job ID: 890-2306-1 Client: Ensolum Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

LCS/LCSD RPD exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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 MLMinimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

Not Calculated NC

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)

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

Toxicity Equivalent Factor (Dioxin) TEF TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: Big Sinks 25 CTB

Job ID: 890-2306-1

SDG: 03E1558033

Job ID: 890-2306-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2306-1

Receipt

The sample was received on 5/12/2022 11:01 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-25531 and analytical batch 880-25492 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2306-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-2306-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

Client Sample ID: SS02

Date Collected: 05/11/22 12:55 Date Received: 05/12/22 11:01

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		05/17/22 14:18	05/18/22 13:36	
Toluene	<0.00199	U	0.00199	mg/Kg		05/17/22 14:18	05/18/22 13:36	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		05/17/22 14:18	05/18/22 13:36	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/17/22 14:18	05/18/22 13:36	
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/17/22 14:18	05/18/22 13:36	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/17/22 14:18	05/18/22 13:36	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	104		70 - 130			05/17/22 14:18	05/18/22 13:36	
1,4-Difluorobenzene (Surr)	101		70 - 130			05/17/22 14:18	05/18/22 13:36	
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/19/22 11:21	
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 49.8	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 05/16/22 12:00	Dil Fa
10tal 1PH - -	<49.8	U	49.8	mg/Kg			05/16/22 12:00	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		05/13/22 11:17	05/14/22 03:43	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/13/22 11:17	05/14/22 03:43	•
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/13/22 11:17	05/14/22 03:43	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	97		70 - 130			05/13/22 11:17	05/14/22 03:43	
o-Terphenyl	102		70 - 130			05/13/22 11:17	05/14/22 03:43	
Madhada 000 o Antana Isra Obra	omatography	Soluble						
Method: 300.0 - Anions, ion Chro	Jilialograpily -	Colubic						
Method: 300.0 - Anions, Ion Chro Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2306-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate R
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2306-1	SS02	104	101	
890-2306-1 MS	SS02	101	98	
890-2306-1 MSD	SS02	102	95	
LCS 880-25749/1-A	Lab Control Sample	101	98	
LCSD 880-25749/2-A	Lab Control Sample Dup	97	97	
MB 880-25749/5-A	Method Blank	97	98	
Surrogate Legend				
BFB = 4-Bromofluorobenze	ene (Surr)			
DFBZ = 1,4-Difluorobenzer	ne (Surr)			

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

Matrix: Solid Prep Type: Total/NA

		1001	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-14735-A-3-C MS	Matrix Spike	86	83
880-14735-A-3-D MSD	Matrix Spike Duplicate	83	80
890-2306-1	SS02	97	102
LCS 880-25531/2-A	Lab Control Sample	108	108
LCSD 880-25531/3-A	Lab Control Sample Dup	105	108
MB 880-25531/1-A	Method Blank	102	108

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-2306-1 Project/Site: Big Sinks 25 CTB SDG: 03E1558033

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25749/5-A

Analysis Batch: 25806

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25749

	MB	мв						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/17/22 14:18	05/18/22 13:06	1

MB MB

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	05/17/22 14:18	05/18/22 13:06	1
1,4-Difluorobenzene (Surr)	98	70 - 130	05/17/22 14:18	05/18/22 13:06	1

Lab Sample ID: LCS 880-25749/1-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25749

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09743		mg/Kg		97	70 - 130	
Toluene	0.100	0.09874		mg/Kg		99	70 - 130	
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.09655		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-25749/2-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 25749

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.08840 mg/Kg 88 70 - 130 10 35 Toluene 0.100 0.08787 mg/Kg 88 70 - 130 12 35 Ethylbenzene 0.100 0.1000 mg/Kg 100 70 - 130 13 35 0.200 m-Xylene & p-Xylene 0.1796 mg/Kg 90 70 - 130 13 35 0.100 0.08469 o-Xylene mg/Kg 70 - 130 13 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-2306-1 MS

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: SS02 Prep Type: Total/NA

Prep Batch: 25749

MS MS Sample Sample Spike %Rec Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits <0.00199 U 0.100 0.09042 90 70 - 130 Benzene mg/Kg Toluene <0.00199 U 0.100 0.08913 mg/Kg 88 70 - 130

