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Incident ID: nAPP2215732821
District RP
Facility ID
Application ID

Closure

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

Closure Report Attachment Checklist: Each of the following i	tems must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.1	11 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
■ Laboratory analyses of final sampling (Note: appropriate ODG)	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and replace the human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the coaccordance with 19.15.29.13 NMAC including notification with	ntions. The responsible party acknowledges they must substantially anditions that existed prior to the release or their final land use in
email: jim.raley@dvn.com	Telephone: 575-689-7597
OCD Only	
Received by:Jocelyn Harimon	Date:11/28/2022
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.
Closure Approved by: Robert Hamlet	Date: 2/21/2023
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	nAPP2215732821
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party WPX Energy Permian, LLC			OGRID	O 246289		
Contact Name Jim Raley			Contact	t Telephone 575-689-7597		
Contact ema	il jim.rale	ey@dvn.com		Inciden	nt # (assigned by OCD) nAPP2215732821	
Contact mail NM 88220	ling address	5315 Buena Vi	sta Drive, Carlsb	ad,		
			Location	n of Release	Source	
Latitude 32.0)197411		(NAD 83 in a	Longitud decimal degrees to 5 de	de -103.8926239 lecimal places)	
Site Name F	RDX FEDER	RAL 28 #011		Site Typ	pe Oil	
Date Release	Discovered			API# (if	Capplicable) 30-015-42109	
Unit Letter	Section	Township	Range	Co	ounty	
D	28	26S	30E	Eddy		
Crude Oi	Materia		Nature and attacked that apply and attacked	id Volume o	of Release cific justification for the volumes provided below) Volume Recovered (bbls) 0	
□ Produced	Water	Volume Release	ed (bbls) 12		Volume Recovered (bbls) 0	
		Is the concentra produced water	tion of dissolved >10,000 mg/l?	chloride in the	Yes No	
Condensa	Condensate Volume Released (bbls)			Volume Recovered (bbls)		
Natural C	das	Volume Released (Mcf)			Volume Recovered (Mcf)	
Other (de	lescribe) Volume/Weight Released (provide units)		de units)	Volume/Weight Recovered (provide u	nits)	
produced wa	ter to pad su	rface. No fluids re	ecovered.		ing for the release of approx 12bbls oil and e yards * Soil Porosity * 6.41187 bbls of flu	

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Page 2 Oil Conservation Division

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Incident ID	nAPP2215732821
District RP	
Facility ID	
Application ID	

337 41	TOWER C. 1
Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by 19.15.29.7(A) NMAC?	
19.13.29.7(A) NWIAC:	
☐ Yes ⊠ No	
If YES, was immediate no	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 rele	ease has been stopped.
☐ The impacted area ha	s been secured to protect human health and the environment.
Released materials ha	we been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☐ All free liquids and re	ecoverable materials have been removed and managed appropriately.
<u> </u>	d above have <u>not</u> been undertaken, explain why:
if an the actions described	1 above have not occur undertaken, explain why.
	AC the responsible party may commence remediation immediately after discovery of a release. If remediation
C 1	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
within a fined containmen	it area (see 19.13.29.11(A)(3)(a) NMAC), please attach an information needed for closure evaluation.
	rmation given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and
	required to report and/or file certain release notifications and perform corrective actions for releases which may endanger
	nent. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have at and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In
	f 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: Lim Ral	ey Title:Environmental Professional
	TitleEnvironmental Floressional
Signature: Im Rily	Date:6/6/2022
	Talankana, 575 690 7507
email:jim.raley@dv	n.com Telephone:575-689-7597
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of New Mexico

Incident ID:	nAPP2215732821
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes 🏻 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes 🄀 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 ve contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
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 we Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs	lls.
☐ Photographs including date and GIS information	

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.

■ Laboratory data including chain of custody

▼ Topographic/Aerial maps

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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: Jim Raley	Title: Environmental Professional		
Signature: fin Rdy	Date:11/22/2022		
email: _jim.raley@dvn.com	Telephone: _ 575-689-7597		
OCD Only			
Received by:Jocelyn Harimon	Date: 11/28/2022		

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Incident ID:	nAPP2215732821
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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 it	tems must be included in the closure report.
☑ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Note That Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
□ Laboratory analyses of final sampling (Note: appropriate ODC)	C District office must be notified 2 days prior to final sampling)
Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re- numan health or the environment. In addition, OCD acceptance of a	ntions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Signature:	Date: 11/22/2022
email: _ jim.raley@dvn.com	Telephone: 575-689-7597
OCD Only	
Received by:Jocelyn Harimon	Date:11/28/2022
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



CLOSURE REQUEST REPORT

Site Location:

RDX Federal 28 #011 Eddy County, New Mexico Incident Number nAPP2215732821

November 21, 2022 Ensolum Project No. 03A1987032

Prepared for:

WPX Energy Permian, LLC 5315 Buena Vista Drive Carlsbad, New Mexico 88220 Attention: Jim Raley

Prepared by:

Joseph S. Hernandez Senior Geologist

Joyn S. Holy.

