

January 17, 2023

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

Re: Closure Request Dominator Federal 25 O CTB Incident Number NAPP2230729294 Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request* to document initial assessment, remediation, and soil sampling activities performed at the Dominator Federal 25 O CTB (Site; Figure 1). The purpose of the soil sampling activities was to assess for the presence or absence of impacted soil following a release of produced water. Based on Site assessment, excavation activities, and laboratory analytical results, COG is requesting closure for Incident Number NAPP2230729294.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 25, Township 25 South, Range 33 East, in Lea County, New Mexico (32.095391° N, 103.525871° W) and is associated with oil and gas exploration and production operations on federally owned surface managed by the Bureau of Land Management (BLM).

On October 22, 2022, a strike to a flowline by an unknown operator caused a release of produced water. Approximately 15.01 barrels (bbls) of produced water were released off pad. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 10 bbls of released produced water were recovered. COG submitted a Release Notification Form C-141 (Form C-141) on November 3, 2022 to the New Mexico Oil Conservation Commission (NMOCD). The release was assigned Incident Number NAPP2230729294.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Based on a desktop review of regional hydrologic data, no known groundwater sources are located within a 0.5-mile radius of the Site. Depth to groundwater at the Site is estimated to be

greater than 100 feet below ground surface (bgs) based on the nearest available groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office the State Engineer (NMOSE) permitted well C-02313, located approximately 6,980 feet west of the Site. The groundwater well has a reported depth to groundwater of 110 feet bgs and a total depth of 150 feet bgs. Ground surface elevation at the groundwater well location is 3,325 feet above mean sea level (amsl), which is approximately 13 feet lower in elevation than the Site. Nearby water wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a unnamed dry wash, located approximately 6,062 feet southeast 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, and wetland. The Site is greater than 1,000 feet of 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 I* Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum hydrocarbons (TPH): 2,500 mg/kg
- TPH-Diesel Range Organics (DRO) + TPH-Gasoline Range Organics (GRO): 1,000 mg/kg
- Chloride: 20,000 mg/kg

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

INITIAL SITE ASSESSMENT ACTIVITIES

On November 14, 2022, Ensolum evaluated the release based on information provided on the Form C-141 and visual observations. Onsite personnel documented the release and mapped the release extent (Figure 2). Ensolum collected delineation soil samples SS01 and SS02 within the release extent to characterize surficial soil. Soil samples SS03 through SS06 were collected outside the release extent to assess the lateral extent of the release. All delineation soil samples were collected at a depth of 0.2 feet bgs.

All soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach[®] chloride QuanTab[®] test strips. The soil sample locations were mapped using a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Ensolum completed photographic documentation during the initial Site assessment and a photographic log is included as 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 under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following



United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for soil samples SS01 and SS02 indicated all COCs were compliant with the Site Closure Criteria. However, laboratory analytical results for SS01 and SS02 indicated that TPH and/or chloride concentrations exceeded the reclamation requirement. Laboratory analytical results for soil samples SS03 through SS06 indicated all COCs were compliant with the most stringent *Table I* Closure Criteria and successfully defined the lateral extent of the release. As such, remediation of waste-containing soil appeared warranted.

EXCAVATION ACTIVITIES

On December 9, 2022, Ensolum oversaw the excavation of waste-containing soil from the release extent as indicated by visible staining and laboratory analytical results from delineation soil samples SS01 and SS02. Excavation activities were performed via hand shoveling and back-hoe to a depth of approximately 1-foot bgs. To direct excavation activities, soil was field screened for VOCs and chloride. Photographic documentation of excavation activities is included in Appendix C.

Following removal of waste-containing soil, 5-point composite soil samples were collected every 200 square feet from the excavation floor. Due to the shallow depth of the excavation, soil from the sidewalls were incorporated into the floor samples. Excavation composite soil samples FS01 through FS04 were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation soil samples were handled and analyzed as previously described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3.

Laboratory analytical results from excavation confirmation soil samples FS01 through FS04 indicated all COC concentrations were compliant with the Site Closure Criteria and the reclamation requirement. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

The total areal extent of the excavation was approximately 800 square feet. A total of approximately 30 cubic yards of waste-containing soil were removed during the excavation. The impacted soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was backfilled.

CLOSURE REQUEST

Based on the initial recovery of free-standing fluid and excavation activities with subsequent confirmation soil sample laboratory analytical results compliant with the reclamation requirement, actions taken by COG appear to have successfully remediated waste-containing soil as the result of a produced water release at the Site. Delineation soil samples collected outside the release extent successfully define the edge of the release. COG believes these remedial actions have been protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2230729294. The Final C-141 is included in Appendix A and required notifications are included as Appendix E.



If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Sincerely, **Ensolum, LLC**

1. alinas

Josh Adams, PG Project Geologist

Daniel R. Moir, PG Senior Managing Geologist

cc: Charles Beauvais, COG Operating, LLC Bureau of Land Management

Attachments:

- Figure 1 Site Location Map
- Figure 2 Delineation Soil Sample Locations
- Figure 3 Excavation Soil Sample Locations
- Table 1Soil Sample Analytical Results
- Appendix A Final C-141
- Appendix B Referenced Well Records
- Appendix C Photographic Log
- Appendix D Laboratory Analytical Reports
- Appendix E NMOCD Notifications





FIGURES

Received by OCD: 1/23/2023 11:18:01 AM



Unit O, Section 25, T 25S, R 33E Lea County, New Mexico

Released to Imaging: 2/9/2023 1:30:36 PM

Received by OCD: 1/23/2023 11:18:01 AM



Received by OCD: 1/23/2023 11:18:01 AM



Released to Imaging: 2/9/2023 1:30:36 PM



TABLE



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS **Dominator Federal 25 O CTB** COG Operating, LLC Lea County, New Mexico

Sample Designation	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	NE	1,000	20,000
		•		Delinea	tion Soil Samples	8	•		•	
SS01*	11/14/2022	0.2	<0.00202	< 0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,130
SS02*	11/14/2022	0.2	<0.00200	< 0.00399	<49.9	295	<49.9	295	295	9,540
SS03*	11/14/2022	0.2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	70.3
SS04*	11/14/2022	0.2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	17.5
SS05*	11/14/2022	0.2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	45.3
SS06*	11/14/2022	0.2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	92.9
				Excava	tion Soil Samples	5				
FS01*	12/09/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<505
FS02*	12/09/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	11.5
FS03*	12/09/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	167
FS04*	12/09/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	79.7

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NE: not established

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 I Closure Criteria or reclamation requirment where applicable.

Grey text represents samples that have been excavated

* - indicates locations where the reclamation requirment was applied

ENSOLUM

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APPENDIX A

Final C141

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

32.545

32.095391

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

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Incident ID	NAPP2230729294
District RP	
Facility ID	fAPP2203456444
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137			
Contact Name	Charles Beauvais	Contact Telephone	(575) 988-2043			
Contact email	Charles.R.Beauvais@ConocoPhillips.com	Incident # (assigned by OCD)	NAPP2230729294			
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701					

Location of Release Source

T	ati	fn	de

Longitude -103.3132 -103.525871

(NAD 83 in decimal degrees to 5 decimal places)

Site Name		Dominator F	ederal 25 O	СТВ	Site Type	Flowline
Date Release	Discovered	October 22,	2022		API# (if applicable)	
Unit Letter	Section	Township	Range		County	
E -0	25	20S 258	36E 33E		Lea	

Surface Owner: State Federal Tribal Private (Name: Cooper Dale Family Trust BLM

Nature and Volume of Release

Materia	al(s) Released (Select all that apply and attach calculations or specific	justification for the volumes provided below)
Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls) 15.01	Volume Recovered (bbls) 10
	Is the concentration of dissolved chloride 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)
C CD 1		

Cause of Release

The release was caused by a strike to flowine from unknown operator. Strike was not communicated. The release was off the pad. A vacuum truck was dispatched to remove all freestanding fluids. Evaluation will be made at the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

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Oil Conservation Division

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Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
5	
19.15.29.7(A) NMAC?	
🗌 Yes 🔳 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

Initial Response

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

The source of the release has been stopped.

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

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

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

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

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

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

Printed Name. Brittany N. Esparza	Title: Environmental Technician
Signature:	Date:
email: Brittany.Esparza@ConocoPhillips.com	Telephone: (432) 221-0398
OCD Only	
Received by: Jocelyn Harimon	Date: <u>11/03/2022</u>

NAPP2230729294

	L48 Spill Volume Estimate Form - Fill In Gray Cells											
Facility Name & Well Number(s): [DOMINATOR O WELL 104 Release Discovery Date & Time: 10/24/2022 TIME					12:00			
			Provide a	iny known de		Open up a new well at a 15/6 and blow it down the open to			comeing out of	the ground on the right away so we	shut the well down a	and closed the header
			Recovered Volume (bbl.) (if available, not included in volume calculations)	available, not included in Determination Release Type		(dropdown):	> 1/2" of Rain in Last 24 Hours (dropdown):		overed (not included in ions, informational):			
BU: Perr	mian	<	Asse	t Area:	DBE - Asset Avg.	10	Field Measurement	Produced	d Water	No		0%
				Known	Volume (dropdown):	No						
Known Area (dropdown):			No									
					Spill C	alculation - Subsurface Spil	I - Rectangle				Remediation	Recommendation
into a series of rectangles	.ength (ft.)	Width (ft.)	Average Depth (in.)	On/Off Pad (dropdown)	Soil Spilled-Fluid Saturation (%.)	area (bbl.)	Total Estimated Volume of Spill (bbl.)				Total Estimated Contaminated Soil, uncompacted, 25% (yd ³ .)	Current Rule of Thumb - RMR Handover Volume, (yd ³ .)
	150.0	30.0		Off-Pad∕	15.02%	33.38	5.01				8.68	
Rectangle B				On-Pad [✓]	10.50%	0.00	0.00				0.00	
Rectangle C	_			On-Pad∽ ∽	10.50%	0.00	0.00				0.00	
Rectangle D Rectangle E				~		0.00					0.00	
Rectangle F				~		0.00					0.00	750
Rectangle G				~		0.00					0.00	
Rectangle H				~		0.00					0.00	
				~		0.00					0.00	1
Rectangle I Rectangle J				~		0.00					0.00	

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

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

District III

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

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

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

CONDITIONS

Operator:	OGRID: 229137
COG OPERATING LLC 600 W Illinois Ave	Action Number:
Midland, TX 79701	155885
	Action Type: [C-141] Release Corrective Action (C-141)
CONDITIONS	

CONDITIONS

Created By		Condition Date
jharimon	None	11/3/2022

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Action 155885

Oil Conservation Division

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

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

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

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

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

Received by OCD: 1/23/2	023 11:18:01 AM State of New Mexico				Page 17 of 154
				Incident ID	NAPP2230729294
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				Facility ID	
				Application ID	
regulations all operators ar public health or the environ failed to adequately investi addition, OCD acceptance and/or regulations. Printed Name:Cl Signature: <u>Charles R</u> email:Charles.R.B		e notifications and the OCD does no a threat to ground or of responsibilit Title:S Date:	l perform cc t relieve the water, surfa y for compl enior Envi _01/17/202	prrective actions for rele operator of liability sho ce water, human health iance with any other fee ronmental Engineer	ases which may endanger ould their operations have or the environment. In
OCD Only Received by: <u>Jocelyn</u>	Harimon	Da	.te: 01/2	23/2023	

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Oil Conservation Division

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Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report. A scaled site and sampling diagram as described in 19.15.29.11 NMAC Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: ____ Charles Beauvais _____ Title: ____ Senior Environmental Engineer Signature: <u>C</u>harles R. Beauvais 99 _____ Date: ____01/17/2023_____ email: ____ Charles.R.Beauvais@conocophillips.com _____ Telephone: ____575-988-2043 **OCD Only** Received by: _____ Jocelyn Harimon Date: 01/23/2023

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

Closure Approved by:	Date: 02/09/2023
Printed Name: Jennifer Nobui	Title:Environmental Specialist A



APPENDIX B

Referenced Well Record



Released to Imaging: 2/9/2023 1:30:36 PM

New Mexico Office of the State Engineer Point of Diversion Summary

		(quarters a (quarters				(NAD83 UTM in meters)			
Well Tag P	OD Number	Q64 Q1	5 Q4	Sec	Tws	Rng	Χ	Y	
C	02313	2 3	3	26	25S	33E	636971	3552098* 🌍	
^x Driller Licens	e:	Driller Co	mpa	ny:					
Driller Name:	UNKNOWN								
Drill Start Da	te: 01/01/1925	Drill Finis	h Da	te:	0	6/30/1925	Ph	ug Date:	
Log File Date	:	PCW Rev	Date	e:			So	urce:	
Pump Type:		Pipe Discl	narge	Size	:		Es	timated Yield:	60 GPM
Casing Size:	6.88	Depth We	ıı،		1	50 feet	De	pth Water:	110 feet

*UTM location was derived from PLSS - see Help

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

11/18/22 11:35 AM

POINT OF DIVERSION SUMMARY





National Water Information System: Web Interface

USGS Water Resources

USGS Home Contact USGS Search USGS

Click to hideNews Bulletins

- ALERT! USGS will be performing an upgrade to their network on **Thursday, November 17, 2022, starting at 10:00pm EST**. During the maintenance period, the Water Data for the Nation web portal and water services will be accessible; however, delivery of the most recent time-series data and WaterAlert notifications will be disrupted. The maintenance period is not expected to exceed 4 hours, after which the backlog of time-series data will be processed and delivered.
- Water Data for the Nation Blog

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

Search Results -- 1 sites found

Agency code = usgs

site_no list =

• 320523103294401

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320523103294401 25S.34E.29.343322

Lea County, New Mexico Latitude 32°05'23", Longitude 103°29'44" NAD27 Land-surface elevation 3,321 feet above NAVD88 The depth of the well is 165 feet below land surface. This well is completed in the Other aquifers (N99990THER) national aquifer. This well is completed in the Ogallala Formation (1210GLL) local aquifer.

Output formats

<u>Table of data</u>

Tab-separated data

Graph of data

Reselect period

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water- level approval status
1970-12-08	3	D	62610		3192.28	NGVD29	1	Z	1		A
1970-12-08	3	D	62611		3193.85	NAVD88	1	Z			A
1970-12-08	3	D	72019	127.15			1	Z	1		A
1976-01-08	3	D	62610		3191.94	NGVD29	1	Z			A
1976-01-08	3	D	62611		3193.51	NAVD88	1	Z	1		P
1976-01-08	3	D	72019	127.49			1	Z	-		A
1981-03-25	5	D	62610		3187.33	NGVD29	1	Z	1		A
1981-03-25	5	D	62611		3188.90	NAVD88	1	Z			A
1981-03-25	5	D	72019	132.10			1	Z			A
1986-03-12	2	D	62610		3189.20	NGVD29	1	Z			A
1986-03-12	2	D	62611		3190.77	NAVD88	1	Z	1		A
1986-03-12	2	D		130.23			1	Z			A
1991-06-06		D			3190.92	NGVD29	1				A
1991-06-06	5	D	62611		3192.49	NAVD88	1				A
1991-06-06	5	D	72019	128.51			1	Z	2		A

Expl	ana	tion
------	-----	------

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	А	Approved for publication Processing and review completed.

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FOIA

Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-11-18 13:40:37 EST 0.27 0.23 nadww01



Received by OCD: 1/23/2023 11:18:01 AM



APPENDIX C

Photographic Log





APPENDIX D

Laboratory Analytical Report

Received by OCD: 1/23/2023 11:18:01 AM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/22/2022 3:47:51 PM

JOB DESCRIPTION

Dominator 0 Flowline SDG NUMBER 03D20224110

JOB NUMBER

890-3456-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



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Qualifiers		
GC VOA		
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VOA		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		
Qualifier	Qualifier Description	
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not	
	applicable.	
U	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
	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)	
EDL	Estimated Detection Limit (Dioxin)	
LOD LOQ	Limit of Detection (DoD/DOE)	
MCL	Limit of Quantitation (DoD/DOE) EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

.

Job ID: 890-3456-1 SDG: 03D20224110

Job ID: 890-3456-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3456-1

Receipt

The samples were received on 11/14/2022 3:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-3456-1) and SS02 (890-3456-2).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-39851/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-21514-A-1-G MS) and (880-21514-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-3456-1) and SS02 (890-3456-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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 880-39826 and 880-39826 and analytical batch 880-40018 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.

4

5

Job ID: 890-3456-1 SDG: 03D20224110

Client Sample ID: SS01

Project/Site: Dominator 0 Flowline

Date Collected: 11/14/22 12:30 Date Received: 11/14/22 15:40

Client: Ensolum

Lab Sample ID: 890-3456-1

Matrix: Solid

Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/17/22 16:04	11/22/22 11:15	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/17/22 16:04	11/22/22 11:15	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/17/22 16:04	11/22/22 11:15	
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/17/22 16:04	11/22/22 11:15	
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/17/22 16:04	11/22/22 11:15	
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/17/22 16:04	11/22/22 11:15	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	151	S1+	70 - 130			11/17/22 16:04	11/22/22 11:15	
1,4-Difluorobenzene (Surr)	85		70 - 130			11/17/22 16:04	11/22/22 11:15	
Method: TAL SOP Total BTEX - T	otal BTEX Calo	ulation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/22/22 16:26	
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/21/22 10:45	
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 02:21	,
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 02:21	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	103		70 - 130			11/17/22 08:58	11/19/22 02:21	
o-Terphenyl	104		70 - 130			11/17/22 08:58	11/19/22 02:21	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1130		4.97	mg/Kg			11/20/22 20:28	1
lient Sample ID: SS02						Lab San	nple ID: 890-	3456-2
ate Collected: 11/14/22 12:35							· · · · · · · · · · · · · · · · · · ·	x: Solie
ate Received: 11/14/22 15:40								
ample Depth: 0.2								
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:04	11/22/22 11:41	
						11/17/22 16:04		

4-Bromofluorobenzene (Surr)	138	S1+	70 - 130		11/17/22 16:04	11/22/22 11:41	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00399	U	0.00399	mg/Kg	11/17/22 16:04	11/22/22 11:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	11/17/22 16:04	11/22/22 11:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg	11/17/22 16:04	11/22/22 11:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	11/17/22 16:04	11/22/22 11:41	1
Toluene	<0.00200	U	0.00200	mg/Kg	11/17/22 16:04	11/22/22 11:41	1
Benzene	<0.00200	U	0.00200	mg/Kg	11/17/22 16:04	11/22/22 11:41	1

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

Method: TAL SOP Total BTEX - Total BTEX Calculation

%Recovery Qualifier

Result Qualifier

81

<0.00399 U

Client Sample Results

Limits

70 - 130

RL

0.00399

Unit

mg/Kg

Job ID: 890-3456-1 SDG: 03D20224110

Analyzed

11/22/22 11:41

Analyzed

11/22/22 16:26

Client Sample ID: SS02

Project/Site: Dominator 0 Flowline

Client: Ensolum

Surrogate

Analyte

Total BTEX

Date Collected: 11/14/22 12:35

Date Received: 11/14/22 15:40 Sample Depth: 0.2

1,4-Difluorobenzene (Surr)

Lab Sample	ID:	890-3456-2
		Matrix: Solid

Prepared

11/17/22 16:04

Prepared

D

Matrix: Solid

Dil Fac

Dil Fac

1

1

8	
9	
13	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	295		49.9	mg/Kg			11/21/22 10:45	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/17/22 08:58	11/19/22 02:43	1
Diesel Range Organics (Over C10-C28)	295		49.9	mg/Kg		11/17/22 08:58	11/19/22 02:43	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/17/22 08:58	11/19/22 02:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			11/17/22 08:58	11/19/22 02:43	1
o-Terphenyl	117		70 - 130			11/17/22 08:58	11/19/22 02:43	1

method. moArri 000.0 - Amons, h		graphy - oo						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9540		99.2	mg/Kg			11/20/22 20:45	20

Project/Site: Dominator 0 Flowline

Job ID: 890-3456-1 SDG: 03D20224110

Prep Type: Total/NA

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

_				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		5
880-21514-A-1-G MS	Matrix Spike	135 S1+	84	·	
880-21514-A-1-H MSD	Matrix Spike Duplicate	134 S1+	90		6
890-3456-1	SS01	151 S1+	85		
890-3456-2	SS02	138 S1+	81		
LCS 880-39851/1-A	Lab Control Sample	124	85		
LCSD 880-39851/2-A	Lab Control Sample Dup	131 S1+	95		8
MB 880-39851/5-A	Method Blank	84	86		
MB 880-39852/5-A	Method Blank	81	89		0
Surrogate Legend					9