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Client: Ensolum Job ID: 890-2306-1 Project/Site: Big Sinks 25 CTB SDG: 03E1558033

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

Lab Sample ID: 890-2306-1 MS Client Sample ID: SS02 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25806 Prep Batch: 25749 Snike MS MS Sample Sample

	Sample	Sample	Spike	IVIO	IVIO				/ortec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.100	0.1015		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1822		mg/Kg		91	70 - 130	
o-Xylene	< 0.00199	U	0.100	0.08657		mg/Kg		86	70 - 130	

MS MS

Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 101 1,4-Difluorobenzene (Surr) 70 - 130 98

Lab Sample ID: 890-2306-1 MSD Client Sample ID: SS02 **Matrix: Solid** Prep Type: Total/NA Prep Batch: 25749

Analysis Batch: 25806

Sample Sample Spike MSD MSD Result Qualifier RPD Limit Analyte babbA Result Qualifier %Rec Limits Unit Benzene <0.00199 U 0.100 0.09636 mg/Kg 96 70 - 130 6 35 Toluene <0.00199 U 0.100 0.09963 mg/Kg 99 70 - 130 11 35 Ethylbenzene <0.00199 U 0.100 0.1164 116 70 - 130 35 mg/Kg 14 0.200 70 - 130 m-Xylene & p-Xylene <0.00398 U 0.2064 mg/Kg 103 12 35 <0.00199 U 0.100 0.09745 97 70 - 130 o-Xylene mg/Kg 12

MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 102 1,4-Difluorobenzene (Surr) 95 70 - 130

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

Lab Sample ID: MB 880-25531/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 25492 Prep Batch: 25531

	INIB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/13/22 11:17	05/13/22 21:34	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/13/22 11:17	05/13/22 21:34	1
o-Terphenyl	108		70 - 130	05/13/22 11:17	05/13/22 21:34	1

Lab Sample ID: LCS 880-25531/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Analysis Batch: 25492

Analysis Batch: 25492							Prep	Batch: 25531
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	883.9		mg/Kg		88	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1071		mg/Kg		107	70 - 130	

C10-C28)

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Prep Type: Total/NA

Job ID: 890-2306-1 Client: Ensolum Project/Site: Big Sinks 25 CTB SDG: 03E1558033

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

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Lab Sample ID: LCS 880-25531/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 25492

Prep Type: Total/NA Prep Batch: 25531

LCS LCS %Recovery Qualifier Limits 108 70 - 130

Lab Sample ID: LCSD 880-25531/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 25492 Prep Batch: 25531 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1141 *1 114 70 - 13025 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 108 1077 mg/Kg 70 - 13020

70 - 130

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

LCSD LCSD Surrogate %Recovery Qualifier Limits 105 70 - 130 1-Chlorooctane 108 70 - 130 o-Terphenyl

Lab Sample ID: 880-14735-A-3-C MS

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 25492** Prep Batch: 25531 Sample Sample MS MS Spike

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 1000 817.2 mg/Kg 80 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 945.2 mg/Kg 95 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 86 o-Terphenyl 83 70 - 130

Lab Sample ID: 880-14735-A-3-D MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid Analysis Batch: 25492

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U *1 998 812.7 80 Gasoline Range Organics <50.0 mg/Kg 70 - 130 20 (GRO)-C6-C10

917.5

mg/Kg

92

70 - 130

998

Diesel Range Organics (Over

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 83 70 - 130 80 70 - 130 o-Terphenyl

<50.0 U

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Prep Batch: 25531

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client: Ensolum Job ID: 890-2306-1 Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25552/1-A Client Sample ID: Method Blank **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 25608

Analyte Chloride

MR MR							
Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
<5.00 U	5.00	ma/Ka			05/16/22 08:45	1	

Lab Sample ID: LCS 880-25552/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 25608

	Бріке	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Chloride	250	249.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-25552/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 25608

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	257.6		mg/Kg		103	90 - 110	3	20

Lab Sample ID: 880-14732-A-19-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 25608

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	49.9		249	297.8		mg/Kg		100	90 - 110	

Lab Sample ID: 880-14732-A-19-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 25608

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	49.9		249	307.4		mg/Kg	_	103	90 - 110	3	20

QC Association Summary

 Client: Ensolum
 Job ID: 890-2306-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