Ashley L. Ager, M.S., P.G.

Principal

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1.0	INTRODUCTION	2
	1.1 Site Description & Background	2
	1.2 Site Characterization	2-3
2.0	REMEDIATION AND SOIL SAMPLING ACTIVITIES	3
3.0	SOIL SAMPLING RESULTS	3-4
4.0	CLOSURE REQUEST	4
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Appendix A: Figure 1: Site Map

Figure 2: Excavation Soil Sample Locations

Figure 3: Delineation Soil Sample Locations

Appendix B: Well Record

Appendix C: Lithologic Soil Sampling Logs

Appendix D: Photographic Log

Appendix E: Tables

Appendix F: Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix G: Email Correspondence

Page 2

1.0 INTRODUCTION

Ensolum, LLC (Ensolum) has prepared this Closure Request Report (CRR) to document site assessment, soil sampling activities, and corrective actions performed by WPX Energy Permian, LLC (WPX) at the RDX Federal 28 #011 (Site) in Unit D, Section 28, Township 26 South, Range 30 East, in Eddy County, New Mexico (**Figure 1** in **Appendix A**). Based on remedial activities performed at the Site and laboratory analytical results from delineation and confirmation soil sampling activities indicating compliance with the regulatory standards, WPX respectfully submits this CRR, which summarizes remediation and soil sampling activities associated with a reportable release of produced water and crude oil at the Site.

1.1 Site Description & Background

The Site is located within Eddy County, New Mexico (32.0197411 N, -103.8926239° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1** in **Appendix A**).

On May 26, 2022, a valve on a wellhead was left slightly opened, resulting in approximately 12 barrels (bbls) of oil and 12 bbls of produced water to be released to the well pad and adjacent pasture. No fluids were recovered following the release. Initial response efforts included scraping of surface soils within the subject release. The release extent is presented on **Figure 2** in **Appendix A**. WPX reported the release to the New Mexico Oil Conservation Division (NMOCD) with a subsequent Release Notification Form C-141 (Form C-141) on June 6, 2022. The release was assigned Incident Number nAPP2215732821. Prior to initiating any ground disturbance in the pasture area, WPX submitted a Sundry Request Form for pasture areas impacted by a release. An archeological site boundary during the desktop review was identified near the release location and BLM required a cultural resource specialist to be onsite to monitor remediation activities. Due to additional coordination initiated by BLM, WPX submitted an extension request to November 22, 2022, which was subsequently approved on August 10, 2022.

1.2 Site Characterization

The Site has been characterized to determine applicability of Table I, Closure Criteria for Soils Impacted by a Release, from Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on **Figure 1 in Appendix A.**

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based a soil boring (MW-1) that was drilled by Talon LPE for WPX on December 9, 2020, located approximately ½ mile northeast of the Site at the RDX Federal Com 21-43 well pad (RDX 21-43). Using a truck-mounted drill rig equipped with hollow stem auger, the soil boring was advanced to a total depth of 110 feet bgs. No fluids were observed within the soil boring after at least 72 hours. Following the observation period, the boring was plugged and abandoned. The well log is provided in **Appendix B**. The location of the soil boring is depicted on **Figure 1** in **Appendix A**.

The closest continuously flowing or significant watercourse is an intermittent dry wash, located approximately 1,180 feet west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet from a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area).

Based on 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 Hydrocarbon (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet in the pasture area that was impacted by the release.

2.0 REMEDIATION AND SOIL SAMPLING ACTIVITIES

Between September 8 and September 13, 2022, Ensolum personnel oversaw excavation activities to remove impacted soil from the pasture area and delineation activities to confirm the presence or absence of impacted soil within and around the release extent on the well pad. Excavation and delineation activites were directed by field sceening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips.

Following removal of impacted soil, Ensolum collected 5-point composite soil samples at a sampling frequency of 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01, SW04, and SW09 through SW11 were collected from the sidewalls of the excavation at depths ranging from the ground surface to approximately 4 feet bgs; SW02, SW03, and SW05 were collected from the sidewalls of the excavation at depths ranging from the ground surface to approximately 3 feet bgs; SW06 through SW08 were collected from the sidewalls of the excavation at depths ranging from the ground surface to approximately 2 feet bgs. Composite soil samples FS01 through FS24 were collected from the floor of the excavation at depths ranging from the 2 feet bgs to approximately 4 feet bgs. The approximate extent of the excavation and confirmation soil sample locations are provided on Figure 3 in Appendix A. The soil samples were placed directly into a pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C), under strict chain-of-custody procedures, to Eurofins LLC (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 following EPA Method 8015M/D; and chloride following EPA Method 300.0.