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

		1001		Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
450-A-1-C MS	Matrix Spike	89	87	
450-A-1-D MSD	Matrix Spike Duplicate	89	87	
456-1	SS01	103	104	
6-2	SS02	102	117	
-39777/2-A	Lab Control Sample	96	107	
880-39777/3-A	Lab Control Sample Dup	99	110	
80-39777/1-A	Method Blank	98	110	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Job ID: 890-3456-1 SDG: 03D20224110

Prep Type: Total/NA

Client Sample ID: Method Blank

Project/Site: Dominator 0 Flowline Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 40034

Client: Ensolum

Analysis Batch: 40034							Prep Batch	n: 39851
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/17/22 16:04	11/22/22 01:39	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			11/17/22 16:04	11/22/22 01:39	1
1,4-Difluorobenzene (Surr)	86		70 - 130			11/17/22 16:04	11/22/22 01:39	1

Lab Sample ID: LCS 880-39851/1-A Matrix: Solid

Analysis Batch: 40034

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.07952		mg/Kg		80	70 - 130
Toluene	0.100	0.08743		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08238		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	0.200	0.1818		mg/Kg		91	70 - 130
o-Xylene	0.100	0.08734		mg/Kg		87	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

Lab Sample ID: LCSD 880-39851/2-A

Matrix: Solid

	Analysis Batch: 40034							Prep	Batch:	39851
		Spike	LCSD	LCSD				%Rec		RPD
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Benzene	0.100	0.08920		mg/Kg		89	70 - 130	11	35
	Toluene	0.100	0.09501		mg/Kg		95	70 - 130	8	35
	Ethylbenzene	0.100	0.08643		mg/Kg		86	70 - 130	5	35
	m-Xylene & p-Xylene	0.200	0.1928		mg/Kg		96	70 - 130	6	35
	o-Xylene	0.100	0.09388		mg/Kg		94	70 - 130	7	35
I										

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-21514-A-1-G MS

Matrix: Solid

Analysis Batch: 40034									Prep	Batch: 39851
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.0996	0.08119		mg/Kg		82	70 - 130	
Toluene	<0.00199	U	0.0996	0.09085		mg/Kg		91	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39851	
ec	

82	70 - 130
91	70 - 130
87	70 - 130

Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: 880-21514-A-1-G MS

OC Sample Posulte

Client: Ensolum Project/Site: Dominator 0 Flowline

Matrix: Solid

Analyte

o-Xylene

Surrogate

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 40034

Method: 8021B - Volatile Organic Comp

	(QC Sampl	e Resul	IS					1
								Job ID: 890-3456-1 SDG: 03D20224110	2
ganic Cor	mpounds	(GC) (Conti	inued)						3
G MS							Client	Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 39851	4
Sample	Sample	Spike	MS	MS				%Rec	5
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
<0.00199	U	0.0996	0.08672		mg/Kg		87	70 - 130	
<0.00398	U	0.199	0.1893		mg/Kg		95	70 - 130	
<0.00199	U	0.0996	0.08757		mg/Kg		88	70 - 130	7
MS	MS								
%Recovery	Qualifier	Limits							8
135	S1+	70 - 130							
84		70 - 130							9
H MSD					Cli	ient Sa	ample ID): Matrix Spike Duplicate Prep Type: Total/NA	

Lab Sample ID:	880-21514-A-1-H I	MSD
Matrix: Solid		

Analysis Batch: 40034

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Analysis Batch: 40034									Prep	Batch:	39851
	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	0.07531		mg/Kg		75	70 - 130	8	35
Toluene	<0.00199	U	0.100	0.08477		mg/Kg		84	70 - 130	7	35
Ethylbenzene	<0.00199	U	0.100	0.08045		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1756		mg/Kg		87	70 - 130	8	35
o-Xylene	<0.00199	U	0.100	0.08288		mg/Kg		83	70 - 130	6	35
	MSD	MSD									

	INISD	WSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-39852/5-A Matrix: Solid Analysis Batch: 40034

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39852

INIB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
<0.00400	U	0.00400	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
<0.00400	U	0.00400	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
МВ	МВ						
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
81		70 - 130			11/17/22 16:07	11/21/22 12:20	1
89		70 - 130			11/17/22 16:07	11/21/22 12:20	1
_	Result <0.00200	Result Qualifier <0.00200	Result Qualifier RL <0.00200	Result Qualifier RL Unit <0.00200	Result Qualifier RL Unit D <0.00200	Result Qualifier RL Unit D Prepared <0.00200	Result Qualifier RL Unit D Prepared Analyzed <0.00200

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

Lab Sample ID: MB 880-39777/1-A Matrix: Solid Analysis Batch: 39876						Client Sa	mple ID: Metho Prep Type: ⊺ Prep Batcł	Total/NA
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1
(GRO)-C6-C10								

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QC Sample Results

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: MB 880-39777	7/1 -A									Client Sa	ample ID:			
Matrix: Solid												Type: T		
Analysis Batch: 39876											Prep	Batch	I: 397	77
		MB	MB											
Analyte		esult		RL		Ur	nit	D	P	repared	Analy	zed	Dil F	ac
Diesel Range Organics (Over	<	\$0.0	U	50.0		m	g/Kg		11/1	7/22 08:58	11/18/22	19:50		1
C10-C28)														
Oll Range Organics (Over C28-C36)	<	\$50.0	U	50.0		m	g/Kg		11/1	7/22 08:58	11/18/22	19:50		1
		ΜВ	МВ											
Surrogate	%Reco			Limits					F	Prepared	Analy	zed	Dil F	ac
1-Chlorooctane		98						-		17/22 08:58	11/18/22			1
o-Terphenyl		110		70 - 130						17/22 08:58	11/18/22			1
Lab Sample ID: LCS 880-3977	7/2-A							CI	ient	t Sample	ID: Lab C	ontrol	Samp	ole
Matrix: Solid												Type: T		
Analysis Batch: 39876												Batch		
•				Spike	LCS	LCS					%Rec			
Analyte				Added	Result	Qualifie	r Unit		D	%Rec	Limits			
Gasoline Range Organics				1000	854.3		mg/Kg		_	85	70 - 130			—
(GRO)-C6-C10							5 5							
Diesel Range Organics (Over				1000	977.8		mg/Kg			98	70 - 130			
C10-C28)														
	LCS	LCS												
Surrogate	%Recovery			Limits										
1-Chlorooctane	<u>96</u>	quu		70 - 130										
o-Terphenyl	107			70 - 130										
Matrix: Solid Analysis Batch: 39876											Prep	Type: T Batch	n: 397	77
				Spike		LCSD			_	~ -	%Rec			PD
Analyte				Added		Qualifie			<u>D</u>	%Rec	Limits	RPD		mit
Gasoline Range Organics				1000	1009		mg/Kg			101	70 - 130	17		20
(GRO)-C6-C10 Diesel Range Organics (Over				1000	1035		mg/Kg			103	70 - 130	6	\$	20
C10-C28)				1000	1000		mg/rtg			100	10 - 100	0	,	20
,														
	LCSD													
Surrogate	%Recovery	Qua	lifier	Limits										
1-Chlorooctane	99			70 - 130										
o-Terphenyl	110			70 - 130										
- Lab Sample ID: 890-3450-A-1	CMS									Client	Sample ID	• Motri	v eni	ka
Matrix: Solid										Gnent		лан Туре: Т		
Analysis Batch: 39876												Batch		
Analysis Batch. 55070	Sample	Sam	nle	Spike	MS	MS					%Rec	Datch	1. 397	· ·
Analyte	Result		-	Added		Qualifie	r Unit		D	%Rec	Limits			
Gasoline Range Organics	<50.0			998	955.2		mg/Kg		_		70 - 130			—
(GRO)-C6-C10	~50.0	5		530	300.Z		mg/rxg			54	10 - 100			
Diesel Range Organics (Over	<50.0	U		998	1084		mg/Kg			109	70 - 130			
C10-C28)							5 5							
	Ме	мs												
Surrogate	%Recovery		lifior	Limits										
	/onecovery	Qua												

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89

87

1-Chlorooctane

o-Terphenyl

70 - 130

70 - 130
QC Sample Results

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: 890-3450-A-1-D M	SD					C	Client S	ample II	D: Matrix Sp		
Matrix: Solid									Prep T	ype: To	tal/N/
Analysis Batch: 39876									Prep	Batch:	39777
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	997	983.4		mg/Kg		97	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	997	1099		mg/Kg		110	70 - 130	1	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	89		70 - 130	-							
o-Terphenyl	87		70 - 130								
, in the second s	07		/01/00								
lethod: 300.0 - Anions, Ion C	hromat	ography									
Lab Cample ID: ND 000 20200/4								Olivert			Diani
Lab Sample ID: MB 880-39826/1-4	•							Client	Sample ID:		
Matrix: Solid									Prep	Type: So	oluble
Analysis Batch: 40018											
		MB MB									
Analyte	R	esult Qualifier		RL	Unit		D F	Prepared	Analyz	ed	Dil Fac
Chloride	<	<5.00 U		5.00	mg/k	(g			11/20/22	20:11	1
Lab Sample ID: LCS 880-39826/2-	Α						Clien	t Sample	e ID: Lab Co	ontrol Sa	ample
Matrix: Solid										Type: So	
Analysis Batch: 40018											
Analysis Baton. 40010			Spike	LCS	LCS				%Rec		
Analyte			Added	Result		Unit	D	%Rec	Limits		
Chloride			250	260.4	Quanner	mg/Kg	<u> </u>	104	90 - 110		
			200	200.4		ilig/itg		104	50 - 110		
Lab Sample ID: LCSD 880-39826/	3-A					Clie	ent San	nple ID:	Lab Contro	I Sampl	e Dup
Matrix: Solid										Type: So	
Analysis Batch: 40018											
·			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride		· ·	250	266.7	Guanner	mg/Kg		107	90 - 110	2	20
-			200	200.7				107	50 - 110	2	20
Lab Sample ID: 890-3456-1 MS									Client Sar	nple ID:	SS01
Matrix: Solid										· Type: So	
Analysis Batch: 40018											
· · · · · , · · · · · · · · · · · · · · · · · · ·	Sample	Sample	Spike	MS	MS				%Rec		

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	1130		249	1318	4	mg/Kg		77	90 _ 110		
Lab Sample ID: 890-3456-1 MSI Matrix: Solid Analysis Batch: 40018	D								Client Sa Prep	mple ID: Type: So	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1130		249	1318	4	mg/Kg		77	90 - 110	0	20

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Job ID: 890-3456-1

SDG: 03D20224110

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3456-1 SDG: 03D20224110

GC VOA

Prep Batch: 39851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3456-1	SS01	Total/NA	Solid	5035	
890-3456-2	SS02	Total/NA	Solid	5035	
MB 880-39851/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39851/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39851/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21514-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-21514-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
rep Batch: 39852					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39852/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 40034

880-21514-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035		0
Prep Batch: 39852						8
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	9
MB 880-39852/5-A	Method Blank	Total/NA	Solid	5035		
Analysis Batch: 40034						
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-3456-1	SS01	Total/NA	Solid	8021B	39851	
890-3456-2	SS02	Total/NA	Solid	8021B	39851	
MB 880-39851/5-A	Method Blank	Total/NA	Solid	8021B	39851	
MB 880-39852/5-A	Method Blank	Total/NA	Solid	8021B	39852	4 4
LCS 880-39851/1-A	Lab Control Sample	Total/NA	Solid	8021B	39851	
LCSD 880-39851/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39851	
880-21514-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	39851	
880-21514-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39851	
—						

Analysis Batch: 40246

Lal	b Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890	0-3456-1	SS01	Total/NA	Solid	Total BTEX	
890	0-3456-2	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3456-1	SS01	Total/NA	Solid	8015NM Prep	
890-3456-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39876

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3456-1	SS01	Total/NA	Solid	8015B NM	39777
890-3456-2	SS02	Total/NA	Solid	8015B NM	39777
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015B NM	39777
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39777
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39777
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	39777
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39777

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Job ID: 890-3456-1 SDG: 03D20224110

GC Semi VOA

Analysis Batch: 40092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3456-1	SS01	Total/NA	Solid	8015 NM	
890-3456-2	SS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3456-1	SS01	Soluble	Solid	DI Leach	<u>8</u>
890-3456-2	SS02	Soluble	Solid	DI Leach	0
MB 880-39826/1-A	Method Blank	Soluble	Solid	DI Leach	0
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	3
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3456-1 MS	SS01	Soluble	Solid	DI Leach	
890-3456-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 40018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-3456-1	SS01	Soluble	Solid	300.0	39826	
890-3456-2	SS02	Soluble	Solid	300.0	39826	
MB 880-39826/1-A	Method Blank	Soluble	Solid	300.0	39826	
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	300.0	39826	
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39826	
890-3456-1 MS	SS01	Soluble	Solid	300.0	39826	
890-3456-1 MSD	SS01	Soluble	Solid	300.0	39826	

Job ID: 890-3456-1 SDG: 03D20224110

Lab Sample ID: 890-3456-1 Matrix: Solid

Lab Sample ID: 890-3456-2

Matrix: Solid

Date Collected: 11/14/22 12:30 Date Received: 11/14/22 15:40

Client Sample ID: SS01

Project/Site: Dominator 0 Flowline

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	39851	11/17/22 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40034	11/22/22 11:15	SM	EET MID
Total/NA	Analysis	Total BTEX		1			40246	11/22/22 16:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			40092	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 02:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40018	11/20/22 20:28	СН	EET MID

Client Sample ID: SS02

Date Collected: 11/14/22 12:35 Date Received: 11/14/22 15:40

	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	39851	11/17/22 16:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40034	11/22/22 11:41	SM	EET MID
Total/NA	Analysis	Total BTEX		1			40246	11/22/22 16:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			40092	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 02:43	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	40018	11/20/22 20:45	СН	EET MID

Laboratory References:

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

Accreditation/Certification Summary

		Accreditation/Co	ertification Summary		
Client: Ensolum Project/Site: Dominato	r 0 Flowline			Job ID: 890-3456-1 SDG: 03D20224110	2
Laboratory: Eurof Unless otherwise noted, all a		were covered under each accr	reditation/certification below.		
Authority		Program	Identification Number	Expiration Date	
Texas		NELAP	T104704400-22-24	06-30-23	5
The following analytes the agency does not of		but the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for which	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					11
					13
					14

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.

Job ID: 890-3456-1 SDG: 03D20224110

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

Protocol References:

ASTM = ASTM International

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:

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

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Job ID: 890-3456-1
SDG: 03D20224110

		Sample Sun	nmary			
Client: Ensolum Project/Site: Do	n ominator 0 Flowline				Job ID: 890-3456 SDG: 03D202241 ⁻	
ab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	_
90-3456-1	SS01	Solid	11/14/22 12:30	11/14/22 15:40		_
90-3456-2	SS02	Solid	11/14/22 12:35	11/14/22 15:40	0.2	

.

Received by: (Signature)	Relinquished by: (Signature)	-14.221546		Received by: (Signature)	R	W (Signatu	Relinquished by: (Signature)
tiat	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 and conditions of sarvice. Eurofina 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 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 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 cost of sample submitted to Eurofins Xenco. A minimum charge of \$80.00 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.	rofins Xenco, Its affiliates and sul anses incurred by the client if suc Eurofins Xenco, but not analyze	from client company to Eu sibility for any losses or exp r each sample submitted to	Notice: Signature of this document and relinquishment of samples constitutives a valid purchase order from client company to Eurofins Xenco. Its affiliates and subcontractors: It assignt standard 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 circumstance of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced of the cost of samples cost of the cost of samples and a charge of \$5 for each sample submitted to Eurofins Xenco. But not analyzed. These terms will be enforced of the cost of samples cost of the cost of	elinquishment of samples nly for the cost of sample \$85.00 will be applied to	ocument and re will be liable or murn charge of	Notice: Signature of this d of service. Eurofins Xenco of Eurofins Xenco. A minit
Vi K Se Ag SiO ₂ Na Sr Tl Sn Hg: 1631/245.1/7470	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	b As Ba Be B Cd C Sb As Ba Be Cd Cr	A Texas 11 Al Sb LP 6010 : 8RCRA St	8RCRA 13PPM zed TCLP / SPLI	200.8 / 6020: tal(s) to be analy) and Met	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed
		VVV	201	1-14-27 1235	CN		5507
		VAXAVA	1 0 2.	11-14-72/730	S		502
			Depth Grab/ # of Comp Cont	Date Time Sampled Sampled	Matrix	ntification	Sample Identification
	-	PH TE	2:0	Corrected Temperature:			Total Containers:
		f = x	0.0	Temperature Reading:	NO N/A		Sample Custody Seals:
	890-3456 Chain of Custody	lo	Para	Correction Factor:	Yes No N/A	-	Cooler Custody Seals:
			No mete	et Ice:	o Blank:		SAMPLE RECEIPT
						C	PO #:
			ay received by		ata	DF	Sampler's Name:
_				COS Due Date:	105201-1131	AN KO	Project I ocation:
			Rush Code	Rout	CIERCOC	NON N	Project Number:
	ANALYSIS REQUEST		bund	(VANIA) Turn Andund	mminator D F	Man	Project Name:
HUMAN (RAY) EDD	L'highings ocurs	ensolum.com	Longrande	S7 Email:	SH2-LIS-	318	Phone:
Reporting: Level II 🗌 Level III	NIN 88720 0	Ministeral	City, State ZIP:	1882220	beal inv	Park	City, State ZIP:
oject:	A RULS HULL State of Project:	2177 Mat	Address:	WHALLAN	2 1 0 f - 1 D	AR.	Address:
UST/PST	Program:	ansolum.1	Company Name:	ic.	Shinn I		Company Name:
Work Order Comments	121S	Whater Ionnin	Bill to: (if different)		ANNWS	X N	Droiget Manager
www.xenco.com	IM (575) 988-3199	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Hobbs, NM				
	X (806) 794-1296	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	EL Paso, TX		Xenco		
Work Order No:	X (214) 902-0300 , TX (210) 509-3334	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Houston, T Midland, TX (Environment Testing	Environm	otins	eurorins
	ody	Chain of Custody	0			2	•

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Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3456 List Number: 1 Creator: Clifton, Cloe

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

Job Number: 890-3456-1 SDG Number: 03D20224110

List Source: Eurofins Carlsbad

Job Number: 890-3456-1 SDG Number: 03D20224110

List Source: Eurofins Midland

List Creation: 11/16/22 02:15 PM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3456 List Number: 2 Creator: Rodriguez, Leticia

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

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

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Job Notes

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

Authorization

RAMER

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

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/22/2022 3:47:51 PM

JOB DESCRIPTION

Dominator 0 Flowline SDG NUMBER 03D20224110

JOB NUMBER

890-3457-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



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Sample Summary	16
Chain of Custody	17
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Appendix	20

Client: Ensolum		Job ID: 890-3457-1	
Project/Site: Do	ominator 0 Flowline	SDG: 03D20224110	
Qualifiers			3
GC VOA			
Qualifier	Qualifier Description		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		5
GC Semi VOA			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			
Qualifier	Qualifier Description		
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control lir	mits are not	8
	applicable.		
U	Indicates the analyte was analyzed for but not detected.		9
Glossary			
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		
%R	Percent Recovery		
CFL	Contains Free Liquid		
CFU	Colony Forming Unit		
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
DLC	Decision Level Concentration (Radiochemistry)		
EDL	Estimated Detection Limit (Dioxin)		
LOD	Limit of Detection (DoD/DOE)		
LOQ	Limit of Quantitation (DoD/DOE)		
MCL	EPA recommended "Maximum Contaminant Level"		
MDA	Minimum Detectable Activity (Radiochemistry)		
MDC	Minimum Detectable Concentration (Radiochemistry)		
MDL	Method Detection Limit		
ML	Minimum Level (Dioxin)		
MPN	Most Probable Number		
MQL	Method Quantitation Limit		
NC	Not Calculated		
ND	Not Detected at the reporting limit (or MDL or EDL if shown)		
NEG	Negative / Absent		
POS	Positive / Present		
PQL	Practical Quantitation Limit		
PRES	Presumptive		
QC	Quality Control		
RER	Relative Error Ratio (Radiochemistry)		

Reporting Limit or Requested Limit (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

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

RL

RPD TEF

TEQ

TNTC

4

5

Job ID: 890-3457-1 SDG: 03D20224110

Job ID: 890-3457-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Narrative

Job Narrative 890-3457-1

Receipt

The sample was received on 11/14/2022 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS03 (890-3457-1).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS03 (890-3457-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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 880-39826 and 880-39826 and analytical batch 880-40018 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.