GC VOA

Prep Batch: 25749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	5035	
MB 880-25749/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2306-1 MS	SS02	Total/NA	Solid	5035	
890-2306-1 MSD	SS02	Total/NA	Solid	5035	

Analysis Batch: 25806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	8021B	25749
MB 880-25749/5-A	Method Blank	Total/NA	Solid	8021B	25749
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	8021B	25749
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25749
890-2306-1 MS	SS02	Total/NA	Solid	8021B	25749
890-2306-1 MSD	SS02	Total/NA	Solid	8021B	25749

Analysis Batch: 25881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	8015B NM	25531
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015B NM	25531
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25531
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25531
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B NM	25531
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	25531

Prep Batch: 25531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	8015NM Prep	
MB 880-25531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-14735-A-3-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-14735-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25552

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Soluble	Solid	DI Leach	
MB 880-25552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2306-1

 Project/Site: Big Sinks 25 CTB
 SDG: 03E1558033

HPLC/IC (Continued)

Leach Batch: 25552 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14732-A-19-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-14732-A-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 25608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2306-1	SS02	Soluble	Solid	300.0	25552
MB 880-25552/1-A	Method Blank	Soluble	Solid	300.0	25552
LCS 880-25552/2-A	Lab Control Sample	Soluble	Solid	300.0	25552
LCSD 880-25552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25552
880-14732-A-19-B MS	Matrix Spike	Soluble	Solid	300.0	25552
880-14732-A-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25552

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Lab Chronicle

Client: Ensolum Job ID: 890-2306-1 Project/Site: Big Sinks 25 CTB SDG: 03E1558033

Client Sample ID: SS02

Lab Sample ID: 890-2306-1 Date Collected: 05/11/22 12:55

Matrix: Solid

Date Received: 05/12/22 11:01

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	25749	05/17/22 14:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25806	05/18/22 13:36	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25881	05/19/22 11:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25631	05/16/22 12:00	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	25531	05/13/22 11:17	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25492	05/14/22 03:43	SM	XEN MID
Soluble	Leach	DI Leach			4.97 g	50 mL	25552	05/13/22 15:16	SC	XEN MID
Soluble	Analysis	300.0		1			25608	05/16/22 13:13	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2306-1 Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Identification Number Expiration Date		
		T104704400-21-22		06-30-22		
The following analytes the agency does not of	' '	it the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes fo		
Analysis Method	Prep Method	Matrix	Analyte			
8015 NM		Solid	Total TPH			
OO IO INIVI						

Method Summary

Job ID: 890-2306-1 Client: Ensolum Project/Site: Big Sinks 25 CTB

SDG: 03E1558033

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: Big Sinks 25 CTB

Job ID: 890-2306-1

SDG: 03E1558033

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2306-1	SS02	Solid	05/11/22 12:55	05/12/22 11:01	0.5

Revised Date 08/25/2020 Rev. 2020

Date/Time

Received by: (Signature)

ut jaot analyzed. These terms will be enforced unless previously negotiated.

10.73 1101

e

(Signature)

Relinguished by:

Chain of Custody

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

Environment Testing

💸 eurofins

Xenco

Work Order No:

				www.xenco.com	To age
Project Manager:	Kalei Tennihus	Bill to: (if different)	Advin Byker	Work Order Comments	Comments
	reel	Company Name:	XTO	T/PST PRP	Brownfields ☐ RRC ☐ Superfund ☐
Address:		Address:		State of Project:	
City, State ZIP:		City, State ZIP:		Reporting: Level Level PST/UST TRRP Level V	PST/UST TRRP L Level IV
Phone:		Email: Kjenh	Kjehnings 6 ensdym, com	Deliverables: EDD ADa	ADaPT Other:
Project Name:	Prie Grake 25 CTB	Turn Around	ANALYSIS REQUEST	UEST	Preservative Codes
er:	1658033	Routine Rush Code	ss.		None: NO DI Water: H ₂ O
		Due Date:			Cool: Cool
	Kyse Paker TAT	TAT starts the day received by			HCL: HC HNO 3: HN
) (K	the lab, if received by 4:30pm			H ₂ SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank: (Yet No) W		etera		H ₃ PO ₄ : HP
Samples Received Intact:	Yes No Thermometer ID:	7			NaHSO 4: NABIS
Cooler Custody Seals:	Yes No N/A Correction Factor:	-0.a	5 89		Na 2S 2O 3: NaSO 3
Sample Custody Seals:	Yes No N/A Temperature Reading:			890-2306 Chain of Custody	Zn Acetate+NaOH: Zn
Total Containers:	Corrected Temperature:	rature: 5,0	190		NaOH+Ascorbic Acid: SAPC
Sample Identification	Matrix Sampled	Time Depth Grab/ # of Cont	77 11 18		Sample Comments
2005	5 6/1/22/1	155 0.6	X X		Indent #:
					NAPP2135032531
					4: 108 WILDS1
	/				
		Sep			
		-			
Total 200.7 / 6010		8RCRA 13PPM Texas 11 AI S TCIP/SPIP6010 · 8RCRA	AISBASBABB BCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	ig Min Mo Ni K se Ag siO ₂ Na sr II sn U V Z Se Ag TI U Ha; 1631 / 245,1 / 7470 / 7471	r II Sn U V Zn 1/7470 /7471
בוורוב ואוברווסמ(א) מוור	כוורום ואוברווסמ(א) מוומ ואוברמו(א) נס מב מוומולדכם				

botice: 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 frence. 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 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. Relinguished by: (Signature)

Received by: (Signature)

5/19/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2306-1 SDG Number: 03E1558033

List Source: Eurofins Carlsbad

Login Number: 2306 List Number: 1 Creator: Clifton, Cloe

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

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2306-1 SDG Number: 03E1558033

Login Number: 2306 **List Source: Eurofins Midland** List Number: 2 List Creation: 05/13/22 10:37 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").





ANALYTICAL REPORT

Eurofins Carlsbad 1089 N Canal St. Carlsbad, NM 88220 Tel: (575)988-3199

Laboratory Job ID: 890-2307-1

Laboratory Sample Delivery Group: 03E1558033

Client Project/Site: BIG SINKS 25 CTB

For:

eurofins 🔅

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 5/19/2022 10:38:53 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through EOL

.....LINKS

Received by OCD: 6/2/2022 1:53:00 PM

Have a Question?



Visit us at:

www.eurofinsus.com/Env Released to Imaging: 8/18/2022/3:44:35 PM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum
Project/Site: BIG SINKS 25 CTB
Laboratory Job ID: 890-2307-1
SDG: 03E1558033

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Definitions/Glossary

Job ID: 890-2307-1 Client: Ensolum Project/Site: BIG SINKS 25 CTB

SDG: 03E1558033

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

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

¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid Colony Forming Unit CFU **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) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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

Toxicity Equivalent Factor (Dioxin) TFF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-2307-1 SDG: 03E1558033 Project/Site: BIG SINKS 25 CTB

Job ID: 890-2307-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2307-1

Receipt

The sample was received on 5/12/2022 11:01 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