RL

0.00200

Unit

mg/Kg

D

Prepared

11/17/22 16:07

Job ID: 890-3457-1 SDG: 03D20224110

Client Sample ID: SS03

Project/Site: Dominator 0 Flowline

Date Collected: 11/ Date Received: 11/14/22 15:40

S

Client: Ensolum

Analyte

Benzene

Lab Sample ID: 890-3457-1

Analyzed

11/21/22 20:57

Matrix: Solid

Dil Fac

1

5

D. 3303	
/14/22 13:10	

Result Qualifier

<0.00200 U

Sample Depth: 0.2	
_	
Method: SW846 8021B - Volatile Organic Compounds (GC)	

Chloride	70.3		5.00	mg/Kg			11/20/22 20:51	
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: MCAWW 300.0 - Anion	s, Ion Chromato	ography - So	oluble					
o-Terphenyl	94		70 - 130			11/17/22 08:58	11/19/22 03:05	
1-Chlorooctane	91		70 - 130			11/17/22 08:58	11/19/22 03:05	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 03:05	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 03:05	
(GRO)-C6-C10			50.0	0.0				
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/19/22 03:05	
Method: SW846 8015B NM - Die Analyte	• •	Dinics (DRO) Qualifier	(GC) RL	Unit	D	Prepared	Analyzed	Dil Fa
Fotal TPH	<50.0	U	50.0	mg/Kg		·	11/21/22 10:45	
Method: SW846 8015 NM - Dies Analyte	• •	<mark>ics (DRO) (</mark> Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/22/22 16:26	
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: TAL SOP Total BTEX -	Total BTEX Calo	culation						
1,4-Difluorobenzene (Surr)	96		70 - 130			11/17/22 16:07	11/21/22 20:57	
4-Bromofluorobenzene (Surr)	139	S1+	70 - 130			11/17/22 16:07	11/21/22 20:57	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/17/22 16:07	11/21/22 20:57	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 20:57	
m-Xylene & p-Xylene	<0.00399		0.00399	mg/Kg		11/17/22 16:07	11/21/22 20:57	
Ethylbenzene	<0.00200		0.00200	mg/Kg		11/17/22 16:07	11/21/22 20:57	
Toluene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 20:57	
				5 5				

Project/Site: Dominator 0 Flowline

Job ID: 890-3457-1 SDG: 03D20224110

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

-				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		5
880-21560-A-1-E MS	Matrix Spike	129	97	·	
880-21560-A-1-F MSD	Matrix Spike Duplicate	122	91		6
890-3457-1	SS03	139 S1+	96		
LCS 880-39852/1-A	Lab Control Sample	113	89		
LCSD 880-39852/2-A	Lab Control Sample Dup	128	98		
MB 880-39852/5-A	Method Blank	81	89		8
Surrogate Legend					
BFB = 4-Bromofluorober	ızene (Surr)				9

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) Lab Sample ID **Client Sample ID** (70-130) 890-3450-A-1-C MS Matrix Spike 89 87 890-3450-A-1-D MSD Matrix Spike Duplicate 89 87 890-3457-1 SS03 91 94 LCS 880-39777/2-A Lab Control Sample 96 107 LCSD 880-39777/3-A Lab Control Sample Dup 99 110 MB 880-39777/1-A 98 Method Blank 110

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Project/Site: Dominator 0 Flowline

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39852/5-A Matrix: Solid Analysis Batch: 40034						Client Sa	mple ID: Metho Prep Type: 1 Prep Batch	otal/NA
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/17/22 16:07	11/21/22 12:20	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			11/17/22 16:07	11/21/22 12:20	1
1,4-Difluorobenzene (Surr)	89		70 - 130			11/17/22 16:07	11/21/22 12:20	1
Lab Sample ID: LCS 880-39852/1-A Matrix: Solid					C	lient Sample I	D: Lab Control Prep Type: 1	

Analysis Batch: 40034

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08813		mg/Kg		88	70 - 130	
Toluene	0.100	0.1012		mg/Kg		101	70 - 130	
Ethylbenzene	0.100	0.09551		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.2098		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.09541		mg/Kg		95	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-39852/2-A

Matrix: Solid

Analysis Batch: 40034							Prep	Batch:	39852
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09764		mg/Kg		98	70 - 130	10	35
Toluene	0.100	0.09569		mg/Kg		96	70 - 130	6	35
Ethylbenzene	0.100	0.1017		mg/Kg		102	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130	7	35
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130	9	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-21560-A-1-E MS

Matrix: Solid

Analysis Batch: 40034									Prep Batch: 39852	
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0996	0.09549		mg/Kg		96	70 - 130	
Toluene	<0.00201	U	0.0996	0.1016		mg/Kg		102	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

SDG: 03D20224110

Job ID: 890-3457-1

Lab Sample ID: 880-21560-A-1-E MS

QC Sample Results

MS MS

Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

Result

0.09687

0.2130

0.09650

Spike

Added

0.0996

0.199

0.0996

Limits

Client: Ensolum Project/Site: Dominator 0 Flowline

Matrix: Solid

Analyte

o-Xylene

Surrogate

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 40034

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

Sample Sample

<0.00201

%Recovery

<0.00402 U

<0.00201 U

Result Qualifier

U

MS MS

Qualifier

Prep Type: Total/NA

Prep Batch: 39852

Client Sample ID: Matrix Spike

%Rec

Limits

70 - 130

70 - 130

70 - 130

%Rec

97

107

97

D

1

1

1

1

4-Bromofluorobenzene (Surr)	129		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								
	F 140D										Bento
Lab Sample ID: 880-21560-A-1						CI	ient Sa		D: Matrix Sp		
Matrix: Solid									Prep 1	Гуре: То	tal/NA
Analysis Batch: 40034									Prep	Batch:	39852
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.08858		mg/Kg		89	70 - 130	8	35
Toluene	<0.00201	U	0.0994	0.09704		mg/Kg		98	70 - 130	5	35
Ethylbenzene	<0.00201	U	0.0994	0.09117		mg/Kg		92	70 - 130	6	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2020		mg/Kg		102	70 - 130	5	35
o-Xylene	<0.00201	U	0.0994	0.09189		mg/Kg		92	70 - 130	5	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	122		70 - 130								
1,4-Difluorobenzene (Surr)	91		70 - 130								

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

Lab Sample ID: MB 880-39777/1-A **Client Sample ID: Method Blank** Matrix: Solid Prep Type: Total/NA Prep Batch: 39777 Analysis Batch: 39876 MB MB Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte 50.0 <50.0 U 11/17/22 08:58 11/18/22 19:50 Gasoline Range Organics mg/Kg (GRO)-C6-C10 11/18/22 19:50 Diesel Range Organics (Over <50.0 U 50.0 11/17/22 08:58 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/17/22 08:58 11/18/22 19:50 mg/Kg MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 1-Chlorooctane 98 70 - 130 11/17/22 08:58 11/18/22 19:50 o-Terphenyl 110 70 - 130 11/17/22 08:58 11/18/22 19:50 **Client Sample ID: Lab Control Sample**

Lab Sample ID: LCS 880-39777/2-A Matrix: Solid Analysis Batch: 39876

Analysis Batch: 39876							Prep	Batch: 39777
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	854.3		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	977.8		mg/Kg		98	70 - 130	
C10-C28)								

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Prep Type: Total/NA

QC Sample Results

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: LCS 880-39	777/2-A		-/(-/(Client	t Sample	ID: Lab Co	ontrol Sa	amnle
Matrix: Solid							onem	Compic		ype: To	
Analysis Batch: 39876										Batch:	
									i i op	Batom	
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	107		70 - 130								
— Г											_
Lab Sample ID: LCSD 880-3	9777/3-A					Clier	nt San	nple ID:	Lab Contro		
Matrix: Solid										ype: To	
Analysis Batch: 39876									Prep	Batch:	39777
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1009		mg/Kg		101	70 - 130	17	20
Diesel Range Organics (Over			1000	1035		mg/Kg		103	70 - 130	6	20
C10-C28)											
	I CSD	LCSD									
Surrogate	%Recovery		Limits								
1-Chlorooctane			70 - 130								
o-Terphenyl	110		70 - 130								
_	110		101100								
Lab Sample ID: 890-3450-A-	1-C MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid										ype: To	
Analysis Batch: 39876										Batch:	
	Sample	Sample	Spike	MS	MS				%Rec	Daton	
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<50.0		998	955.2		mg/Kg		94	70 - 130		
(GRO)-C6-C10						0 0					
Diesel Range Organics (Over	<50.0	U	998	1084		mg/Kg		109	70 - 130		
C10-C28)											
	MS	MS									
Surrogate	%Recovery		Limits								
1-Chlorooctane			70 - 130								
o-Terphenyl	87		70 - 130								
	•										
Lab Sample ID: 890-3450-A-	1-D MSD					CI	ient S	ample IC): Matrix Sp	oike Dun	licate
Matrix: Solid										ype: To	
Analysis Batch: 39876										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec	Daton	RPD
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0		997	983.4		mg/Kg		97	70 - 130	3	20
(GRO)-C6-C10	50.0	-		000.1						5	
Diesel Range Organics (Over	<50.0	U	997	1099		mg/Kg		110	70 - 130	1	20
C10-C28)											
	Men	MSD									
	IVISD	WSD									

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	87		70 - 130

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QC Sample Results

Job ID: 890-3457-1 SDG: 03D20224110

Project/Site: Dominator 0 Flowline

Client: Ensolum

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39826/1-A Matrix: Solid											Client S	Sample ID:		
Analysis Batch: 40018												Prep	Type: S	oluble
Analysis Batch. 40010		мв	MR											
Analyte	Re		Qualifier		RL		Unit		D	P	repared	Analy	zed	Dil Fac
Chloride		5.00 l			5.00		mg/K	g				11/20/22		1
-								-						
Lab Sample ID: LCS 880-39826/2-/	A								Cli	ent	Sample	D: Lab C	ontrol S	ample
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 40018														
				Spike	LO	S LO	cs					%Rec		
Analyte				Added			ualifier	Unit		D	%Rec	Limits		
Chloride				250	260	.4		mg/Kg			104	90 - 110		
Lab Sample ID: LCSD 880-39826/3	8- A							Cli	ent S	am	nle ID: I	Lab Contr	ol Samp	le Dur
Matrix: Solid													Type: S	
Analysis Batch: 40018													.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
-				Spike	LCS	D L	CSD					%Rec		RPD
				Spike Added			CSD Jualifier	Unit		D	%Rec	%Rec Limits	RPD	
Analyte						lt Q		Unit mg/Kg		<u>D</u>	%Rec 107		2	Limit
Analyte Chloride				Added	Res	lt Q				<u>D</u>	107	Limits 90 - 110	2	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M				Added	Res	lt Q				<u>D</u>	107	Limits 90 - 110 Sample II	2 D: Matrix	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid	 S			Added	Res	lt Q				D	107	Limits 90 - 110 Sample II	2	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid	S Sample	Sampl		Added	266	lt Q	Qualifier			<u>D</u>	107	Limits 90 - 110 Sample II	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018	Sample	Sampl		Added 250	266	S M	Qualifier			D	107	Limits 90 - 110 Sample II Prep	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte	Sample			Added 250 Spike	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg			107 Client	Limits 90 - 110 Sample II Prep %Rec	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg			107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110	2 D: Matrix Type: S	Limi 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M Matrix: Solid	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M	Sample Result 1130	Qualif	fier	Added 250 Spike Added 249	Res 266 Res	$\frac{\mathbf{lt}}{7} \mathbf{Q}$	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike coluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M Matrix: Solid	Sample Result 1130	Qualif	ier	Added 250 Spike Added	Res 260 M Res 13	$\frac{\mathbf{lt}}{7} \mathbf{Q}$ $\mathbf{S} \mathbf{M} \mathbf{Q}$ $\frac{\mathbf{lt}}{8} \mathbf{Q}$ $\mathbf{D} \mathbf{M}$	lualifier IS Iualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S Prep	2 D: Matrix Type: S	plicate

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3457-1 SDG: 03D20224110

GC VOA

Prep Batch: 39852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3457-1	SS03	Total/NA	Solid	5035	
MB 880-39852/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39852/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39852/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21560-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-21560-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 40034					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3457-1	SS03	Total/NA	Solid	8021B	39852
MB 880-39852/5-A	Method Blank	Total/NA	Solid	8021B	39852
LCS 880-39852/1-A	Lab Control Sample	Total/NA	Solid	8021B	39852
LCSD 880-39852/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39852
880-21560-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	39852
880-21560-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39852
nalysis Batch: 40242					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3457-1	SS03	Total/NA	Solid	Total BTEX	
GC Semi VOA					
rep Batch: 39777					
	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batcl
Lab Sample ID	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1					Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A	SS03	Total/NA	Solid	8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A	SS03 Method Blank	Total/NA Total/NA	Solid Solid	8015NM Prep 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A	SS03 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA	Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD	SS03 Method Blank Lab Control Sample Lab Control Sample Dup	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/2-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID 890-3457-1	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type	Solid Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep Method	Prep Batcl
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID 890-3457-1 MB 880-39777/1-A	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS03	Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA	Solid Solid Solid Solid Solid Solid Matrix Solid	8015NM Prep	Prep Batcl 3977 3977
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS03 Method Blank	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA Total/NA	Solid Solid Solid Solid Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep	Prep Batcl 3977 3977 3977
Lab Sample ID 890-3457-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS	SS03 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS03 Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid Solid Solid Solid	8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015B NM 8015B NM 8015B NM	Prep Batcl

Analysis Batch: 40093

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3457-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-3457-1	SS03	Soluble	Solid	DI Leach
MB 880-39826/1-A	Method Blank	Soluble	Solid	DI Leach
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	DI Leach
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach

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Job ID: 890-3457-1 SDG: 03D20224110

HPLC/IC (Continued)

Leach Batch: 39826 (Continued)

	A-1-C MS Matrix Spike	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
	Batch: 40018 Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Lab Sam	ple ID Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch

890-3457-1	SS03	Soluble	Solid	300.0	39826
MB 880-39826/1-A	Method Blank	Soluble	Solid	300.0	39826
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	300.0	39826
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39826
890-3456-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	39826
890-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39826

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Job ID: 890-3457-1 SDG: 03D20224110

Lab Sample ID: 890-3457-1 Matrix: Solid

Client Sample ID: SS03 Date Collected: 11/14/22 13:10 Date Received: 11/14/22 15:40

Project/Site: Dominator 0 Flowline

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	39852	11/17/22 16:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40034	11/21/22 20:57	SM	EET MID
Total/NA	Analysis	Total BTEX		1			40242	11/22/22 16:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			40093	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 03:05	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40018	11/20/22 20:51	СН	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

		Accreditation/C	ertification Summary		
Client: Ensolum Project/Site: Dominator	r 0 Flowline			Job ID: 890-3457-1 SDG: 03D20224110	2
Laboratory: Eurofi Unless otherwise noted, all a		bry were covered under each acc	reditation/certification below.		
Authority		Program	Identification Number	Expiration Date	
Texas		NELAP	T104704400-22-24	06-30-23	
The following analytes the agency does not of		ort, but the laboratory is not certif	fied by the governing authority. This list ma	ay include analytes for which	5
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					11
					13
					14

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Project/Site: Dominator 0 Flowline

Job ID: 890-3457-1 SDG: 03D20224110

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

Protocol References:

Client: Ensolum

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:

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

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Sample Summary

Job ID: 890-3457-1 SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3457-1	SS03	Solid	11/14/22 13:10	11/14/22 15:40	0.2	4
						5
						8
						9
						12
						13

.

Program: UST/PST PRP Brownfields RRC Superfund State of Project: PST/UST TRRP Level IV Other: Image: State of Project: ADaPT Other: Other: Image: State of Project: ADaPT Other: Image: State of Project: Image: State of Project: ADaPT None: NO DI W ater: H ₂ O Image: State of Custody SpO : HP BaHSO :: MABIS BaHSO :: MABIS Image: State of Custody ADAPT II U HNO :: KSe Ag SIO : NaSO : NASO : MABIS Image: State of Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody Image: State HabOH: Zn BaHSO :: MABIS Image: State on Custody <th>ANALYSIS REQUEST ANALYSIS REQUEST ANALYSIS RECUEST ANALYSIS RECUEST BIOLOGY B</th> <th>Online Madress: Organization Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Interviewel by Expendence of City of the City of</th> <th>Company Name: Company Name: Company Name: Company Name: Company Name: Company Name: Company Name: Construction Construction Correction Factor: Corrected Temperature Corrected Temperature: Corrected Temperature Corrected Temperature Corrected Temperature Conscience Conscience <tr< th=""><th></th></tr<></th>	ANALYSIS REQUEST ANALYSIS REQUEST ANALYSIS RECUEST ANALYSIS RECUEST BIOLOGY B	Online Madress: Organization Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Image: City, State ZIP: City, State ZIP: City, State ZIP: Interviewel by Expendence of City of the City of	Company Name: Construction Construction Correction Factor: Corrected Temperature Corrected Temperature: Corrected Temperature Corrected Temperature Corrected Temperature Conscience Conscience <tr< th=""><th></th></tr<>	
Work Order No:	Work	Chain of Custody Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Environment Testing Midland EL Pase Hobbs	rofins

11/22/2022

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Job Number: 890-3457-1 SDG Number: 03D20224110

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3457 List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3457 List Number: 2 Creator: Rodriguez, Leticia

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

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

Job Number: 890-3457-1 SDG Number: 03D20224110

List Source: Eurofins Midland

List Creation: 11/16/22 02:15 PM

Received by OCD: 1/23/2023 11:18:01 AM

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Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/22/2022 3:47:51 PM

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

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

Received by OCD: 1/23/2023 11:18:01 AM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/23/2022 1:48:11 PM

JOB DESCRIPTION

Dominator 0 Flowline SDG NUMBER 03D20224110

JOB NUMBER

890-3458-1

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Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



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	Demittions/Glossary	
Client: Ensolum Project/Site: Do	Job ID: 890-3458-1 pminator 0 Flowline SDG: 03D20224110	2
Qualifiers		3
GC VOA		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VOA		5
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		
Qualifier	Qualifier Description	
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not	
	applicable.	8
U	Indicates the analyte was analyzed for but not detected.	
Glossary		9
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)	4.0
Dil Fac	Dilution Factor	13
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)	

Method Detection Limit Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

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

MDL

ML MPN

MQL

NC

ND

NEG

POS

PQL

QC RER

RL RPD

TEF TEQ

TNTC

PRES

Job ID: 890-3458-1 SDG: 03D20224110

Job ID: 890-3458-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Narrative

Job Narrative 890-3458-1

Receipt

The sample was received on 11/14/2022 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS04 (890-3458-1).

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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39826 and 880-39826 and analytical batch 880-40018 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.