GC VOA

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

GC Semi VOA

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

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

Eurofins Carlsbad 5/19/2022

Client Sample Results

 Client: Ensolum
 Job ID: 890-2307-1

 Project/Site: BIG SINKS 25 CTB
 SDG: 03E1558033

Client Sample ID: SS03 Lab Sample ID: 890-2307-1

Date Collected: 05/11/22 12:20

Date Received: 05/12/22 11:01

Matrix: Solid

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198	mg/Kg		05/17/22 14:18	05/18/22 13:56	
Toluene	<0.00198	U	0.00198	mg/Kg		05/17/22 14:18	05/18/22 13:56	
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/17/22 14:18	05/18/22 13:56	
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		05/17/22 14:18	05/18/22 13:56	
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/17/22 14:18	05/18/22 13:56	
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		05/17/22 14:18	05/18/22 13:56	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	103		70 - 130			05/17/22 14:18	05/18/22 13:56	
1,4-Difluorobenzene (Surr)	93		70 - 130			05/17/22 14:18	05/18/22 13:56	
- Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397	U	0.00397	mg/Kg			05/19/22 11:21	
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	<50.0		50.0	mg/Kg	— <u>-</u>		05/17/22 09:43	
Method: 8015B NM - Diesel Rang							03/11/22 09.43	
INICUIOU. OU IDD ININI - DIESEI KAIIÇ	ge Organics (D	RO) (GC)					03/17/22 09.43	•
	•	RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Analyte Gasoline Range Organics	Result	Qualifier	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared 05/16/22 08:41		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			<u>D</u>		Analyzed	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U	50.0	mg/Kg	<u>D</u>	05/16/22 08:41	Analyzed 05/16/22 12:35	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0	Qualifier U	50.0	mg/Kg	<u> </u>	05/16/22 08:41 05/16/22 08:41	Analyzed 05/16/22 12:35 05/16/22 12:35	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	mg/Kg	<u>D</u>	05/16/22 08:41 05/16/22 08:41 05/16/22 08:41	Analyzed 05/16/22 12:35 05/16/22 12:35 05/16/22 12:35	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0 <50.0 <50.0 <50.0 <60.0 %Recovery	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	mg/Kg	<u> </u>	05/16/22 08:41 05/16/22 08:41 05/16/22 08:41 Prepared	Analyzed 05/16/22 12:35 05/16/22 12:35 05/16/22 12:35 Analyzed	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	05/16/22 08:41 05/16/22 08:41 05/16/22 08:41 Prepared 05/16/22 08:41	Analyzed 05/16/22 12:35 05/16/22 12:35 05/16/22 12:35 Analyzed 05/16/22 12:35	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	D	05/16/22 08:41 05/16/22 08:41 05/16/22 08:41 Prepared 05/16/22 08:41	Analyzed 05/16/22 12:35 05/16/22 12:35 05/16/22 12:35 Analyzed 05/16/22 12:35	Dil Fa

Surrogate Summary

Client: Ensolum Job ID: 890-2307-1 Project/Site: BIG SINKS 25 CTB SDG: 03E1558033

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate R
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2306-A-1-D MS	Matrix Spike	101	98	
890-2306-A-1-E MSD	Matrix Spike Duplicate	102	95	
890-2307-1	SS03	103	93	
LCS 880-25749/1-A	Lab Control Sample	101	98	
LCSD 880-25749/2-A	Lab Control Sample Dup	97	97	
MB 880-25749/5-A	Method Blank	97	98	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2307-1	SS03	105	109	
890-2307-1 MS	SS03	100	88	
890-2307-1 MSD	SS03	98	87	
LCS 880-25590/2-A	Lab Control Sample	113	104	
LCSD 880-25590/3-A	Lab Control Sample Dup	108	104	
MB 880-25590/1-A	Method Blank	113	123	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-2307-1 SDG: 03E1558033 Project/Site: BIG SINKS 25 CTB

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-25749/5-A

Matrix: Solid

Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene

o-Xylene

Xylenes, Total

Analysis Batch: 25806

Client Sample ID: Method Blank

05/18/22 13:06

05/18/22 13:06

Prep Type: Total/NA

Prep Batch: 25749

MB	МВ					-	
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
<0.00200	U	0.00200	mg/Kg		05/17/22 14:18	05/18/22 13:06	1
< 0.00400	U	0.00400	mg/Kg		05/17/22 14:18	05/18/22 13:06	1

mg/Kg

mg/Kg

MB MB

<0.00200 U

<0.00400 U

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97	70 - 130	05/17/22 14:18	05/18/22 13:06	1
1,4-Difluorobenzene (Surr)	98	70 - 130	05/17/22 14:18	05/18/22 13:06	1

0.00200

0.00400

Lab Sample ID: LCS 880-25749/1-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample

05/17/22 14:18

05/17/22 14:18

Prep Type: Total/NA

Prep Batch: 25749

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09743		mg/Kg		97	70 - 130	
Toluene	0.100	0.09874		mg/Kg		99	70 - 130	
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.09655		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery Qua	alifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-25749/2-A

Matrix: Solid

Analysis Batch: 25806

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25749

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08840		mg/Kg		88	70 - 130	10	35	
Toluene	0.100	0.08787		mg/Kg		88	70 - 130	12	35	
Ethylbenzene	0.100	0.1000		mg/Kg		100	70 - 130	13	35	
m-Xylene & p-Xylene	0.200	0.1796		mg/Kg		90	70 - 130	13	35	
o-Xylene	0.100	0.08469		mg/Kg		85	70 - 130	13	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1.4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-2306-A-1-D MS