4

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

Method: TAL SOP Total BTEX - Total BTEX Calculation

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

Result Qualifier

Qualifier

<0.00198 U

<0.00198 U

<0.00198 U

<0.00397 U

<0.00198 U

<0.00397 U

107

94

<0.00397 U

Result Qualifier

Result Qualifier

<49.9 U

%Recovery

RL

0.00198

0.00198

0.00198

0.00397

0.00198

0.00397

Limits

70 - 130

70 - 130

RL

RL

49.9

0.00397

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

D

D

D

Prepared

11/22/22 09:18

11/22/22 09:18

11/22/22 09:18

11/22/22 09:18

11/22/22 09:18

11/22/22 09:18

Prepared

11/22/22 09:18

11/22/22 09:18

Prepared

Prepared

Job ID: 890-3458-1 SDG: 03D20224110

Client Sample ID: SS04

Project/Site: Dominator 0 Flowline

Date Collected: 11/14/22 12:45 Date Received: 11/14/22 15:40

Sample Depth: 0.2

Client: Ensolum

Analyte

Benzene

Toluene

o-Xylene

Surrogate

Analyte

Analyte

Total TPH

Total BTEX

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-3458-1

Analyzed

11/22/22 17:03

11/22/22 17:03

11/22/22 17:03

11/22/22 17:03

11/22/22 17:03

11/22/22 17:03

Analyzed

11/22/22 17:03

11/22/22 17:03

Analyzed

11/23/22 13:56

Analyzed

11/21/22 10:45

Matrix: Solid

Dil Fac

1

1

1

1

1

1

1

1

Dil Fac

Dil Fac

Dil Fac

5
8
9

12 13 14

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		11/17/22 08:58	11/19/22 03:26	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		11/17/22 08:58	11/19/22 03:26	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/17/22 08:58	11/19/22 03:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			11/17/22 08:58	11/19/22 03:26	1
o-Terphenyl	88		70 - 130			11/17/22 08:58	11/19/22 03:26	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			5.03	mg/Kg		·	11/20/22 20:57	

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Released to Imaging: 2/9/2023 1:30:36 PM
Project/Site: Dominator 0 Flowline

Job ID: 890-3458-1 SDG: 03D20224110

Prep Type: Total/NA

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

-				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		5
880-21853-A-1-D MS	Matrix Spike	99	116		
880-21853-A-1-E MSD	Matrix Spike Duplicate	96	116		6
890-3458-1	SS04	107	94		
LCS 880-40183/1-A	Lab Control Sample	93	118		
LCSD 880-40183/2-A	Lab Control Sample Dup	113	112		
MB 880-40183/5-A	Method Blank	83	101		8
Surrogate Legend					
BFB = 4-Bromofluorober	nzene (Surr)				9

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) Lab Sample ID **Client Sample ID** (70-130) 890-3450-A-1-C MS Matrix Spike 89 87 890-3450-A-1-D MSD Matrix Spike Duplicate 89 87 890-3458-1 SS04 87 88 LCS 880-39777/2-A Lab Control Sample 96 107 LCSD 880-39777/3-A Lab Control Sample Dup 99 110 MB 880-39777/1-A 98 Method Blank 110

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3458-1 SDG: 03D20224110

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 40183

Prep Batch: 40183

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40183/5-A	
Matrix: Solid	

Project/Site: Dominator 0 Flowline

Matrix: Solid Analysis Batch: 40173

Client: Ensolum

MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
< 0.00200	U	0.00200	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
<0.00200	U	0.00200	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
<0.00200	U	0.00200	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
<0.00400	U	0.00400	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
<0.00200	U	0.00200	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
<0.00400	U	0.00400	mg/Kg		11/22/22 09:18	11/22/22 10:52	1
МВ	МВ						
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
83		70 - 130			11/22/22 09:18	11/22/22 10:52	1
101		70 - 130			11/22/22 09:18	11/22/22 10:52	1
	Result <0.00200	Result Qualifier <0.00200	Result Qualifier RL <0.00200	Result Qualifier RL Unit <0.00200	Result Qualifier RL Unit D <0.00200	Result Qualifier RL Unit D Prepared <0.00200	Result Qualifier RL Unit D Prepared Analyzed <0.00200

Lab Sample ID: LCS 880-40183/1-A Matrix: Solid

Analysis Batch: 40173

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09122		mg/Kg		91	70 - 130	
Toluene	0.100	0.08358		mg/Kg		84	70 - 130	
Ethylbenzene	0.100	0.08326		mg/Kg		83	70 - 130	
m-Xylene & p-Xylene	0.200	0.1684		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.08323		mg/Kg		83	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: LCSD 880-40183/2-A

Matrix: Solid

Analysis Batch: 40173							Prep	Batch:	40183
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09438		mg/Kg		94	70 - 130	3	35
Toluene	0.100	0.09480		mg/Kg		95	70 - 130	13	35
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130	19	35
m-Xylene & p-Xylene	0.200	0.2160		mg/Kg		108	70 - 130	25	35
o-Xylene	0.100	0.1073		mg/Kg		107	70 - 130	25	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)			70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-21853-A-1-D MS

Matrix: Solid

Analysis Batch: 40173									Prep	o Batch: 4018	83
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00199	U	0.101	0.09514		mg/Kg		94	70 - 130		
Toluene	<0.00199	U	0.101	0.08944		mg/Kg		89	70 - 130		

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: 880-21853-/ Matrix: Solid	A-1-D MS							Client	Sample ID Prep 1	: Matrix Type: To	
Analysis Batch: 40173										Batch:	
Analysis Batch. 40170	Sample	Sample	Spike	MS	MS				%Rec	Batern.	-0100
Analyte	•	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	<0.00199		0.101	0.08877		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene	<0.00398		0.202	0.1805		mg/Kg		89	70 - 130		
o-Xylene	<0.00199		0.101	0.08821		mg/Kg		87	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	99		70 - 130								
1,4-Difluorobenzene (Surr)	116		70 - 130								
Lab Sample ID: 880-21853-/	A-1-E MSD					CI	ient Sa	ample ID	: Matrix Sp	oike Dup	olicate
Matrix: Solid	A-1-E MSD					CI	ient Sa	ample ID	Prep 1	Type: To	tal/NA
Matrix: Solid		Samolo	Spiko	MSD	MSD	CI	ient Sa	ample ID	Prep 1 Prep		tal/NA 40183
Matrix: Solid Analysis Batch: 40173	Sample	•	Spike Added		MSD Qualifier				Prep 1 Prep %Rec	Type: To Batch:	tal/NA 40183 RPD
Matrix: Solid Analysis Batch: 40173 Analyte	Sample	Qualifier	Spike Added 0.101		MSD Qualifier	Unit	ient Sa	mple ID	Prep 1 Prep	Type: To	tal/NA 40183 RPD
Matrix: Solid Analysis Batch: 40173 Analyte Benzene	Sample Result	Qualifier	Added	Result				%Rec	Prep 1 Prep %Rec Limits	Batch:	tal/NA 40183 RPD Limit
Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene	Sample 	Qualifier U U	Added	Result 0.09257		- <mark>Unit</mark> mg/Kg		%Rec 92	Prep 7 Prep %Rec Limits 70 - 130	Type: Top Batch: RPD 3	tal/NA 40183 RPD Limit 35 35
Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene Ethylbenzene	Sample Result <0.00199 <0.00199	Qualifier U U U	Added 0.101 0.101	Result 0.09257 0.08274		- <mark>Unit</mark> mg/Kg mg/Kg		%Rec 92 82	Prep 7 Prep %Rec Limits 70 - 130 70 - 130	Type: To Batch: RPD 3 8	tal/NA 40183 RPD Limit 35
Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result <0.00199 <0.00199 <0.00199	Qualifier U U U U	Added 0.101 0.101 0.101	Result 0.09257 0.08274 0.08172		Unit mg/Kg mg/Kg mg/Kg		%Rec 92 82 81	Prep 7 Prep %Rec Limits 70 - 130 70 - 130 70 - 130	Type: To Batch: RPD 3 8 8	tal/NA 40183 RPD Limit 35 35 35
Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	Sample Result <0.00199 <0.00199 <0.00199 <0.00398 <0.00199	Qualifier U U U U	Added 0.101 0.101 0.101 0.202	Result 0.09257 0.08274 0.08172 0.1642		Unit mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 92 82 81 81	Prep 7 Prep 9 %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: To Batch: RPD 3 8 8 8 9	tal/NA 40183 RPD Limit 35 35 35 35
Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene	Sample Result <0.00199 <0.00199 <0.00199 <0.00398 <0.00199	Qualifier U U U U U U MSD	Added 0.101 0.101 0.101 0.202	Result 0.09257 0.08274 0.08172 0.1642		Unit mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 92 82 81 81	Prep 7 Prep 9 %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: To Batch: RPD 3 8 8 8 9	tal/NA 40183 RPD Limit 35 35 35 35
Lab Sample ID: 880-21853-7 Matrix: Solid Analysis Batch: 40173 Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene o-Xylene Surrogate 4-Bromofluorobenzene (Surr)	Sample Result <0.00199 <0.00199 <0.00199 <0.00398 <0.00199 <i>MSD</i>	Qualifier U U U U U U MSD	Added 0.101 0.101 0.101 0.202 0.101	Result 0.09257 0.08274 0.08172 0.1642		Unit mg/Kg mg/Kg mg/Kg mg/Kg		%Rec 92 82 81 81	Prep 7 Prep 9 %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130	Type: To Batch: RPD 3 8 8 8 9	tal/NA 40183 RPD Limit 35 35 35 35

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

Lab Sample ID: MB 880-39777/1-, Matrix: Solid Analysis Batch: 39876	Α					Client Sa	mple ID: Metho Prep Type: ٦ Prep Batcl	Total/NA
	МВ	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			11/17/22 08:58	11/18/22 19:50	1
o-Terphenyl	110		70 - 130			11/17/22 08:58	11/18/22 19:50	1
Lab Sample ID: LCS 880-39777/2	-A				c	lient Sample I	D: Lab Control	Sample

Matrix: Solid Analysis Batch: 39876 Spike LCS LCS Analyte Added Result Qualifier Unit Gasoline Range Organics 1000 854.3 mg/Kg

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	854.3		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	977.8		mg/Kg		98	70 - 130	
C10-C28)								

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Prep Type: Total/NA

%Rec

Prep Batch: 39777

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: LCS 880-39 Matrix: Solid	777/2-A						Client	t Sample	ID: Lab Co Prep 1	ontrol S Type: To	
Analysis Batch: 39876										Batch:	
	1.05	LCS									
Surrogate	%Recovery		Limits								
1-Chlorooctane		Quaimer	70 - 130								
o-Terphenyl	90 107		70 - 130 70 - 130								
	107		70 - 750								
Lab Sample ID: LCSD 880-3	9777/3-A					Clie	nt Sam	nole ID:	Lab Contro	ol Sampl	e Dup
Matrix: Solid										Гуре: То	
Analysis Batch: 39876										Batch:	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	1009		mg/Kg		101	70 - 130	17	20
(GRO)-C6-C10											
Diesel Range Organics (Over			1000	1035		mg/Kg		103	70 - 130	6	20
C10-C28)											
	LCSD	LCSD									
Surrogate	%Recovery		Limits								
1-Chlorooctane			70 - 130								
o-Terphenyl	110		70 - 130								
Lab Sample ID: 890-3450-A	-1-C MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid									Prep 1	Гуре: То	tal/NA
Analysis Batch: 39876										Batch:	
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<50.0	U	998	955.2		mg/Kg		94	70 - 130		
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	998	1084		mg/Kg		109	70 - 130		
C10-C28)											
	MS	MS									
Surrogate	%Recovery		Limits								
1-Chlorooctane			70 - 130								
o-Terphenyl	87		70 - 130								
Lab Sample ID: 890-3450-A	-1-D MSD					CI	ient Sa	ample IC): Matrix S	oike Dup	olicate
Matrix: Solid								- i - i		Гуре: То	
Analysis Batch: 39876										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	997	983.4		mg/Kg		97	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	997	1099		mg/Kg		110	70 - 130	1	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery		Limits								

	10/30	WSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	87		70 - 130

SDG: 03D20224110

QC Sample Results

Job ID: 890-3458-1 SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39826/1-A Matrix: Solid											Client S	Sample ID:		
Analysis Batch: 40018												Prep	Type: S	oluble
Analysis Batch. 40010		мв	MR											
Analyte	Re		Qualifier		RL		Unit		D	P	repared	Analy	zed	Dil Fac
Chloride		5.00 l			5.00		mg/K	g				11/20/22		1
-								-						
Lab Sample ID: LCS 880-39826/2-/	A								Cli	ent	Sample	D: Lab C	ontrol S	ample
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 40018														
				Spike	LO	S LO	cs					%Rec		
Analyte				Added			ualifier	Unit		D	%Rec	Limits		
Chloride				250	260	.4		mg/Kg			104	90 - 110		
Lab Sample ID: LCSD 880-39826/3	8- A							Cli	ent S	am	nle ID: I	Lab Contr	ol Samp	le Dur
Matrix: Solid													Type: S	
Analysis Batch: 40018													.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
-				Spike	LCS	D L	CSD					%Rec		RPD
				Spike Added			CSD Jualifier	Unit		D	%Rec	%Rec Limits	RPD	
Analyte						lt Q		Unit mg/Kg		<u>D</u>	%Rec 107		2	Limit
Analyte Chloride				Added	Res	lt Q				<u>D</u>	107	Limits 90 - 110	2	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M				Added	Res	lt Q				<u>D</u>	107	Limits 90 - 110 Sample II	2 D: Matrix	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid	 S			Added	Res	lt Q				D	107	Limits 90 - 110 Sample II	2	Limit 20
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid	S Sample	Sampl		Added	266	lt Q	Qualifier			<u>D</u>	107	Limits 90 - 110 Sample II	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018	Sample	Sampl		Added 250	266	S M	Qualifier			D	107	Limits 90 - 110 Sample II Prep	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte	Sample			Added 250 Spike	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg			107 Client	Limits 90 - 110 Sample II Prep %Rec	2 D: Matrix	Limit 20 Spike
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg			107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110	2 D: Matrix Type: S	Limi 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M Matrix: Solid	Sample Result 1130			Added 250 Spike Added	Res 266 Res	S M	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike soluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M	Sample Result 1130	Qualif	fier	Added 250 Spike Added 249	Res 266 Res	$\frac{\mathbf{lt}}{7} \mathbf{Q}$	ualifier IS Jualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S	2 D: Matrix Type: S	Limit 20 Spike coluble
Analyte Chloride Lab Sample ID: 890-3456-A-1-C M Matrix: Solid Analysis Batch: 40018 Analyte Chloride Lab Sample ID: 890-3456-A-1-D M Matrix: Solid	Sample Result 1130	Qualif	ier	Added 250 Spike Added	Res 260 M Res 13	$\frac{\mathbf{lt}}{7} \mathbf{Q}$ $\mathbf{S} \mathbf{M} \mathbf{Q}$ $\frac{\mathbf{lt}}{8} \mathbf{Q}$ $\mathbf{D} \mathbf{M}$	lualifier IS Iualifier	mg/Kg	Client		107 Client %Rec 77	Limits 90 - 110 Sample II Prep %Rec Limits 90 - 110 D: Matrix S Prep	2 D: Matrix Type: S	plicate

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Analysis Batch: 40173

SDG: 03D20224110	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3458-1	SS04	Total/NA	Solid	8021B	40183
MB 880-40183/5-A	Method Blank	Total/NA	Solid	8021B	40183
LCS 880-40183/1-A	Lab Control Sample	Total/NA	Solid	8021B	40183
LCSD 880-40183/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40183
880-21853-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	40183
880-21853-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40183
rep Batch: 40183					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3458-1	SS04	Total/NA	Solid	5035	
MB 880-40183/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40183/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40183/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21853-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-21853-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 40332					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3458-1	SS04	Total/NA	Solid	Total BTEX	
-	3304	IOIAI/INA	Solid		
GC Semi VOA rep Batch: 39777					Drop Patel
C Semi VOA rep Batch: 39777 Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
iC Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A	Client Sample ID SS04 Method Blank	Prep Type Total/NA Total/NA	Matrix Solid Solid	Method 8015NM Prep 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A	Client Sample ID SS04 Method Blank Lab Control Sample	Prep Type Total/NA Total/NA Total/NA	Matrix Solid	Method 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup	Prep Type Total/NA Total/NA	Matrix Solid Solid Solid Solid	Method 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS	Client Sample ID SS04 Method Blank Lab Control Sample	Prep Type Total/NA Total/NA Total/NA Total/NA	Matrix Solid Solid Solid Solid Solid	Method 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/2-A 890-3450-A-1-C MS 890-3450-A-1-D MSD	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA	Matrix Solid Solid Solid Solid Solid Solid	Method 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type	Matrix Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/2-A 890-3450-A-1-C MS 890-3450-A-1-D MSD nalysis Batch: 39876 Lab Sample ID	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Matrix Solid Solid Solid Solid Solid Solid	Method 8015NM Prep	Prep Batch
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD nalysis Batch: 39876 Lab Sample ID 890-3458-1	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type	Matrix Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep	Prep Batch 39777
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD nalysis Batch: 39876 Lab Sample ID 890-3458-1 MB 880-39777/1-A	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04	Prep Type Total/NA	Matrix Solid Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep	Prep Batch 39777 39777
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD nalysis Batch: 39876 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04 Method Blank	Prep Type Total/NA	Matrix Solid Solid	Method 8015NM Prep	Prep Batch 39777 39777 39777
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD nalysis Batch: 39876 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04 Method Blank Lab Control Sample	Prep Type Total/NA	Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep	Prep Batch 39777 39777 39777 39777
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup	Prep Type Total/NA	Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep 8015B NM 8015B NM 8015B NM 8015B NM 8015B NM	Prep Batch 39777 39777 39777 39777 39777 39777
C Semi VOA rep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD malysis Batch: 39876 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS 890-3450-A-1-D MSD	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike	Prep Type Total/NA Total/NA	Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep 8015B NM 8015B NM 8015B NM 8015B NM 8015B NM 8015B NM	Prep Batch 39777 39777 39777 39777 39777 39777
C Semi VOA Prep Batch: 39777 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS Analysis Batch: 39876 Lab Sample ID 890-3458-1 MB 880-39777/1-A LCS 880-39777/2-A LCSD 880-39777/3-A 890-3450-A-1-C MS	Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate Client Sample ID SS04 Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike	Prep Type Total/NA Total/NA	Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid	Method 8015NM Prep 8015B NM 8015B NM 8015B NM 8015B NM 8015B NM 8015B NM	

HPLC/IC

Leach Batch: 39826

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method Prep B	Batch
890-3458-1	SS04	Soluble	Solid	DI Leach	
MB 880-39826/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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11/23/2022
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HPLC/IC (Continued)

Leach Batch: 39826 (Continued)

Lab Sample ID 890-3456-A-1-C MS	Client Sample ID Matrix Spike	Prep Type Soluble	Matrix Solid	DI Leach	Prep Batch
890-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Analysis Batch: 40018					

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-3458-1	SS04	Soluble	Solid	300.0	39826	
MB 880-39826/1-A	Method Blank	Soluble	Solid	300.0	39826	
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	300.0	39826	8
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39826	
390-3456-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	39826	9
890-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39826	
						13

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5

Job ID: 890-3458-1 SDG: 03D20224110

Lab Sample ID: 890-3458-1 Matrix: Solid

Client Sample ID: SS04 Date Collected: 11/14/22 12:45 Date Received: 11/14/22 15:40

Project/Site: Dominator 0 Flowline

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	40183	11/22/22 09:18	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40173	11/22/22 17:03	SM	EET MID
Total/NA	Analysis	Total BTEX		1			40332	11/23/22 13:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			40094	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 03:26	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40018	11/20/22 20:57	СН	EET MID

Laboratory References:

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

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		Accreditation/Co	ertification Summary		
Client: Ensolum Project/Site: Dominator	r 0 Flowline			Job ID: 890-3458-1 SDG: 03D20224110	2
Laboratory: Eurofi Unless otherwise noted, all a		vere covered under each acci	reditation/certification below.		
Authority	F	Program	Identification Number	Expiration Date	
Texas			T104704400-22-24	06-30-23	5
the agency does not of	fer certification.		ed by the governing authority. This list ma	ay include analytes for which	6
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH		
Total BTEX		Solid	Total BTEX		0
					0
					9
					10

Eurofins Carlsbad

.

Project/Site: Dominator 0 Flowline

Job ID: 890-3458-1 SDG: 03D20224110

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

Protocol References:

Client: Ensolum

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:

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

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Sample Summary

Job ID: 890-3458-1 SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3458-1	SS04	Solid	11/14/22 12:45	11/14/22 15:40	0.2	4
						5
						8
						9
						12
						13

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Revised Date: 08/25/2020 Rev. 2020.2		4 0		A		5 3
		0	11-14-22 154	a lib		
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinguished by: (Signature)	Relinquist
	diktons untrol r negotlated.	ubcontractors. It assigns standard terms and cond uch losses are due to circumstances beyond the co zed. These terms will be enforced unless previously	 Decorption Section 2015 and se Section 2015 and section 2015	Notce: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated	f this document and relinquishment of samples c Xenco will be liable only for the cost of samples s A minimum charge of \$85.00 will be applied to e:	Notice: Signature o of service. Eurofins of Eurofins Xenco.
U V Zn /7471	10 Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Z 11 U Hg: 1631/245.1/7470/7471	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se TCLP/SPLP6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Al Sb As Ba Be B Cd CRA Sb As Ba Be Cd C	8RCRA 13PPM Texas 11 A ed TCLP / SPLP 6010 : 8RCI	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) ar
			IVVV	-1472 1245 12 C	11 C 1	St.
Sample Comments	S		#of T	Date Time Depth Grab/ Sampled Sampled Comp	Sample Identification Matrix S	Samp
NaOH+Ascorbic Acid: SAPC		890-3458 Chain of Custody	1931	Corrected Temperature:	(Total Containers:
Zn Acetate+NaOH: Zn	Zn Acet		A E AL	Temperature Reading: 8,2	Yes No W/A	Sample Custody Seals:
Na 25 203: NaSO 3	Na ₂ S ₂ C			Correction Factor:	Yes No N/A	Cooler Custody Seals:
H3PO 4: HP NaHSO 4: NABIS			I	et Ice:	Temp Blank:	SAMPLE RECEIPT
H ₂ NaOH: Na	H ₂ SO 4: H ₂		5	the lab, if received by 4:3upm	C.	PO #:
	HCL: HC				harmon in	Sampler's Name:
NO DI Water: H ₂ O	Cool: Cool		Code	CO CORO DATA	105/02/2411U	Project Number:
ervative	-	ANALYSIS REQUEST		1010/11/ / Turn Nound	Dominator D F	Project Name:
Other:	DUPPTNerabiting EDD ADaPT	hier winning Densollering	ensolum.com/	T Email OCOUNS	202-517:442	Phone:
TRRP Level IV	Reporting: Level II Level III PST/UST TRRP Level IV	NVM, TATIO (Repor	Murishoud	City, State ZIP:	Print-Aron NY	City, State ZIP:
1	State of Project:	til DAVKA HUNLY State	2127 10	WASHIN'L Address:	SHOW THO	Address:
RRC Superfund	UST/PST [h h h h h h h h h h h h h h h h h h h	A ANT PAR	Bill to: (if different)	er: WXITTUMI	Project Manager:
-	1	INAC	I Antio lota la		TALIANMA	
of	www.xenco.com Page	X (806) 794-1296 VM (575) 988-3199	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	EL Paso Hobbs,	Xenco	
	Work Order No:	X (214) 902-0300 , TX (210) 509-3334	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Housto Midland,	eurofins Environm	e e
		odv	Chain of Custody			

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13 14

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3458 List Number: 1 Creator: Clifton, Cloe

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

Job Number: 890-3458-1 SDG Number: 03D20224110

List Source: Eurofins Carlsbad

Eurofins Carlsbad Released to Imaging: 2/9/2023 1:30:36 PM

Job Number: 890-3458-1 SDG Number: 03D20224110

List Source: Eurofins Midland

List Creation: 11/16/22 02:15 PM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3458 List Number: 2 Creator: Rodriguez, Leticia

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

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

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Job Notes

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

Authorization

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

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Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701 Generated 11/28/2022 4:23:34 PM

JOB DESCRIPTION

Dominator 0 Flowline SDG NUMBER 03D20224110

JOB NUMBER

890-3459-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

See page two for job notes and contact information.

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Eurofins Carlsbad

Job Notes

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

Authorization

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	· · · · · · · · · · · · · · · · · · ·	
Client: Ensolum Project/Site: Do	m Job ID: 890-3459 ominator 0 Flowline SDG: 03D202242	
Qualifiers		
GC VOA		
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	_
J	Indicates the analyte was analyzed for but not detected.	4
GC Semi VOA		
Qualifier	Qualifier Description	
J	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		
Qualifier	Qualifier Description	
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not	
	applicable.	
J	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

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

MPN

MQL

NC

ND NEG

POS

PQL

PRES

QC

RER RL

RPD

TEF

TEQ

TNTC

4

Job ID: 890-3459-1 SDG: 03D20224110

Job ID: 890-3459-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Narrative

Job Narrative 890-3459-1

Receipt

The sample was received on 11/14/2022 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3459-1).

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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39826 and 880-39826 and analytical batch 880-40018 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.

Job ID: 890-3459-1 SDG: 03D20224110

Client Sample ID: SS05

Project/Site: Dominator 0 Flowline

Date Collected: 11/14/22 12:50 Date Received: 11/14/22 15:40

Sample Depth: 0.2

Client: Ensolum

Chloride

Lab Sample ID: 890-3459-1 Matrix: Solid

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11/20/22 21:02

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		11/22/22 15:04	11/24/22 12:12	
Toluene	<0.00201	U	0.00201	mg/Kg		11/22/22 15:04	11/24/22 12:12	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/22/22 15:04	11/24/22 12:12	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/22/22 15:04	11/24/22 12:12	
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/22/22 15:04	11/24/22 12:12	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/22/22 15:04	11/24/22 12:12	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	210	S1+	70 - 130			11/22/22 15:04	11/24/22 12:12	
1,4-Difluorobenzene (Surr)	82		70 - 130			11/22/22 15:04	11/24/22 12:12	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/28/22 15:38	1
				mg/Kg			11/28/22 15:38	1
: Method: SW846 8015 NM - Diese	el Range Organ			mg/Kg Unit	D	Prepared	11/28/22 15:38 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte	el Range Organ	ics (DRO) (Qualifier	GC)		<u>D</u>	Prepared		
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <50.0	<mark>ics (DRO) (</mark> Qualifier U	GC)	<u>Unit</u>	<u> </u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ 	<mark>ics (DRO) (</mark> Qualifier U	GC)	<u>Unit</u>	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	el Range Organ 	ics (DRO) (Qualifier U nnics (DRO) Qualifier	GC) <u>RL</u> 50.0 (GC)	Unit mg/Kg			Analyzed 11/21/22 10:45	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result							

5.05

mg/Kg

45.3

Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Job ID: 890-3459-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
_ab Sample ID	Client Sample ID	(70-130)	(70-130)		
390-3459-1	SS05	210 S1+	82		
890-3479-A-1-G MS	Matrix Spike	173 S1+	76		
890-3479-A-1-H MSD	Matrix Spike Duplicate	180 S1+	77		
LCS 880-40225/1-A	Lab Control Sample	192 S1+	87		
LCSD 880-40225/2-A	Lab Control Sample Dup	189 S1+	87		
MB 880-39856/5-A	Method Blank	102	76		
MB 880-40225/5-A	Method Blank	114	74		
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
450-A-1-C MS	Matrix Spike	89	87	
450-A-1-D MSD	Matrix Spike Duplicate	89	87	
59-1	SS05	87	90	
-39777/2-A	Lab Control Sample	96	107	
880-39777/3-A	Lab Control Sample Dup	99	110	
880-39777/1-A	Method Blank	98	110	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

SDG: 03D20224110

Prep Type: Total/NA

Prep Type: Total/NA

Client: Ensolum Project/Site: Dominator 0 Flowline

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39856/5-A										Client Sa	mple ID: Met	hod	Blank
Matrix: Solid											Prep Type	: Tot	tal/NA
Analysis Batch: 40264											Prep Ba		
	Ν	ив м	IB										
Analyte	Res	ult Q	ualifier		RL	Unit		D	P	repared	Analyzed		Dil Fac
Benzene	<0.002	00 U	l	0.00	200	mg/K	(g	_	11/1	7/22 16:28	11/23/22 13:2	1	1
Toluene	<0.002	00 U	I	0.00	200	mg/K	g		11/1	7/22 16:28	11/23/22 13:2	1	1
Ethylbenzene	<0.002	00 U		0.00	200	mg/K	g		11/1	7/22 16:28	11/23/22 13:2	1	1
m-Xylene & p-Xylene	<0.004	00 U	I	0.004	400	mg/K	g		11/1	7/22 16:28	11/23/22 13:2	1	1
o-Xylene	<0.002	00 U	I	0.00	200	mg/K	(g		11/1	7/22 16:28	11/23/22 13:2	1	1
Xylenes, Total	<0.004	00 U		0.004	400	mg/K	g		11/1	7/22 16:28	11/23/22 13:2	1	1
	л	1B M	1B										
Surrogate	%Recove	ry Q	ualifier	Limits	;				P	repared	Analyzed		Dil Fac
4-Bromofluorobenzene (Surr)	1	02		70 - 13	30				11/1	7/22 16:28	11/23/22 13:2	1	1
1,4-Difluorobenzene (Surr)		76		70 - 13	30				11/1	7/22 16:28	11/23/22 13:2	1	1
Lab Sample ID: MB 880-40225/5-A										Client Sa	mple ID: Met	hod	Blank
Matrix: Solid											Prep Type	: Tot	tal/NA
Analysis Batch: 40264											Prep Ba	tch:	40225
A		1B M			DI.	11		~	-		A		
Analyte	Res		ualifier		RL	Unit		D		repared	Analyzed		Dil Fac
Benzene	< 0.002			0.00		mg/K	-			2/22 15:04	11/24/22 02:3		1
	< 0.002			0.00		mg/K	-			2/22 15:04	11/24/22 02:3		1
Ethylbenzene	< 0.002			0.00		mg/K				2/22 15:04	11/24/22 02:3		1
m-Xylene & p-Xylene	< 0.004			0.004		mg/K	-			2/22 15:04	11/24/22 02:3		1
o-Xylene	< 0.002			0.00		mg/K	-			2/22 15:04	11/24/22 02:3		1
Xylenes, Total	<0.004	00 U		0.004	400	mg/K	g		11/2	2/22 15:04	11/24/22 02:3	3	1
		1B M											
Surrogate	%Recove		ualifier	Limits						repared	Analyzed		Dil Fac
4-Bromofluorobenzene (Surr)		14		70 - 13						2/22 15:04	11/24/22 02:3		1
1,4-Difluorobenzene (Surr)		74		70 - 13	30				11/2	2/22 15:04	11/24/22 02:3	8	1
								С	lient	Sample	ID: Lab Conti	ol Sa	ample
Matrix: Solid											Prep Type		
Analysis Batch: 40264											Prep Ba		
				Spike	LCS	LCS					%Rec		
Analyte				Added	Result	Qualifier	Unit		D	%Rec	Limits		
Benzene				0.100	0.09860		mg/Kg			99	70 - 130		
Toluene				0.100	0.1003		mg/Kg			100	70 - 130		
Ethylbenzene				0.100	0.09008		mg/Kg			90	70 - 130		
m-Xylene & p-Xylene				0.200	0.1992		mg/Kg			100	70 - 130		
o-Xylene				0.100	0.09545		mg/Kg			95	70 - 130		
	LCS L	cs											
Surrogate %F	Recovery G		er	Limits									
4-Bromofluorobenzene (Surr)	192 S	1+		70 - 130									
1,4-Difluorobenzene (Surr)	87			70 - 130									
	^						0	ont	Sam		ah Control S	mal	o Dun
Lab Sample ID: LCSD 880-40225/2-/ Matrix: Solid	•							ent	Sain	pie iD. L	ab Control Sa		
											Prep Type		
Analysis Batch: 40264				Colles	1.000	1000					Prep Ba	icn:	
Analyta				Spike		LCSD	11		-	0/ D	%Rec	חחנ	RPD
Analyte				Added	0 1116	Qualifier	Unit		D	%Rec	Limits		Limit

Job ID: 890-3459-1 SDG: 03D20224110

> 225 RPD .imit 35

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12

Benzene

0.1116

mg/Kg

112

70 - 130

0.100

5

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3459-1 SDG: 03D20224110

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

Lab Sample ID: LCSD 880-4 Matrix: Solid	0225/2-A					Clie	nt Sam	ple ID: I	Lab Contro	I Sampl ype: To	
Analysis Batch: 40264										Batch:	
Analysis Batch. 40204			Spike	LCSD	LCSD				%Rec	Daten.	RPI
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Toluene			0.100	0.1072		mg/Kg		107	70 - 130	7	3
Ethylbenzene			0.100	0.1083		mg/Kg		108	70 - 130	18	3
m-Xylene & p-Xylene			0.200	0.2364		mg/Kg		118	70 - 130	17	3
o-Xylene			0.100	0.1119		mg/Kg		112	70 - 130	16	3
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)		S1+	70 - 130								
1,4-Difluorobenzene (Surr)	87		70 - 130								
Lab Sample ID: 890-3479-A-	1-G MS							Client	Sample ID	: Matrix	Spik
Matrix: Solid										ype: To	
Analysis Batch: 40264										Batch:	
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00202	U	0.101	0.09677		mg/Kg		96	70 - 130		
Toluene	<0.00202	U	0.101	0.09986		mg/Kg		99	70 - 130		
Ethylbenzene	<0.00202	U	0.101	0.09120		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene	<0.00404	U	0.202	0.2022		mg/Kg		99	70 - 130		
o-Xylene	< 0.00202	U	0.101	0.09456		mg/Kg		94	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	173	S1+	70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-3479-A-1-H MSD Matrix: Solid Analysis Batch: 40264

Analysis Batch: 40264									Prep	Batch:	40225
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.1022		mg/Kg		103	70 - 130	5	35
Toluene	<0.00202	U	0.0994	0.1022		mg/Kg		103	70 - 130	2	35
Ethylbenzene	<0.00202	U	0.0994	0.09353		mg/Kg		94	70 - 130	3	35
m-Xylene & p-Xylene	<0.00404	U	0.199	0.2068		mg/Kg		103	70 - 130	2	35
o-Xylene	<0.00202	U	0.0994	0.09632		mg/Kg		97	70 - 130	2	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	180	S1+	70 - 130								

70 - 130

1,4-Difluorobenzene (Surr)

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

77

Lab Sample ID: MB 880-39777/1-A Matrix: Solid Analysis Batch: 39876	MB N	мв				Client Sa	mple ID: Metho Prep Type: ٦ Prep Batch	Total/NA
Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0 L	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1
(GRO)-C6-C10								

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Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

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Client: Ensolum Project/Site: Dominator 0 Flowline

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

Lab Sample ID: MB 880-39777/	'1-A										Client S	ample ID: M	Nethod	Blank
Matrix: Solid												Prep T		
Analysis Batch: 39876													Batch:	
		мв	МВ											
Analyte	Re	esult	Qualifier		RL		Unit		D	Р	repared	Analyze	əd	Dil Fac
Diesel Range Organics (Over C10-C28)	~ ~	50.0	U		50.0		mg/K	g	-	11/1	7/22 08:58	11/18/22 1	9:50	1
Oll Range Organics (Over C28-C36)	<	50.0	U	:	50.0		mg/K	g		11/1	7/22 08:58	11/18/22 1	9:50	1
		MВ	МВ											
Surrogate	%Reco	very	Qualifier	Limits	5					Р	Prepared	Analyze	ed	Dil Fac
1-Chlorooctane		98		70 - 1	30					11/1	7/22 08:58	11/18/22 1	9:50	1
o-Terphenyl		110		70 - 1	30					11/1	7/22 08:58	11/18/22 1	9:50	1
Lab Sample ID: LCS 880-39777	7/2-A								С	lient	t Sample	ID: Lab Co	ontrol S	ample
Matrix: Solid												Prep T	ype: To	tal/NA
Analysis Batch: 39876													Batch:	
-				Spike		LCS	LCS					%Rec		
Analyte				Added	Re	esult	Qualifier	Unit		D	%Rec	Limits		
Gasoline Range Organics				1000	8	54.3		mg/Kg		-	85	70 - 130		
(GRO)-C6-C10														
Diesel Range Organics (Over C10-C28)				1000	9	77.8		mg/Kg			98	70 - 130		
	LCS	LCS												
Surrogate	%Recovery	Qua	lifier	Limits										
1-Chlorooctane	96			70 - 130										
o-Terphenyl	107			70 - 130										
-														
Lab Sample ID: LCSD 880-397	77/3-A							CI	ient	Sam	nple ID: I	ab Control	l Sampl	e Dup
Matrix: Solid												Prep T	ype: To	tal/NA
Analysis Batch: 39876												Prep	Batch:	39777
				Spike	L	CSD	LCSD					%Rec		RPD
Analyte				Added	Re	esult	Qualifier	Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10				1000		1009		mg/Kg			101	70 - 130	17	20
Diesel Range Organics (Over				1000		1035		mg/Kg			103	70 - 130	6	20
C10-C28)														
	LCSD	LCS	D											
Surrogate	%Recovery			Limits										
1-Chlorooctane	99			70 - 130										
o-Terphenyl	110			70 - 130										
											Client	Sample ID:		
	CMS											Prep T		
Matrix: Solid	CMS													39777
Matrix: Solid													Batch:	
Matrix: Solid Analysis Batch: 39876	Sample		-	Spike	-	MS				-	~ =	%Rec	Batch:	
Matrix: Solid Analysis Batch: 39876 Analyte	Sample Result	Qua	-	Added		esult	MS Qualifier	Unit		D	%Rec	%Rec Limits		
Matrix: Solid Analysis Batch: 39876 Analyte Gasoline Range Organics (GRO)-C6-C10	Sample Result <50.0	Qual U	-	Added	9	esult 955.2		mg/Kg		<u>D</u>	94	%Rec Limits 70 ₋ 130		
Matrix: Solid Analysis Batch: 39876 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Sample Result	Qual U	-	Added	9	esult				<u>D</u>		%Rec Limits		
Lab Sample ID: 890-3450-A-1-C Matrix: Solid Analysis Batch: 39876 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Sample Result <50.0	Qual U U	-	Added	9	esult 955.2		mg/Kg		<u>D</u>	94	%Rec Limits 70 ₋ 130		
Matrix: Solid Analysis Batch: 39876 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Sample Result <50.0 <50.0	Qual U U	lifier	Added	9	esult 955.2		mg/Kg		<u>D</u>	94	%Rec Limits 70 ₋ 130		

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89

87

1-Chlorooctane

o-Terphenyl

70 - 130

70 - 130

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Matrix: Solid									Prep T	ype: To	tal/NA
Analysis Batch: 39876										Batch:	
,,	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	<50.0	U	997	983.4		mg/Kg		97	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1099		mg/Kg		110	70 - 130	1	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane			70 - 130								
o-Terphenyl	87		70 - 130								
lethod: 300.0 - Anions,	Ion Chromat	ography									

Matrix: Solid											Prep	Type: S	oluble
Analysis Batch: 40018													
	МВ	МВ											
Analyte	Result	Qualifier		RL		Un	it	D	Pi	repared	Analyz	ed	Dil Fa
Chloride	<5.00	U		5.00		mį	g/Kg				11/20/22 2	20:11	
Lab Sample ID: LCS 880-39826/2-A								Cli	ient	Sample	ID: Lab Co	ontrol S	ampl
Matrix: Solid											Prep	Type: S	olubl
Analysis Batch: 40018													
			Spike		LCS	LCS					%Rec		
Analyte			Added		Result	Qualifie	r Unit		D	%Rec	Limits		
Chloride			250		260.4		mg/Kg		_	104	90 - 110		
Lab Sample ID: LCSD 880-39826/3-A							CI	ient S	Sam	ple ID: I	Lab Contro	l Sampl	e Duj
Matrix: Solid											Prep	Type: S	olubl
Analysis Batch: 40018													
-			Spike		LCSD	LCSD					%Rec		RPI
Analyte			Added		Result	Qualifie	r Unit		D	%Rec	Limits	RPD	Limi
Chloride			250		266.7		mg/Kg		_	107	90 - 110	2	20

Lab Sample ID: 890-3456-A-1-C M	S							Client	Sample ID	: Matrix Spike
Matrix: Solid									Prep	Type: Soluble
Analysis Batch: 40018										
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1130		249	1318	4	mg/Kg		77	90 - 110	

Lab Sample ID: 890-3456-A-1- Matrix: Solid Analysis Batch: 40018		Client Sa	ample IC): Matrix S Prep	pike Dup Type: S						
····,···	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1130		249	1318	4	mg/Kg		77	90 - 110	0	20

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Job ID: 890-3459-1

SDG: 03D20224110

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3459-1 SDG: 03D20224110

GC VOA

Prep Batch: 39856

rep Batch: 39856					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39856/5-A	Method Blank	Total/NA	Solid	5035	
rep Batch: 40225					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3459-1	SS05	Total/NA	Solid	5035	
MB 880-40225/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40225/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40225/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3479-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-3479-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nalysis Batch: 40264					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	Client Sample ID SS05	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 40225
890-3459-1	•				
890-3459-1 MB 880-39856/5-A	SS05	Total/NA	Solid	8021B	40225
890-3459-1 MB 880-39856/5-A MB 880-40225/5-A	SS05 Method Blank	Total/NA Total/NA	Solid Solid	8021B 8021B	40225 39856
890-3459-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A	SS05 Method Blank Method Blank	Total/NA Total/NA Total/NA	Solid Solid Solid	8021B 8021B 8021B 8021B	40225 39856 40225
Lab Sample ID 890-3459-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A 890-3479-A-1-G MS	SS05 Method Blank Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225
890-3459-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A	SS05 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup	Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225
890-3459-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A 890-3479-A-1-G MS	SS05 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225 40225
890-3459-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A 890-3479-A-1-G MS 890-3479-A-1-H MSD	SS05 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225 40225

GC Semi VOA

Prep Batch: 39777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3459-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39876

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3459-1	SS05	Total/NA	Solid	8015B NM	39777
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015B NM	39777
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39777
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39777
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	39777
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39777
Analysis Batch: 40095					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3459-1	SS05	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Leach Batch: 39826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3459-1	SS05	Soluble	Solid	DI Leach	
MB 880-39826/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3456-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Analysis Batch: 40018					

Lab Sample ID **Client Sample ID** Prep Type Matrix Method Prep Batch 890-3459-1 SS05 Soluble 300.0 Solid 39826 MB 880-39826/1-A Method Blank Soluble Solid 300.0 39826 LCS 880-39826/2-A Lab Control Sample Soluble Solid 300.0 39826 LCSD 880-39826/3-A Lab Control Sample Dup Soluble Solid 300.0 39826 890-3456-A-1-C MS Matrix Spike Soluble Solid 300.0 39826 Soluble Solid 39826 890-3456-A-1-D MSD Matrix Spike Duplicate 300.0

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Job ID: 890-3459-1 SDG: 03D20224110

Job ID: 890-3459-1 SDG: 03D20224110

Lab Sample ID: 890-3459-1 Matrix: Solid

Client Sample ID: SS05 Date Collected: 11/14/22 12:50 Date Received: 11/14/22 15:40

Project/Site: Dominator 0 Flowline

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	40225	11/22/22 15:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 12:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40497	11/28/22 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			40095	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 03:48	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40018	11/20/22 21:02	СН	EET MID

Laboratory References:

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

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	A	Accreditation/C	ertification Summary		
Client: Ensolum Project/Site: Dominator	0 Flowline			Job ID: 890-3459-1 SDG: 03D20224110	2
Laboratory: Eurofi	ns Midland				
Unless otherwise noted, all a	nalytes for this laboratory we	ere covered under each acc	reditation/certification below.		
Authority	P	rogram	Identification Number	Expiration Date	
Texas	N	ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, b	ut the laboratory is not certif	fied by the governing authority. This list ma	ay include analytes for which	5
the agency does not off	fer certification.				
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM Total BTEX		Solid Solid	Total TPH Total BTEX		
IOIAI BIEX		Solid			
					8
					9
					10
					13

Eurofins Carlsbad

Method Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3459-1 SDG: 03D20224110

lethod	Method Description	Protocol	Laboratory
021B	Volatile Organic Compounds (GC)	SW846	EET MID
otal BTEX	Total BTEX Calculation	TAL SOP	EET MID
015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
00.0	Anions, Ion Chromatography	MCAWW	EET MID
035	Closed System Purge and Trap	SW846	EET MID
015NM Prep	Microextraction	SW846	EET MID
I Leach	Deionized Water Leaching Procedure	ASTM	EET MID
	"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Ed = TestAmerica Laboratories, Standard Operating Procedure	dition, November 1986 And Its Updates.	
Laboratory R	eferences:		
EET MID :	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Protocol References:

Laboratory References:

Eurofins Carlsbad

Sample Summary

Job ID: 890-3459-1 SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3459-1	SS05	Solid	11/14/22 12:50	11/14/22 15:40	0.2

.