Matrix: Solid

Analysis Batch: 25806

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

Prep Batch: 25749

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.100	0.09042		mg/Kg	_	90	70 - 130	
Toluene	< 0.00199	U	0.100	0.08913		mg/Kg		88	70 - 130	

Eurofins Carlsbad

Page 7 of 19

Prep Batch: 25749

QC Sample Results

Client: Ensolum Job ID: 890-2307-1 Project/Site: BIG SINKS 25 CTB SDG: 03E1558033

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

Lab Sample ID: 890-2306-A-1-D MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 25806

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00199	U	0.100	0.1015		mg/Kg		101	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1822		mg/Kg		91	70 - 130	
o-Xylene	<0.00199	U	0.100	0.08657		mg/Kg		86	70 - 130	

MS MS

Sample Sample

<0.00199 U

<0.00199 U

<0.00199 U

<0.00398 U

Result Qualifier

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	101	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: 890-2306-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

MSD MSD

0.09636

0.09963

0.1164

0.2064

0.09745

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Spike

Added

0.100

0.100

0.100

0.200

Matrix: Solid

Analyte

Benzene

Toluene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 25806

Prep Type: Total/	NA
- 1 A L	
Prep Batch: 257	749

116

103

97

%Rec RPD Limits RPD Limit %Rec 96 70 - 130 6 35 99 70 - 130 11 35

14

12

12

70 - 130

70 - 130

70 - 130

<0.00199 U 0.100 o-Xylene MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 102 1,4-Difluorobenzene (Surr) 95 70 - 130

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

Lab Sample ID: MB 880-25590/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 25590

Analysis Batch: 25580

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		05/16/22 08:41	05/16/22 11:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/16/22 08:41	05/16/22 11:32	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/16/22 08:41	05/16/22 11:32	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	05/16/22 08:4	05/16/22 11:32	1
o-Terphenyl	123		70 - 130	05/16/22 08:4	05/16/22 11:32	1

Lab Sample ID: LCS 880-25590/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Matrix: Solid							Prep Typ	e: Total/NA
Analysis Batch: 25580							Prep B	atch: 25590
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1299		mg/Kg		130	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	927.4		mg/Kg		93	70 - 130	
C10-C28)								

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Job ID: 890-2307-1

Client: Ensolum Project/Site: BIG SINKS 25 CTB SDG: 03E1558033

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

Lab Sample ID: LCS 880-25590/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25580 Prep Batch: 25590

l		LCS	LCS	
	Surrogate	%Recovery	Qualifier	Limits
	1-Chlorooctane	113		70 - 130
ı	o-Terphenvl	104		70 - 130

Lab Sample ID: LCSD 880-25590/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25580 Prep Batch: 25590

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 1165 117 70 - 13011 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 884.5 88 mg/Kg 70 - 1305 20 C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 108 70 - 130 1-Chlorooctane 104 70 - 130 o-Terphenyl

Lab Sample ID: 890-2307-1 MS **Client Sample ID: SS03 Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 25580 Prep Batch: 25590

Sample Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 1000 1269 mg/Kg 123 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 1000 903.5 mg/Kg 90 70 - 130

MS MS Surrogate %Recovery Qualifier Limits

C10-C28)

70 - 130 1-Chlorooctane 100 o-Terphenyl 88 70 - 130

Lab Sample ID: 890-2307-1 MSD **Client Sample ID: SS03**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 25580 Prep Batch: 25590

Sample Sample MSD MSD RPD Spike %Rec Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics <50.0 U 998 1250 121 mg/Kg 70 - 130 2 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 948.0 mg/Kg 95 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 98 70 - 130 87 70 - 130 o-Terphenyl

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Dil Fac

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

 Client: Ensolum
 Job ID: 890-2307-1

 Project/Site: BIG SINKS 25 CTB
 SDG: 03E1558033

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-25552/1-A

Matrix: Solid

Analysis Batch: 25608

MB MB

 Analyte
 Result
 Qualifier
 RL
 Unit
 D
 Prepared
 Analyzed

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 05/16/22 08:45

Lab Sample ID: LCS 880-25552/2-A

Matrix: Solid

Analysis Batch: 25608

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 249.3 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-25552/3-A