Revised Date 08/25/2020 Rev. 2020.2		0		U		S C
		1540	il ur an	dry w	Maa ca	1 And
Signature) Date/Time	e) Received by: (Signature)	Relinquished by: (Signature)	Date/Time	eceived by: (Signature)	r: (Signature)	Relinguished by:
	and conditions nd the control vreviously 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 lable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated	y to Eurofins Xenco, its affill or expenses incurred by the itted to Eurofins Xenco, but	itutes a valid purchase order from client compan shall not assume any responsibility for any losses project and a charge of \$5 for each sample subm	cument and relinquishment of samples con- will be liable only for the cost of samples and um charge of \$85.00 will be applied to each	Notice: Signature of this do of service. Eurofins Xenco · of Eurofins Xenco. A minim
Ag SiO ₂ Na Sr TI Sn U V Zn Hg: 1631/245.1/7470/7471	Mg Mn Mo Ni K Se Ag SiO ₂ Ni Se Ag TI U Hg: 1631	A 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Al Sb As Ba Be RA Sb As Ba Be	8RCR.	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) ar
			IVV	-H72 1750 .2' C	SIF	3505
Sample Comments			# of T	Date Time Depth Grab/ Sampled Sampled Comp	Matrix	Sample Identification
NaOH+Ascorbic Acid: SAPC	-		FF	Corrected Temperature: N + O	Corr	Total Containers:
Zn Acetate+NaOH: Zn	Chain of Custody	890-3459 Ch	71 TE	Temperature Reading:	Yes No AVA	Sample Custody Seals:
Na 25 203: NaSO 3		ori	Para - X	Correction Factor:	Yes No MTA	Cooler Custody Seals:
H ₃ PO 4: HP NaHSO 4: NABIS		, cl	ameter	No Wet Ice: Yes No	Temp Blank:	SAMPLE RECEIPT
'H ₂ SO 4: H 2 NaCH: Na			rs	the lab, if received by 4:30pm		PO #:
)		TAT starts the day received by	1.510mata	Sampler's Name:
Cool: Cool MeOH: Me				SK TDue Date:	20 NACION - 113-57	Project Location:
None: NO DI Water: H ₂ O			Pres. Code	Routine	1147 (12)411 b	Project Number:
Preservative Codes	51	ANALYSIS REQUEST		UM d Turn Around	Numinator & Flo	Project Name:
ADaPT Other:	S GEWARKERN EDD	contraction have	Oursolun.	Email: 100000000	1212517-5437	Phone:
Reporting: Level II Level III PST/UST TRRP Level IV	Reporting: Level II Level	DOZZXXVIIV VOOC	WIK	6770 A City, State ZIP:	MNN LOOGH MNN S	City, State ZIP:
	State of Project:	Not Douks Hure	277	SHINYA Address:	SIZ Noti au	Address:
Brownfields RRC Superfund	Program: UST/PST PRP	IMO, LIC	anti	Company Name	Kankalim 110	Company Name:
Work Order Comments	Work C	MIMAS	UNCA	Bill to: (if different)	Inan Anna Mart	Project Manager:
nco.com Page of	www.xenco.com	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	s, NM (575) 392-7550, Ca	Hobb		
•		EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	io, TX (915) 585-3443, Lu		Xenco	
er No:	Work Order No:	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland. TX (432) 704-5440, San Antonio, TX (210) 509-3334	ton, TX (281) 240-4200, 1. TX (432) 704-5440, Sar		Environment Testing	
		Custody	Chain of Custody		of no	

11/28/2022

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Job Number: 890-3459-1 SDG Number: 03D20224110

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3459 List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3459 List Number: 2 Creator: Rodriguez, Leticia

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

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

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Job Number: 890-3459-1 SDG Number: 03D20224110

List Source: Eurofins Midland

List Creation: 11/16/22 02:15 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701 Generated 11/28/2022 4:23:34 PM

JOB DESCRIPTION

Dominator 0 Flowline SDG NUMBER 03D20224110

JOB NUMBER

890-3460-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220




Received by OCD: 1/23/2023 11:18:01 AM

1

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/28/2022 4:23:34 PM

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

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

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Sample Summary	17
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Client: Encolum		1
Client: Ensolum Project/Site: Do	n Job ID: 890-3460-1 ominator 0 Flowline SDG: 03D20224110	
-		
Qualifiers		- 3
GC VOA		
Qualifier	Qualifier Description	
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	Ę
GC Semi VOA		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	-
HPLC/IC Qualifier		
Qualifier 4	Qualifier Description MS_MSD: The analyte present in the original sample is greater than 4 times the matrix chike concentration; therefore, control limits are not	- c
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.	9
U	applicable. Indicates the analyte was analyzed for but not detected.	d
		_ 13
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	1
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	і . Л
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
	Too Numerous To Count	

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Job ID: 890-3460-1 SDG: 03D20224110

Job ID: 890-3460-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Narrative

Job Narrative 890-3460-1

Receipt

The sample was received on 11/14/2022 3:40 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-3460-1).

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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39826 and 880-39826 and analytical batch 880-40018 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.

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

Result Qualifier

<0.00200 U

RL

0.00200

Unit

mg/Kg

D

Prepared

11/22/22 15:04

Job ID: 890-3460-1 SDG: 03D20224110

Client Sample ID: SS06

Project/Site: Dominator 0 Flowline

Date Collected: 11/14/22 12:55 Date Received: 11/14/22 15:40

Sample Depth: 0.2

Client: Ensolum

Analyte

Benzene

Lab Sample ID: 890-3460-1

Analyzed

11/24/22 12:38

Matrix: Solid

Toluene	<0.00200	U	0.00200	mg/Kg		11/22/22 15:04	11/24/22 12:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/22/22 15:04	11/24/22 12:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/22/22 15:04	11/24/22 12:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/22/22 15:04	11/24/22 12:38	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/22/22 15:04	11/24/22 12:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	174	S1+	70 - 130			11/22/22 15:04	11/24/22 12:38	1
1,4-Difluorobenzene (Surr)	74		70 - 130			11/22/22 15:04	11/24/22 12:38	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/28/22 15:38	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result <49.9		RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/21/22 10:45	Dil Fac 1
Total TPH	<49.9	U	49.9		<u>D</u>	Prepared		Dil Fac 1
Total TPH Method: SW846 8015B NM - Dies	<49.9 sel Range Orga	U	49.9		D	Prepared		Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	<49.9 sel Range Orga	U nics (DRO) Qualifier	49.9 (GC)	mg/Kg		<u> </u>	11/21/22 10:45	1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	<49.9 sel Range Orga Result	U nics (DRO) Qualifier U	49.9 (GC) RL	mg/Kg Unit		Prepared	11/21/22 10:45	1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.9 sel Range Orga Result <49.9	U nics (DRO) Qualifier U	49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 11/17/22 08:58	Analyzed 11/19/22 04:10	1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9 sel Range Orga Result <49.9	U nics (DRO) Qualifier U	49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 11/17/22 08:58	Analyzed 11/19/22 04:10	1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 sel Range Orga Result <49.9 <49.9	U nics (DRO) Qualifier U U U	49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/17/22 08:58 11/17/22 08:58	Analyzed 11/19/22 04:10 11/19/22 04:10	1 <u>Dil Fac</u> 1 1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 Sel Range Orga Result <49.9 <49.9 <49.9 <49.9	U nics (DRO) Qualifier U U U	49.9 (GC) <u>RL</u> 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/17/22 08:58 11/17/22 08:58 11/17/22 08:58	Analyzed 11/21/22 10:45 Analyzed 11/19/22 04:10 11/19/22 04:10 11/19/22 04:10	1 Dil Fac 1 1
Total TPH Method: SW846 8015B NM - Dies Analyte	<49.9 sel Range Orga Result <49.9 <49.9 <49.9 <49.9 %Recovery	U nics (DRO) Qualifier U U U	49.9 (GC) <u>RL</u> 49.9 49.9 49.9 <u>Limits</u>	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/17/22 08:58 11/17/22 08:58 11/17/22 08:58 Prepared	Analyzed 11/21/22 10:45 Analyzed 11/19/22 04:10 11/19/22 04:10 11/19/22 04:10 Analyzed	1 Dil Fac 1 1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 sel Range Orga Result <49.9 <49.9 <49.9 <49.9 <84 84 88	U nics (DRO) Qualifier U U U Qualifier	49.9 (GC) RL 49.9 49.9 49.9 <u>Limits</u> 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/17/22 08:58 11/17/22 08:58 11/17/22 08:58 Prepared 11/17/22 08:58	Analyzed 11/21/22 10:45 Analyzed 11/19/22 04:10 11/19/22 04:10 11/19/22 04:10 Analyzed 11/19/22 04:10	1 Dil Fac 1 1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	 <49.9 sel Range Orga Result <49.9 <49.9 <49.9 <49.9 <49.9 <49.9 <49.9 <49.9 <49.8 							

Eurofins Carlsbad

Project/Site: Dominator 0 Flowline

Job ID: 890-3460-1 SDG: 03D20224110

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
890-3460-1	SS06	174 S1+	74		
890-3479-A-1-G MS	Matrix Spike	173 S1+	76		
890-3479-A-1-H MSD	Matrix Spike Duplicate	180 S1+	77		
LCS 880-40225/1-A	Lab Control Sample	192 S1+	87		
LCSD 880-40225/2-A	Lab Control Sample Dup	189 S1+	87		
MB 880-39856/5-A	Method Blank	102	76		
MB 880-40225/5-A	Method Blank	114	74		
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Sample ID	Client Sample ID	(70-130)	(70-130)	
50-A-1-C MS	Matrix Spike	89	87	
3450-A-1-D MSD	Matrix Spike Duplicate	89	87	
60-1	SS06	84	88	
-39777/2-A	Lab Control Sample	96	107	
80-39777/3-A	Lab Control Sample Dup	99	110	
80-39777/1-A	Method Blank	98	110	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

Client: Ensolum Project/Site: Dominator 0 Flowline

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39856	5/5-A								Client Sa	mple ID: Meth	
Matrix: Solid										Prep Type:	
Analysis Batch: 40264	M	B MB								Prep Bato	n: 3965
Analyte		lt Qualifier	RL		Unit		D	Pr	epared	Analyzed	Dil Fa
Benzene	<0.0020	00 U	0.00200		mg/K	a	_		/22 16:28	11/23/22 13:21	
Toluene	<0.0020		0.00200		mg/K	-			7/22 16:28	11/23/22 13:21	
Ethylbenzene	<0.0020		0.00200		mg/K	-			/22 16:28	11/23/22 13:21	
m-Xylene & p-Xylene	<0.0040		0.00400		mg/K				/22 16:28	11/23/22 13:21	
p-Xylene	<0.0020		0.00200		mg/K				/22 16:28	11/23/22 13:21	
Kylenes, Total	<0.0020		0.00400		mg/K	-			/22 16:28	11/23/22 13:21	
	-0.00-10		0.00400		ing/iv	9		,.,	722 10.20	11/20/22 10.21	
	M	IB MB									
Surrogate	%Recove		Limits					Pr	epared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	10)2	70 - 130					11/17	7/22 16:28	11/23/22 13:21	
1,4-Difluorobenzene (Surr)	:	76	70 - 130					11/17	7/22 16:28	11/23/22 13:21	
Lab Sample ID: MB 880-40225	0/5-A								client Sa	mple ID: Meth	
Matrix: Solid										Prep Type:	
Analysis Batch: 40264										Prep Batc	:h: 4022
		B MB									
Analyte	Resu		RL		Unit		D		epared	Analyzed	Dil Fa
Benzene	<0.0020		0.00200		mg/K				2/22 15:04	11/24/22 02:38	
Toluene	<0.0020	0 U	0.00200		mg/K	g		11/22	2/22 15:04	11/24/22 02:38	
Ethylbenzene	<0.0020	0 U	0.00200		mg/K	g		11/22	2/22 15:04	11/24/22 02:38	
m-Xylene & p-Xylene	<0.0040	00 U	0.00400		mg/K	g		11/22	2/22 15:04	11/24/22 02:38	
o-Xylene	<0.0020	00 U	0.00200		mg/K	g		11/22	2/22 15:04	11/24/22 02:38	
Xylenes, Total	<0.0040	00 U	0.00400		mg/K	g		11/22	2/22 15:04	11/24/22 02:38	
	N	IB MB									
Surrogate	%Recove	ry Qualifier	Limits					Pr	epared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	1:	14	70 - 130					11/22	2/22 15:04	11/24/22 02:38	
1,4-Difluorobenzene (Surr)	;	74	70 - 130					11/22	2/22 15:04	11/24/22 02:38	
							-		- · ·		
Lab Sample ID: LCS 880-4022	:5/1-A						C	lient	Sample	ID: Lab Contro	
Matrix: Solid										Prep Type:	
Analysis Batch: 40264										Prep Bato	:h: 4022
			Spike		LCS					%Rec	
Analyte			Added		Qualifier	Unit		<u>D</u>	%Rec	Limits	
Benzene			0.100	0.09860		mg/Kg			99	70 - 130	
Toluene			0.100	0.1003		mg/Kg			100	70 - 130	
Ethylbenzene			0.100	0.09008		mg/Kg			90	70 - 130	
m-Xylene & p-Xylene			0.200	0.1992		mg/Kg			100	70 - 130	
o-Xylene			0.100	0.09545		mg/Kg			95	70 - 130	
	LCS L	cs									
Surrogate		ualifier	Limits								
	192 S		70 - 130								
4-Bromofluorobenzene (Surr)			70 - 130								
	87		10 - 100								
	87		10-100								
1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-402			10-100			CI	ient	Sam	ple ID: L	ab Control San	
1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-402			10-100			CI	ient	Sam	ple ID: L	ab Control San Prep Type:	
4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-402 Matrix: Solid Analysis Batch: 40264						CI	ient	Sam	ple ID: L		Total/N/
1,4-Difluorobenzene (Surr) Lab Sample ID: LCSD 880-402 Matrix: Solid			Spike	LCSD	LCSD	CI	ient	Sam	ple ID: L	Prep Type:	Total/N/

Job ID: 890-3460-1 SDG: 03D20224110

> 5 7

mg/Kg

112

70 - 130

12

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35

Benzene

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0.1116

0.100

Client: Ensolum Project/Site: Dominator 0 Flowline

Job ID: 890-3460-1 SDG: 03D20224110

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

Lab Sample ID: LCSD 880-40225 Matrix: Solid	5/2-A					Clier	nt Sam	ple ID: I	Lab Contro Pren T	l Sampl ype: To	
Analysis Batch: 40264										Batch:	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Toluene			0.100	0.1072		mg/Kg		107	70 - 130	7	35
Ethylbenzene			0.100	0.1083		mg/Kg		108	70 - 130	18	35
m-Xylene & p-Xylene			0.200	0.2364		mg/Kg		118	70 - 130	17	35
o-Xylene			0.100	0.1119		mg/Kg		112	70 - 130	16	35
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	189	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	87		70 - 130								
Lab Sample ID: 890-3479-A-1-G	MS							Client	Sample ID	: Matrix	Spike
Matrix: Solid										ype: To	
Analysis Batch: 40264										Batch:	
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00202	U	0.101	0.09677		mg/Kg		96	70 - 130		
Toluene	<0.00202	U	0.101	0.09986		mg/Kg		99	70 - 130		
Ethylbenzene	<0.00202	U	0.101	0.09120		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene	<0.00404	U	0.202	0.2022		mg/Kg		99	70 - 130		
o-Xylene	<0.00202	U	0.101	0.09456		mg/Kg		94	70 - 130		
	МЗ	MS									

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	173	S1+	70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-3479-A-1-H MSD Matrix: Solid

Analysis Batch: 40264

Analysis Batch: 40264									Prep	Batch:	40225
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00202	U	0.0994	0.1022		mg/Kg		103	70 - 130	5	35
Toluene	<0.00202	U	0.0994	0.1022		mg/Kg		103	70 - 130	2	35
Ethylbenzene	<0.00202	U	0.0994	0.09353		mg/Kg		94	70 - 130	3	35
m-Xylene & p-Xylene	<0.00404	U	0.199	0.2068		mg/Kg		103	70 - 130	2	35
o-Xylene	<0.00202	U	0.0994	0.09632		mg/Kg		97	70 - 130	2	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	180	S1+	70 - 130								

1,4-Difluorobenzene (Surr)

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

77

Lab Sample ID: MB 880-39777/1-A Matrix: Solid Analysis Batch: 39876	MB	МВ				Client Sa	mple ID: Metho Prep Type: ⁻ Prep Batcl	Total/NA
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/17/22 08:58	11/18/22 19:50	1

70 - 130

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Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Client: Ensolum Project/Site: Dominator 0 Flowline