Matrix: Solid

Analysis Batch: 25608

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 257.6 mg/Kg 103 90 - 110

Lab Sample ID: 880-14732-A-19-B MS

Matrix: Solid

Analysis Batch: 25608

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits Chloride 49.9 249 297.8 100 90 - 110 mg/Kg

Lab Sample ID: 880-14732-A-19-C MSD

Matrix: Solid

Analysis Batch: 25608

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 49.9 307.4 mg/Kg 103 90 - 110 20

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QC Association Summary

Client: Ensolum

Project/Site: BIG SINKS 25 CTB

Job ID: 890-2307-1 SDG: 03E1558033

GC VOA

Prep Batch: 25749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	5035	
MB 880-25749/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2306-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2306-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 25806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	8021B	25749
MB 880-25749/5-A	Method Blank	Total/NA	Solid	8021B	25749
LCS 880-25749/1-A	Lab Control Sample	Total/NA	Solid	8021B	25749
LCSD 880-25749/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	25749
890-2306-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	25749
890-2306-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	25749

Analysis Batch: 25882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 25580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	8015B NM	25590
MB 880-25590/1-A	Method Blank	Total/NA	Solid	8015B NM	25590
LCS 880-25590/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	25590
LCSD 880-25590/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	25590
890-2307-1 MS	SS03	Total/NA	Solid	8015B NM	25590
890-2307-1 MSD	SS03	Total/NA	Solid	8015B NM	25590

Prep Batch: 25590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-25590/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-25590/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-25590/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2307-1 MS	SS03	Total/NA	Solid	8015NM Prep	
890-2307-1 MSD	SS03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 25680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 25552

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Soluble	Solid	DI Leach	
MB 880-25552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-25552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-25552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum Job ID: 890-2307-1 Project/Site: BIG SINKS 25 CTB

SDG: 03E1558033

HPLC/IC (Continued)

Leach Batch: 25552 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-14732-A-19-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-14732-A-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 25608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2307-1	SS03	Soluble	Solid	300.0	25552
MB 880-25552/1-A	Method Blank	Soluble	Solid	300.0	25552
LCS 880-25552/2-A	Lab Control Sample	Soluble	Solid	300.0	25552
LCSD 880-25552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	25552
880-14732-A-19-B MS	Matrix Spike	Soluble	Solid	300.0	25552
880-14732-A-19-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	25552

Lab Chronicle

 Client: Ensolum
 Job ID: 890-2307-1

 Project/Site: BIG SINKS 25 CTB
 SDG: 03E1558033

Client Sample ID: SS03 Lab Sample ID: 890-2307-1

Matrix: Solid

Date Collected: 05/11/22 12:20 Date Received: 05/12/22 11:01

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	25749	05/17/22 14:18	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	25806	05/18/22 13:56	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			25882	05/19/22 11:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			25680	05/17/22 09:43	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	25590	05/16/22 08:41	DM	XEN MID
Total/NA	Analysis	8015B NM		1			25580	05/16/22 12:35	AJ	XEN MID
Soluble	Leach	DI Leach			4.96 g	50 mL	25552	05/13/22 15:16	SC	XEN MID
Soluble	Analysis	300.0		1			25608	05/16/22 13:22	CH	XEN MID

Laboratory References:

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

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2307-1

 Project/Site: BIG SINKS 25 CTB
 SDG: 03E1558033

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-21-22	06-30-22
The following analytes the agency does not of	. ,	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for wh
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH	

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Method Summary

Client: Ensolum

Project/Site: BIG SINKS 25 CTB

Job ID: 890-2307-1

SDG: 03E1558033

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
3015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
3015NM Prep	Microextraction	SW846	XEN MID
Ol Leach	Deionized Water Leaching Procedure	ASTM	XEN MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

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Sample Summary

Client: Ensolum

Project/Site: BIG SINKS 25 CTB

Job ID: 890-2307-1

SDG: 03E1558033

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2307-1	SS03	Solid	05/11/22 12:20	05/12/22 11:01	0.5

Page

Work Order No:

Date/Time

Received by: (Signature)

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5.12.33

4/0

Date/Jime

(eceived by: (Signature)

(Signature)

Relinduished by:

Relifiquished by: (Signature)

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

Environment Testing

seurofins 😽

Xenco

Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

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Project Manager:	Role: Lennings		Bill to: (if different)	40	ydran Da	Site	Work	Work Order Comments	
Company Name:	Enesdem		Company Name:	4	22		Program: UST/PST	UST/PST PRP Brownfields RR	RRC Superfund
Address:			Address:				State of Project:		
City, State ZIP:			City, State ZIP:				Reporting: Level II Level III PST/UST TRRP Level IV	IIII	RP Level IV
Phone:		Email:	Ljenning & Ochsolum. con	1500	usolun	202	Deliverables: EDD	ADaPT Other:	er:
Project Name:	Rafinke 26 CTB	Turn	Turn Around			ANALYSIS REQUEST	UEST	Preserva	Preservative Codes
Project Number:	036 (55 8033	Routine	ų.	Pres. Code				None: NO	Di Water: H ₂ O
Project Location:	(Due Date:						Cool: Cool	MeOH: Me
Sampler's Name:	Kisse Parker	TAT starts the	TAT starts the day received by			-	-	HCL: HC	HNO 3: HN
PO #:		the lab, if rec	the lab, if received by 4:30pm					H2S04:H2	NaOH: Na
SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice:	ves (No	eter				H ₃ PO ₄ : HP	
Samples Received Intact:	Yes No	1	F-00-W/W	шел				NaHSO 4: NABIS	IS
Cooler Custody Seals:	>		-0°5	_	0			Na 2 S 2 O 3: Na S O	0 3
Sample Custody Seals:	Yes No N/A	Temperature Reading:	00	4	7.	080-080	all of custous	Zn Acetate+NaOH: Zn	aOH: Zn
Total Containers:	Corrected	Corrected Temperature:	5.8	3	7	_		NaOH+Ascorbic Acid: SAPC	ic Acid: SAPC
Sample Identification	ification Matrix Sampled	Time	Depth Grab/ #	Cont Cont	35 U			Sample	Sample Comments
5603	S 4/11/2	122 / 220	2.0	Q	2			Inidout #	·# #
1								14002	NAPO213503253
		`						801:50	(c:108 b/100)
		M	0						
				/					
					/				
						/			
Total 2007 / 6010	300.8 / 6030:	SRCRA 13PPM	Texas 11	Sh As Ba	Re B Cd C	Cr Co Cu Fe Pb A	AISH AS BA BE B CH CA CT CO CU FE PB MA MN MO NI K SE AA SIO, NA ST TISA U V ZN	Na Sr TISA U V.	Zn.
Circle Method(s)	AM Pr	TCI P/S	6010 : 8R	Sb As Ba	Be Cd Cr	TCIP/SPLP6010: 8RCRA Sh As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Se Ag TI U Hg: 1631	Hq: 1631 / 245.1 / 7470 / 7471	
シッションションコンコン	מוום ואורימיולו יה הר מיימיולו הווח								

Eurofins Xenco. A minimum change ar 555.00 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. 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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2307-1 SDG Number: 03E1558033

Login Number: 2307 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or ampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
here 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	
ppropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
here 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: 890-2307-1 SDG Number: 03E1558033

> List Source: Eurofins Midland List Creation: 05/13/22 10:37 AM

Creator: Rodriguez, Leticia

Login Number: 2307

List Number: 2

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

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<6mm (1/4").



APPENDIX E

NMOCD Notifications

Collins, Melanie

From: Green, Garrett J

Sent: Monday, December 13, 2021 4:30 PM

To: Mike Bratcher; Victoria Venegas; Rob Hamlet

Cc: Pennington, Shelby G; Baker, Adrian; Sanders, David; DelawareSpills /SM

Subject: XTO 48 hour liner inspection notification

Good afternoon,

This is sent as a 48-hour notification, XTO is scheduled to inspect the lined containment at Big Sinks 25 Battery released on (12/6/21), on Wednesday, December 15, 2021, at 3pm MST. A 24 hour release notification was not sent out since the release was less than 25 barrels in volume. Please call us with any questions or concerns.

GPS Coordinates: (32.18183,-103.83299)

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

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

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 113167

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	113167
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created	Condition	Condition
Ву		Date
jnobui	Closure Report Approved. Please implement 19.15.29.13 NMAC when completing P&A.	8/18/2022