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

Matrix: Solid Analysis Batch: 39876	/1 -A									Client Sa	imple ID:		
Analysis Batch: 39876												Type: T	
											Prep	o Batch	: 39777
A	-	MB		-		11			_		A b		D11 F
Analyte			Qualifier		<u>.</u>	Unit	~	D		repared	Analy		Dil Fa
Diesel Range Organics (Over C10-C28)		50.0	0	50	.0	mg/K	y		11/1	7/22 08:58	11/18/22	19:50	
Oll Range Organics (Over C28-C36)	<	50.0	U	50	.0	mg/K	g		11/1	7/22 08:58	11/18/22	19:50	
5 5 X ,						0	0						
			МВ										
Surrogate	%Reco		Qualifier	Limits	_			_		repared	Analy		Dil Fa
1-Chlorooctane		98		70 - 130						7/22 08:58	11/18/22		
o-Terphenyl		110		70 - 130					11/1	7/22 08:58	11/18/22	19:50	
Lab Sample ID: LCS 880-39777	7/2_4							CII	ont	Sample	ID: Lab C	ontrol	Sample
Matrix: Solid	11 2- A							Cii	em	Sample		Type: T	-
Analysis Batch: 39876												Batch	
Analysis Daten. 35070				Spike	LCS	LCS					%Rec	Daten	. 5577
Analyte				Added		Qualifier	Unit		D	%Rec	Limits		
Gasoline Range Organics				1000	854.3		mg/Kg		_	85	70 - 130		
(GRO)-C6-C10							5 5						
Diesel Range Organics (Over				1000	977.8		mg/Kg			98	70 - 130		
C10-C28)													
	LCS	LCS											
Surrogate	%Recovery	Qual	ifier	Limits									
1-Chlorooctane	96			70 - 130									
o-Terphenyl	107			70 - 130									
Lab Sample ID: LCSD 880-397	77/ 3-A						CI	ent S	am	nple ID: L			-
Matrix: Solid												Type: T	
Analysis Batch: 39876												b Batch	
				Spike		LCSD					%Rec		RPD
Analyte				Added		Qualifier	Unit		D	%Rec	Limits	RPD	
Gasoline Range Organics (GRO)-C6-C10				1000	1009		mg/Kg			101	70 - 130	17	20
Diesel Range Organics (Over				1000	1035		mg/Kg			103	70 - 130	6	20
				1000	1000		mg/rtg			100	10-100	0	2.
C10-C28)			_										
C10-C28)		1051											
	LCSD			1									
Surrogate	%Recovery			Limits									
Surrogate 1-Chlorooctane	%Recovery 99			70 - 130									
Surrogate	%Recovery												
Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 99 110			70 - 130						Client S	Sample ID): Matri	x Spike
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-0	%Recovery 99 110			70 - 130						Client S	Sample ID Prep		
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-0 Matrix: Solid	%Recovery 99 110			70 - 130						Client S	Prep	Type: T	otal/NA
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-0	%Recovery 99 110	Qual	ifier	70 - 130	MS	MS				Client S	Prep		otal/NA
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-0 Matrix: Solid	%Recovery 99 110 C MS	<u>Qual</u>	ifier	70 - 130 70 - 130		MS Qualifier	Unit		D	Client S	Prep Prep	Type: T	otal/NA
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-0 Matrix: Solid Analysis Batch: 39876	%Recovery 99 110 C MS Sample	Qual Samı Quali	ifier	70 - 130 70 - 130 Spike			- Unit mg/Kg		<u>D</u>		Prep Prep %Rec	Type: T	otal/NA
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-C Matrix: Solid Analysis Batch: 39876 Analyte	%Recovery 99 110 C MS Sample Result	Qual Samı Quali	ifier	70 - 130 70 - 130 Spike Added	Result				<u>D</u>	%Rec	Prep Prep %Rec Limits	Type: T	otal/N/
Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: 890-3450-A-1-C Matrix: Solid Analysis Batch: 39876 Analyte Gasoline Range Organics	%Recovery 99 110 C MS Sample Result	Qual Samı Quali	ifier	70 - 130 70 - 130 Spike Added	Result				<u>D</u>	%Rec	Prep Prep %Rec Limits	Type: T	otal/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	87		70 - 130

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Job ID: 890-3460-1

SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Chloride

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

Lab Sample ID: 890-3450-A Matrix: Solid							ment 3		: Matrix Sp Bron J		
										ype: To	
Analysis Batch: 39876	<u> </u>	<u> </u>	• "							Batch:	
		Sample	Spike		MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Gasoline Range Organics	<50.0	U	997	983.4		mg/Kg		97	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	997	1099		mg/Kg		110	70 - 130	1	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	89		70 - 130								
o-Terphenyl	87		70 - 130								
lethod: 300.0 - Anions, Lab Sample ID: MB 880-398 Matrix: Solid		ography						Client S	ample ID:	Method Type: S	
Analysis Batch: 40018									Fieb	Type. 3	oruble
		MB MB									
Analyte	R	esult Qualifier		RL	Unit		D P	Prepared	Analyz	ho	Dil Fac

Lab Sample ID: LCS 880-39826/2-A Matrix: Solid

<5.00 U

Analysis Balch. 400 lo								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	260.4		mg/Kg		104	90 - 110	

5.00

mg/Kg

Lab Sample ID: LCSD 880-39826/3-A Matrix: Solid Analysis Batch: 40018			Clie	nt Sam	ple ID:	Lab Contro Prep	ol Sampl Type: S		
	Spike		LCSD		_	~~ -	%Rec		RPD
Analyte	Added 250	266.7	Qualifier	_ Unit mg/Kg	<u>D</u>	%Rec 107	Limits 90 - 110	2	Limit 20

Lab Sample ID: 890-3456-A-1-C MS Matrix: Solid

Analysis Batch: 40018										
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	1130		249	1318	4	mg/Kg		77	90 _ 110	
_										

Lab Sample ID: 890-3456-A-1-D MSD								ample IC): Matrix S		
Matrix: Solid									Prep	Type: Se	oluble
Analysis Batch: 40018											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	1130		249	1318	4	mg/Kg		77	90 - 110	0	20

Job ID: 890-3460-1 SDG: 03D20224110

11/20/22 20:11

Client Sample ID: Matrix Spike

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: Lab Control Sample

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Job ID: 890-3460-1 SDG: 03D20224110

GC VOA

Prep Batch: 39856

ep Batch: 39856					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39856/5-A	Method Blank	Total/NA	Solid	5035	
rep Batch: 40225					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3460-1	SS06	Total/NA	Solid	5035	
MB 880-40225/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40225/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40225/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3479-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-3479-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
nelveie Ratch: 40264					
	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
Lab Sample ID		Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 40225
Lab Sample ID 890-3460-1	Client Sample ID				
Lab Sample ID 890-3460-1 MB 880-39856/5-A	Client Sample ID SS06	Total/NA	Solid	8021B	40225
Lab Sample ID 890-3460-1 MB 880-39856/5-A MB 880-40225/5-A	Client Sample ID SS06 Method Blank	Total/NA Total/NA	Solid Solid	8021B 8021B	40225 39856
Lab Sample ID	Client Sample ID SS06 Method Blank Method Blank	Total/NA Total/NA Total/NA	Solid Solid Solid	8021B 8021B 8021B 8021B	40225 39856 40225
890-3460-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A	Client Sample ID SS06 Method Blank Method Blank Lab Control Sample	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225
Lab Sample ID 890-3460-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A	Client Sample ID SS06 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup	Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225
Lab Sample ID 890-3460-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A 890-3479-A-1-G MS	Client Sample ID SS06 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225 40225
Lab Sample ID 890-3460-1 MB 880-39856/5-A MB 880-40225/5-A LCS 880-40225/1-A LCSD 880-40225/2-A 890-3479-A-1-G MS 890-3479-A-1-H MSD	Client Sample ID SS06 Method Blank Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B 8021B 8021B	40225 39856 40225 40225 40225 40225

GC Semi VOA

Prep Batch: 39777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3460-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39876

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3460-1	SS06	Total/NA	Solid	8015B NM	39777
MB 880-39777/1-A	Method Blank	Total/NA	Solid	8015B NM	39777
LCS 880-39777/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39777
LCSD 880-39777/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39777
890-3450-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	39777
890-3450-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39777
Analysis Batch: 40096					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3460-1	SS06	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum Project/Site: Dominator 0 Flowline

HPLC/IC

Leach Batch: 39826

ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
390-3460-1	SS06	Soluble	Solid	DI Leach	
/IB 880-39826/1-A	Method Blank	Soluble	Solid	DI Leach	
_CS 880-39826/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
CSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3456-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
390-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
nalysis Batch: 40018					
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
390-3460-1	SS06	Soluble	Solid	300.0	39826
/IB 880-39826/1-A	Method Blank	Soluble	Solid	300.0	39826
_CS 880-39826/2-A	Lab Control Sample	Soluble	Solid	300.0	39826
_CSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39826
390-3456-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	39826
390-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39826

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3460-1	SS06	Soluble	Solid	300.0	39826
MB 880-39826/1-A	Method Blank	Soluble	Solid	300.0	39826
LCS 880-39826/2-A	Lab Control Sample	Soluble	Solid	300.0	39826
LCSD 880-39826/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39826
890-3456-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	39826
890-3456-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39826

Job ID: 890-3460-1

SDG: 03D20224110

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Job ID: 890-3460-1 SDG: 03D20224110

Lab Sample ID: 890-3460-1 Matrix: Solid

Client Sample ID: SS06 Date Collected: 11/14/22 12:55 Date Received: 11/14/22 15:40

Project/Site: Dominator 0 Flowline

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40225	11/22/22 15:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40264	11/24/22 12:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			40498	11/28/22 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			40096	11/21/22 10:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39777	11/17/22 08:58	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39876	11/19/22 04:10	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	39826	11/17/22 14:23	СН	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40018	11/20/22 21:19	CH	EET MID

Laboratory References:

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

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		Accreditation/Co	ertification Summary		
Client: Ensolum Project/Site: Dominator	0 Flowline			Job ID: 890-3460-1 SDG: 03D20224110	
Laboratory: Eurofi			aditation/agrification balance		
Authority		were covered under each acci Program	Identification Number	Expiration Date	
Texas		NELAP	T104704400-22-24	06-30-23	
The following each doe			ad has the maximum and a site. This list as		5
the agency does not off		but the laboratory is not certili	ed by the governing authority. This list ma	ay include analytes for which	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		
					8
					9
					10
					13
					14

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.

Method Summary

Client: Ensolum Project/Site: Dominator 0 Flowline Job ID: 890-3460-1 SDG: 03D20224110

lethod	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
otal BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
800.0	Anions, Ion Chromatography	MCAWW	EET MID
6035	Closed System Purge and Trap	SW846	EET MID
015NM Prep	Microextraction	SW846	EET MID
01 Leach	Deionized Water Leaching Procedure	ASTM	EET 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:

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

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Sample Summary

Job ID: 890-3460-1 SDG: 03D20224110

Client: Ensolum Project/Site: Dominator 0 Flowline

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3460-1	SS06	Solid	11/14/22 12:55	11/14/22 15:40	0.2

.

Backed Date: 08/25/2020 Rev. 2020.2		5	6		4		5
		4	1.14. 22 1540		MUN		Wanto 1 -
ature) Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	2)	Receiver by: (Signature)	gnature)	, Revinquished by: (Signature)
	errns and conditions beyond the control less previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously nego	ofins Xenco, its affiliates and s nses incurred by the client if s Eurofins Xenco, but not analy.	er from client company to Eur nsibility for any losses or expe for each sample submitted to	onstitutes a valid purchase ord and shall not assume any respo ach project and a charge of \$5	nt and relinquishment of samples c liable only for the cost of samples. harge of \$85.00 will be applied to e	Notice: Signature of this docume of service. Eurofins Xenco will b of Eurofins Xenco. A minimum c
Ag SIO ₂ Na Sr H SH O Y ZH Hg: 1631/245.1/7470/7471	I K ve	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se TCLP/SPLP6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Al Sb As Ba Be B Cd CRA Sb As Ba Be Cd C	M Texas 11 AI SI PLP 6010 : 8RCRA	8RCRA 13PPM ed TCLP/SPLP	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 Circle Method(s) an
				-			
					+		A
			VVV	2101	FIL-2 11 SS	5	SKNA
Sample Comments				Depth Grab/ # of Comp Cont	Date Time Sampled Sampled	Matrix	Sample Identification
NaUH+ASCORDIC ACID: SAPC	-		TRI	2.0	Corrected Temperature:	(0	Total Containers:
Zn Acetate+NaOH: Zn	ustody	890-3460 Chain of Custody	P.T.T.	2.2	Temperature Reading:	Yes NO N/A Te	Sample Custody Seals:
Na 25 20 3: NaSO 3			75/0		Correction Factor:	· MA	Cooler Custody Seals:
NaHSO 4: NABIS			< nic	Ž	nometer		Samples Received Intact:
H ₃ PO ₄ : HP			J	(Ye) No eters	Ve No Wet Ice:	Temp Blank:	SAMPLE RECEIPT
2			25	the lab, if received by 4:30pm	the lab, if rec	Intra Maria	PO #:
Cool: Cool MeOH: Me HCL: HC HNO _{\$} : HN					525 But Date:	2.0403911 - 10	Project Location:
None: NO DI Water: H ₂ O				Rush Code	Routine	BD2024110	Project Number:
Preservative Codes		ANALYSIS REQUEST			HOWING / Turn	monimator (XE	Project Name:
ADaPT Other:	UNSCHARTAGE: (USOP)	1 HALINNINGS/WENDER	Jensolum com	hadamsa	Email:	12h3-LIG-90	Phone:
PST/UST TRRP Level IV	Reporting: Level II Level III PST/UST TRRP	NYM SKOZU A Rep	Partsperial	City, State ZIP:	1987701	antshoot in	City, State ZIP:
)	State of Project:	1 fourts Hurd State	13177 not	Address:	Follwin	172 North au	Address:
UST/PST PRP Brownfields RRC Superfund	Program: UST/PST PRP	VIIC Prog	andolum	Company Name:	(+	HSOLIM LL	Company Name:
Work Order Comments	Work Orde	St	1 in renining	Bill to: (if different)		hish adjourns	Project Manager:
com Page of	www.xenco.com	VM (575) 988-3199	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Hobbs, NM			
~		X (806) 794-1296	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	EL Paso, TX (Xenco	
	Work Order No:	X (214) 902-0300 ,, TX (210) 509-3334	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Houston, T) Midland, TX (4	Environment Testing		
		ody	Chain of Custody	C		5	

5

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3460 List Number: 1 Creator: Clifton, Cloe

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

Job Number: 890-3460-1 SDG Number: 03D20224110

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3460 List Number: 2 Creator: Rodriguez, Leticia

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

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

14

Job Number: 890-3460-1 SDG Number: 03D20224110

List Source: Eurofins Midland

List Creation: 11/16/22 02:15 PM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701 Generated 12/27/2022 8:57:51 AM

JOB DESCRIPTION

Dominator Fed 25 "0" SDG NUMBER 03D2024110

JOB NUMBER

890-3615-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220





Received by OCD: 1/23/2023 11:18:01 AM

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 12/27/2022 8:57:51 AM

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

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

SDG: 03D2024110

Laboratory Job ID: 890-3615-1

Table of Contents

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	D: 1/23/2023 11:18:01 AM Page 131 0	́Т.
	Definitions/Glossary	
Client: Ensolur		
Project/Site: D	Dominator Fed 25 "0" SDG: 03D202417	10
Qualifiers		_
GC VOA		
Qualifier	Qualifier Description	_ /
U	Indicates the analyte was analyzed for but not detected.	- ī
GC Semi VOA	۱ ۱	
Qualifier	Qualifier Description	
[•] 1	LCS/LCSD RPD exceeds control limits.	_
F2	MS/MSD RPD exceeds control limits	
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

MPN

MQL

NEG

POS

PQL PRES

QC

RER

RPD

TEF

TEQ TNTC

RL

NC ND

ML

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

Quality Control

Method Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

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

Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

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

Minimum Detectable Activity (Radiochemistry)

Job ID: 890-3615-1 SDG: 03D2024110

Job ID: 890-3615-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: Dominator Fed 25 "0"

Narrative

Job Narrative 890-3615-1

Receipt

The samples were received on 12/9/2022 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3615-1), FS02 (890-3615-2), FS03 (890-3615-3) and FS04 (890-3615-4).

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: Surrogate recovery for the following samples were outside control limits: (CCV 880-41982/5) and (LCSD 880-41926/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-41926 and analytical batch 880-41982 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-41926 and analytical batch 880-41982 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-41926 and analytical batch 880-41982 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

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

0-3615-1)2024110

Unit

mg/Kg

mg/Kg

mg/Kg

D

Prepared

12/22/22 09:05

12/22/22 09:05

12/22/22 09:05

Job ID: 890-3615-1 SDG: 03D2024110

Client Sample ID: FS01

Project/Site: Dominator Fed 25 "0"

Date Collected: 12/09/22 10:00

Sample Depth: 12

Client: Ensolum

Lab Sample ID: 890-3615-1

Analyzed

12/23/22 13:40

12/23/22 13:40

12/23/22 13:40

Matrix: Solid

Dil Fac

1

1

1

5 13

Date Received: 12/09/22 15:10

Method: SW846 8021B - Volatile Organic Compounds (GC)						
Analyte	Result	Qualifier	RL			
Benzene	<0.00199	U	0.00199			
Toluene	<0.00199	U	0.00199			
Ethylbenzene	<0.00199	U	0.00199			

m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/22/22 09:05	12/23/22 13:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/22/22 09:05	12/23/22 13:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/22/22 09:05	12/23/22 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			12/22/22 09:05	12/23/22 13:40	1
1,4-Difluorobenzene (Surr)	103		70 - 130			12/22/22 09:05	12/23/22 13:40	1
Method: TAL SOP Total BTEX - To	tal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/26/22 16:44	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			12/16/22 14:51	1
- Method: SW846 8015B NM - Diese	l Range Orga	nics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	50.0	mg/Kg		12/15/22 14:18	12/16/22 11:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		12/15/22 14:18	12/16/22 11:06	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/22 14:18	12/16/22 11:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			12/15/22 14:18	12/16/22 11:06	1
o-Terphenyl	100		70 - 130			12/15/22 14:18	12/16/22 11:06	1
Method: MCAWW 300.0 - Anions,	on Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05	mg/Kg			12/20/22 06:33	1
-								
Client Sample ID: FS02						Lab San	nple ID: 890-	3615-2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/22/22 09:05	12/23/22 14:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			12/22/22 09:05	12/23/22 14:00	1

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Client Sample Results

Job ID: 890-3615-1 SDG: 03D2024110

Matrix: Solid

5

Lab Sample ID: 890-3615-2

Client Sample ID: FS02

Project/Site: Dominator Fed 25 "0"

Date Collected: 12/09/22 12:00 Date Received: 12/09/22 15:10

Sample Depth: 12

Client: Ensolum

(Continued)			

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130			12/22/22 09:05	12/23/22 14:00	i
Method: TAL SOP Total BTEX - T	otal BTEX Calo	ulation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			12/26/22 16:44	
Method: SW846 8015 NM - Diese	I Range Organi	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			12/16/22 16:55	
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics GRO)-C6-C10	<49.9	U	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:06	
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:06	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:06	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	108		70 - 130			12/15/22 14:18	12/16/22 15:06	
p-Terphenyl	105		70 - 130			12/15/22 14:18	12/16/22 15:06	
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	11.5		4.95	mg/Kg			12/20/22 06:39	

Client Sample ID: FS03

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Date Collected: 12/09/22 12:05 Date Received: 12/09/22 15:10 Sample Depth: 12

Method: SW846 8021B - Volatile Organic Compounds (GC) Dil Fac Result Qualifier RL Unit D Prepared Analyzed <0.00200 U 0.00200 mg/Kg 12/22/22 09:05 12/23/22 14:21 <0.00200 U 0.00200 12/22/22 09:05 12/23/22 14:21 mg/Kg <0.00200 U 0.00200 mg/Kg 12/22/22 09:05 12/23/22 14:21 <0.00399 U 0.00399 12/23/22 14:21 mg/Kg 12/22/22 09:05 <0.00200 U 0.00200 mg/Kg 12/22/22 09:05 12/23/22 14:21 mg/Kg <0.00399 U 0.00399 12/22/22 09:05 12/23/22 14:21 Dil Fac Prepared Analyzed

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	107		70 - 130	
1,4-Difluorobenzene (Surr)	93		70 - 130	

Method: TAL SOP Total BTEX - To	otal BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			12/26/22 16:44	1
Method: SW846 8015 NM - Diesel	Range Organ	ics (DRO) (O	SC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			12/19/22 15:03	1

Eurofins Carlsbad

12/23/22 14:21

12/23/22 14:21

12/22/22 09:05

12/22/22 09:05

Matrix: Solid

1

1

1

1

1

1

1

Job ID: 890-3615-1 SDG: 03D2024110

Matrix: Solid

5

Lab Sample ID: 890-3615-3

Lab Sample ID: 890-3615-4

Matrix: Solid

Client Sample ID: FS03

Project/Site: Dominator Fed 25 "0"

Date Collected: 12/09/22 12:05 Date Received: 12/09/22 15:10

Sample Depth: 12

Client: Ensolum

Method: SW846 8015B NM -	Diesel Range Organics (DRO) (GC)	
Analyte	Result Qualifier	RL

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		12/15/22 14:18	12/16/22 15:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane			70 - 130			12/15/22 14:18	12/16/22 15:49	1
o-Terphenyl	106		70 - 130			12/15/22 14:18	12/16/22 15:49	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	167	5.03	mg/Kg			12/20/22 06:58	1

Client Sample ID: FS04

Date Collected: 12/09/22 12:10 Date Received: 12/09/22 15:10

Sample Depth: 12

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		12/22/22 09:05	12/23/22 14:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130			12/22/22 09:05	12/23/22 14:41	1
1,4-Difluorobenzene (Surr)	88		70 - 130			12/22/22 09:05	12/23/22 14:41	1
Method: SW846 8015 NM - Diese				11-14		Dranarad	Angland	
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte			50.0 (GC)	mg/Kg Unit	D	Prepared	12/19/22 15:03 Analyzed	Dil Fac
Gasoline Range Organics	<50.0		50.0	mg/Kg		12/15/22 14:18	12/16/22 16:12	1
(GRO)-C6-C10	~50.0	0		mynxy				I
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0	mg/Kg		12/15/22 14:18	12/16/22 16:12	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/15/22 14:18	12/16/22 16:12	1

		Client	Sample Res	sults					1	
Client: Ensolum Project/Site: Dominator Fed 25 "0"							Job ID: 890 SDG: 03D2		2	
Client Sample ID: FS04 Date Collected: 12/09/22 12:10					Lab Sample ID: 890-3615-4 Matrix: Solid					
Date Received: 12/09/22 15:10 Sample Depth: 12									4	
Method: MCAWW 300.0 - Anions, Ion Analyte		o <mark>graphy - Solu</mark> Qualifier	uble RL	Unit	D	Prepared	Analyzed	Dil Fac	5	
Chloride	79.7		5.01	mg/Kg		Fiepareu	12/20/22 07:05	1	6	
									7 8 9	
									10	
									11	
									12	
									13	
									14	

...

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Eurofins Carlsbad

Project/Site: Dominator Fed 25 "0"

Job ID: 890-3615-1 SDG: 03D2024110

Prep Type: Total/NA

Prep Type: Total/NA

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Client: Ensolum

_				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
890-3615-1	FS01	92	103		- 5
890-3615-2	FS02	105	94		
890-3615-3	FS03	107	93		- 22
890-3615-4	FS04	119	88		
.					
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

_				
				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3615-1	FS01	100	100	
890-3615-1 MS	FS01	109	98	
890-3615-1 MSD	FS01	105	86	
890-3615-2	FS02	108	105	
890-3615-3	FS03	112	106	
890-3615-4	FS04	122	114	
LCS 880-41926/2-A	Lab Control Sample	98	111	
LCSD 880-41926/3-A	Lab Control Sample Dup	128	134 S1+	
MB 880-41926/1-A	Method Blank	112	115	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Project/Site: Dominator Fed 25 "0"

Method: 8015B NM - Diesel Ra

-										
lethod: 8015B NM - Diesel Ra	nge Orga	nics (DR	(GC) (GC)							
Lab Sample ID: MB 880-41926/1-A								Client S	ample ID: Meth	hod Blank
Matrix: Solid										e: Total/NA
Analysis Batch: 41982										tch: 41926
	MF	в мв								
Analyte	Resul	lt Qualifier	RL		Unit		D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	ύ U	50.0		mg/K	'à	1	12/15/22 14:18	12/16/22 08:33	3 1
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.0) U	50.0		mg/Kg	.g	1	12/15/22 14:18	12/16/22 08:33	3 1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	υU	50.0		mg/Kg	ģ	1	12/15/22 14:18	12/16/22 08:33	3 1
-	мі	B MB			-	-				
Surrogate	%Recovery		Limits					Prepared	Analyzed	Dil Fac
1-Chlorooctane	112	-	70 - 130				1	12/15/22 14:18		
o-Terphenyl	115		70 - 130					12/15/22 14:18		
Lab Sample ID: LCS 880-41926/2-A							Clie	ent Sample	ID: Lab Contro	ol Sample
Matrix: Solid									Prep Type	e: Total/NA
Analysis Batch: 41982									Prep Bat	tch: 41926
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	1	D %Rec	Limits	
Gasoline Range Organics			1000	918.4		mg/Kg		92	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over			1000	903.8		mg/Kg		90	70 - 130	
C10-C28)										
	LCS LC	S								
Surrogate %F	Recovery Qu	ıalifier	Limits							
1-Chlorooctane	98		70 - 130							
o-Terphenyl	111		70 - 130							
	_									
Lab Sample ID: LCSD 880-41926/3-/	A					CI	ent Sa	ample ID: L	_ab Control Sa	
Matrix: Solid										e: Total/NA
Analysis Batch: 41982										tch: 41926
			Spike		LCSD				%Rec	RPD
Analyte			Added		Qualifier	Unit	'	D %Rec		RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1055		mg/Kg		105	70 - 130	14 20

mg/Kg

115

70 - 130

24

Client Sample ID: FS01

Prep Type: Total/NA

20

Diesel Range Organics (Over C10-C28)			1000
	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	134	S1+	70 - 130

Lab Sample ID: 890-3615-1 MS Matrix: Solid Analysis Batch: 41982

Analysis Batch: 41982									Prep	Batch: 41926
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<50.0	U F2	999	1283		mg/Kg		128	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<50.0	U *1	999	1096		mg/Kg		110	70 - 130	
C10-C28)										

1147 *1

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Client: Ensolum Project/Site: Dominator Fed 25 "0"

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

Lab Sample ID: 890-3615-1 MS Matrix: Solid Analysis Batch: 41982

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3615-1 MSD Matrix: Solid

Analysis Batch: 41982									Prep	Batch:	41926
	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	<50.0	U F2	997	988.5	F2	mg/Kg		99	70 - 130	26	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	942.5		mg/Kg		95	70 - 130	15	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	105		70 - 130								
o-Terphenyl	86		70 - 130								

Lab Sample ID: MB 880-41754/1-A										Client	Sample ID:	Metho	d Blank
Matrix: Solid											Prep	Type: \$	Soluble
Analysis Batch: 42164													
		ΜВ	МВ										
Analyte	Re	sult	Qualifier		RL		Unit		D	Prepared	Analyz	2ed	Dil Fac
Chloride	<	5.00	U		5.00		mg/K	g			12/20/22	05:41	1
Lab Sample ID: LCS 880-41754/2-A									Clie	nt Sampl	e ID: Lab C	ontrol	Sample
Matrix: Solid											Prep	Type: \$	Soluble
Analysis Batch: 42164													
				Spike		LCS	LCS				%Rec		
Analyte				Added		Result	Qualifier	Unit	D	%Rec	Limits		
Chloride				250		274.4		mg/Kg		110	90 - 110		
Lab Sample ID: LCSD 880-41754/3-	A							CI	ient Sa	mple ID:	Lab Contro	ol Sam	ole Dup
Matrix: Solid											Prep	Type: 3	Soluble
Analysis Batch: 42164													
				Spike		LCSD	LCSD				%Rec		RPD
Analyte				Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride				250		276.0		mg/Kg		110	90 - 110	1	20
- Lab Sample ID: 880-22579-A-1-G M	S									Client	t Sample ID	: Matri	x Spike
Matrix: Solid											Prep	Type: 3	Soluble
Analysis Batch: 42164													
-	Sample	Samp	ole	Spike		MS	MS				%Rec		
Analyte	Result	Quali	fier	Added		Result	Qualifier	Unit	D	%Rec	Limits		

mg/Kg

94

90 - 110

Job ID: 890-3615-1 SDG: 03D2024110

Client Sample ID: FS01

Client Sample ID: FS01

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 41926

Chloride

547

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250

781.5

Client: Ensolum Project/Site: Dominator Fed 25 "0" Job ID: 890-3615-1 SDG: 03D2024110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-22579-A-1-H MSD Matrix: Solid Analysis Batch: 42164						Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble						
,	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	5
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	547		250	777.4		mg/Kg		92	90 - 110	1	20	
												7
												8
												9
												1

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Client: Ensolum Project/Site: Dominator Fed 25 "0" Job ID: 890-3615-1 SDG: 03D2024110

GC VOA

Analysis Batch: 42465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3615-1	FS01	Total/NA	Solid	8021B	42482
890-3615-2	FS02	Total/NA	Solid	8021B	42482
890-3615-3	FS03	Total/NA	Solid	8021B	42482
890-3615-4	FS04	Total/NA	Solid	8021B	42482

Prep Batch: 42482

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3615-1	FS01	Total/NA	Solid	5035	
890-3615-2	FS02	Total/NA	Solid	5035	
890-3615-3	FS03	Total/NA	Solid	5035	
890-3615-4	FS04	Total/NA	Solid	5035	

Analysis Batch: 42617

	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-3615-1	FS01	Total/NA	Solid	5035		8
890-3615-2	FS02	Total/NA	Solid	5035		
890-3615-3	FS03	Total/NA	Solid	5035		9
890-3615-4	FS04	Total/NA	Solid	5035		
nalysis Batch: 426	517					
nalysis Batch: 426	517 Client Sample ID	Prep Туре	Matrix	Method	Prep Batch	
		Prep Type Total/NA	Matrix Solid	Method Total BTEX	Prep Batch	
Lab Sample ID	Client Sample ID				Prep Batch	
Lab Sample ID 890-3615-1	Client Sample ID	Total/NA	Solid	Total BTEX	Prep Batch	

GC Semi VOA

Prep Batch: 41926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3615-1	FS01	Total/NA	Solid	8015NM Prep	
890-3615-2	FS02	Total/NA	Solid	8015NM Prep	
890-3615-3	FS03	Total/NA	Solid	8015NM Prep	
890-3615-4	FS04	Total/NA	Solid	8015NM Prep	
MB 880-41926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3615-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-3615-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3615-1	FS01	Total/NA	Solid	8015B NM	41926
890-3615-2	FS02	Total/NA	Solid	8015B NM	41926
890-3615-3	FS03	Total/NA	Solid	8015B NM	41926
890-3615-4	FS04	Total/NA	Solid	8015B NM	41926
MB 880-41926/1-A	Method Blank	Total/NA	Solid	8015B NM	41926
LCS 880-41926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41926
LCSD 880-41926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41926
890-3615-1 MS	FS01	Total/NA	Solid	8015B NM	41926
890-3615-1 MSD	FS01	Total/NA	Solid	8015B NM	41926

Analysis Batch: 42053

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3615-1	FS01	Total/NA	Solid	8015 NM	
890-3615-2	FS02	Total/NA	Solid	8015 NM	
890-3615-3	FS03	Total/NA	Solid	8015 NM	
890-3615-4	FS04	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum Project/Site: Dominator Fed 25 "0"

Job ID: 890-3615-1 SDG: 03D2024110

HPLC/IC

Leach Batch: 41754

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3615-1	FS01	Soluble	Solid	DI Leach	
890-3615-2	FS02	Soluble	Solid	DI Leach	
890-3615-3	FS03	Soluble	Solid	DI Leach	
890-3615-4	FS04	Soluble	Solid	DI Leach	
MB 880-41754/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41754/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41754/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-22579-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
880-22579-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
Analysis Batch: 42164					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3615-1	FS01	Soluble	Solid	300.0	41754
890-3615-2	FS02	Soluble	Solid	300.0	41754

890-3615-1	FS01	Soluble	Solia	300.0	41754	
890-3615-2	FS02	Soluble	Solid	300.0	41754	
890-3615-3	FS03	Soluble	Solid	300.0	41754	
890-3615-4	FS04	Soluble	Solid	300.0	41754	
MB 880-41754/1-A	Method Blank	Soluble	Solid	300.0	41754	
LCS 880-41754/2-A	Lab Control Sample	Soluble	Solid	300.0	41754	
LCSD 880-41754/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41754	15
880-22579-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	41754	
880-22579-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	41754	

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Job ID: 890-3615-1 SDG: 03D2024110

Lab Sample ID: 890-3615-1 Matrix: Solid

Date Collected: 12/09/22 10:00 Date Received: 12/09/22 15:10

Client Sample ID: FS01

Project/Site: Dominator Fed 25 "0"

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	42482	12/22/22 09:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42465	12/23/22 13:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42617	12/26/22 16:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42053	12/16/22 14:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41926	12/15/22 14:18	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41982	12/16/22 11:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	41754	12/13/22 13:03	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42164	12/20/22 06:33	СН	EET MID

Client Sample ID: FS02

Date Collected: 12/09/22 12:00

Date Received: 12/09/22 15:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	42482	12/22/22 09:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42465	12/23/22 14:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42617	12/26/22 16:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42053	12/16/22 16:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41926	12/15/22 14:18	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41982	12/16/22 15:06	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	41754	12/13/22 13:03	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42164	12/20/22 06:39	СН	EET MID

Client Sample ID: FS03

Date Collected: 12/09/22 12:05

Date Received: 12/09/22 15:10

	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	42482	12/22/22 09:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42465	12/23/22 14:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42617	12/26/22 16:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42053	12/19/22 15:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41926	12/15/22 14:18	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41982	12/16/22 15:49	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41754	12/13/22 13:03	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42164	12/20/22 06:58	CH	EET MID

Client Sample ID: FS04 Date Collected: 12/09/22 12:10 Date Received: 12/09/22 15:10

	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	42482	12/22/22 09:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42465	12/23/22 14:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42617	12/26/22 16:44	AJ	EET MID

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Lab Sample ID: 890-3615-2

Lab Sample ID: 890-3615-3

Lab Sample ID: 890-3615-4

Matrix: Solid

Matrix: Solid

1	3

9

5

Matrix: Solid

Job ID: 890-3615-1 SDG: 03D2024110

Lab Sample ID: 890-3615-4

Matrix: Solid

Client Sample ID: FS04 Date Collected: 12/09/22 12:10

Project/Site: Dominator Fed 25 "0"

Date Received: 12/09/22 15:10

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			42053	12/19/22 15:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	41926	12/15/22 14:18	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41982	12/16/22 16:12	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	41754	12/13/22 13:03	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42164	12/20/22 07:05	СН	EET MID

Laboratory References:

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

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0-3615-1 22024110 2-3615-4

	ŀ	Accreditation/C	ertification Summary					
Client: Ensolum Project/Site: Dominator	Fed 25 "0"		Job ID: 890-30 SDG: 03D202					
Laboratory: Eurofi Unless otherwise noted, all an			raditation/contification holow					
Authority		rogram	Identification Number	Expiration Date				
Texas		ELAP	T104704400-22-25	06-30-23				
The following analytes	are included in this report by	It the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for which	5			
the agency does not off			ied by the governing autionty. This ist me					
Analysis Method	Prep Method	Matrix	Analyte					
8015 NM		Solid	Total TPH					
Total BTEX		Solid	Total BTEX					
					8			
					9			
					10			
					11			
					13			

Eurofins Carlsbad

.

Method Summary

Client: Ensolum Project/Site: Dominator Fed 25 "0" Job ID: 890-3615-1 SDG: 03D2024110

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
MCAWW :	STM International = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, Marc "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Editi	•	
TAL SOP :	= TestAmerica Laboratories, Standard Operating Procedure		
	eferences: = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Laboratory References:

Eurofins Carlsbad

Released to Imaging: 2/9/2023 1:30:36 PM

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Job ID: 890-3615-1 SDG: 03D2024110

Client: Ensolum Project/Site: Dominator Fed 25 "0"

ab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
0-3615-1	FS01	Solid	12/09/22 10:00	12/09/22 15:10	12
90-3615-2	FS02	Solid	12/09/22 12:00	12/09/22 15:10	12
90-3615-3	FS03	Solid	12/09/22 12:05	12/09/22 15:10	12
90-3615-4	FS04	Solid	12/09/22 12:10	12/09/22 15:10	12

Bill to: (if different)	Karan Kabi Inging	www.xenco.com Page	of
(if different)	in the second se		
		Work Order Comments	
Company Name:		Program: UST/PST PRP Brownfields RRC Superfund State of Project:	Superfund
SS:		Danadina Laval II DI Aval III D DST/LIST D TRRP	
City, State ZIP:	nd, TX 79701	Reporting: Level II Level III Level III Level III Control Level III Control Co	
ings@ensolum	jadams@ensolum.com	AUaPI	
Turn Around	ANALYSIS REQU		Preservative Codes
		None: NO	DI Water: H ₂ O
		Cool: Cool	MeOH: Me
TAT starts the day received by the lab, if received by 4:30pm			NaOH: Na
No	.0)	H ₃ PO ₄ : HP	
ŭ	: 300	NaHSO4: NABIS	
N.)	15) 021	-	Acid: SAPC
	CHLOR TPH (80	Sample (Sample Comments
1			
	No 1/2 /		129/244
-			
CRA 13PPM Texas 11 AI	As Ba Be B Cd Ca Cr Co Cu Fe Pb o As Ba Be Cd Cr Co Cu Pb Mn Mo	K Se /	V Zn 7471
e order from client / responsibility for : f \$5 for each sampl	company to Eurofins Xenco, its affiliates and subcontractors. In ny losses or expenses incurred by the client if such losses arc submitted to Eurofins Xenco, but not analyzed. These terms v	It assigns standard terms and conditions e due to circumstances beyond the control will be enforced unless previously negotiated.	
	Date/Time Relinquished by: (Signatu	ire)	Date/Time
2	1510		
	0 4		
Address Address City, Sta City, Sta City, Sta City, Sta City, Sta City, Sta City, Sta Popth Depth	Image: State of the second st	Address: 601 N Marienteld St Suite 400 City, State ZIP: Midland, TX 79701 Turn Around Resolum.com, jadams@ensolum.com ate: Pres Autrest he day received by 4 30pm b. if received by 4 30pm Ing: Q.Q. Parameters Ing: Q.Q. Parameters Parameters Digit Q.Q. Parameters Bill C.C. Parameters Bill C.C. Parameters Bill C.C. Parameters Bill C.C. Q.D. Q.D. Digit Q.D. Digit Q.D. Q.D. Q.D. Parameters Bill Bill Q.D. Digit Q.D. Q.D. Q.D. Q.D. Q.D. Q.D. Q.D. Q.	601 N Marienfeld St Suite 400 Midland, TX 79701 ANALYSIS REQ Code Analysis Code Analysis Code Analysis Code Analysis Midland Analysis Code Analysis Code Code Code Code Code Code Code Code Code Code

Received by OCD: 1/23/2023 11:18:01 AM

12/27/2022

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Job Number: 890-3615-1 SDG Number: 03D2024110

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3615 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	

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

Job Number: 890-3615-1 SDG Number: 03D2024110

List Source: Eurofins Midland

List Creation: 12/13/22 11:24 AM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3615 List Number: 2 Creator: Rodriguez, Leticia

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

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



APPENDIX E

NMOCD Notifications

Released to Imaging: 2/9/2023 1:30:36 PM

From:	Kalei Jennings
To:	Josh Adams
Subject:	FW: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 12/05/2022)
Date:	Thursday, January 5, 2023 5:53:37 PM
Attachments:	image006.png
	image007.png
	image008.png
	image009.png

Kalei Jennings Senior Scientist 817-683-2503 Ensolum, LLC in f

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, December 1, 2022 5:11 PM
To: Kalei Jennings <kjennings@ensolum.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD
<Jennifer.Nobui@emnrd.nm.gov>
Subject: RE: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 12/05/2022)

[**EXTERNAL EMAIL**]

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

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



From: Kalei Jennings <<u>kjennings@ensolum.com</u>
Sent: Thursday, December 1, 2022 4:01 PM
To: Enviro, OCD, EMNRD <<u>OCD.Enviro@emnrd.nm.gov</u>
Subject: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 12/05/2022)

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

All,

On behalf of ConocoPhillips Company, we respectfully submit notification of sampling to be conducted at the below locations the week of 12/05/2022.

Redhead 31 Federal Com 1H/ NAPP2230442646 Bandit 15 Federal COM #2/ NAPP2231139799 Dominator O Flowline / napp2230729294 James A Waterflood / Incident Numbers NAB1912758567 and NAB1912759510

Thank you,



Kalei Jennings Senior Scientist 817-683-2503 Ensolum, LLC

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

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

District III

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

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

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

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC	229137
600 W Illinois Ave	Action Number:
Midland, TX 79701	178500
	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

Created	Condition	Condition	
Ву		Date	
jnobui	Closure Report Approved.	2/9/2023	

CONDITIONS

Action 178500