On September 12 and September 13, 2022, delineation activities were conducted concurrently with excavation activities. Delineation soil samples (samples designated BH) were collected in boreholes advanced by use of heavy equipment. A total of two soil samples were collected from each delineation soil sample location (BH01 through BH12): the sample with the highest observed field screening (0.5-foot bgs) and the total depth (1-foot bgs). The soil samples were handled, collected, and analyzed as previously described. The location of the delineation soil samples are shown in **Figure 2** in **Appendix A**. Field screening results and observations for each delineation soil sample were recorded on lithologic/soil sampling logs (**Appendix C**). Photographic documentation of remediation activities is included in **Appendix D**.

3.0 SOIL SAMPLING RESULTS

Laboratory analytical results for excavation soil samples FS01 through FS24 and SW01 through SW11 indicated all constituents of concern (COCs) were below the applicable Closure Criteria and/or reclamation standard of the subject release.

Laboratory analytical results for delineation soil samples BH05 through BH10, collected on the well pad and within the subject release, indicated all COCs were below the applicable Closure Criteria. Laboratory analytical results for delineation soil samples BH01 through BH04, BH11, and BH12 provide lateral definition of the subject release.

Laboratory analytical results are summarized in the **Table 1** included in **Appendix E**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix F**. **Appendix G** provides email confirmation sampling and extension request notification receipts associated with the subject release.

4.0 CLOSURE REQUEST

Based on the results documented in this report, the following findings and conclusions regarding the releases are presented:

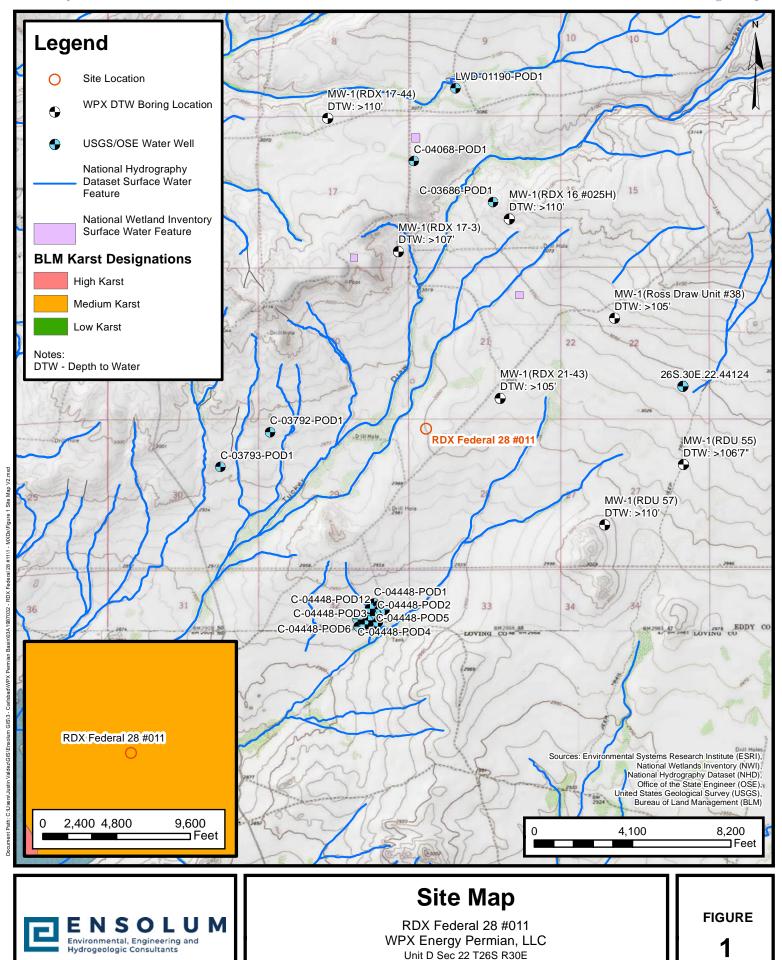
- Laboratory analytical results for excavation soil samples FS01 through FS24 and SW01 through SW11 indicated all COCs were below the applicable Closure Criteria and/or reclamation standard of the subject release. Laboratory analytical results for delineation soil samples BH06 through BH10, collected within the subject release on the well pad, indicated all COCs were below the applicable Closure Criteria of the subject release. Laboratory analytical results for delineation soil samples BH01 through BH04, BH11, and BH12 provide lateral definition of the subject release; and
- Approximately 550 yards of impacted soil were excavated from the subject release area during excavation activities and disposed of in accordance with state and federal regulations. The excavation was backfilled with clean, imported soil and restored to "as close to its original state" as possible.

WPX believes the remediation activities described above have met the requirements set forth in NMAC 19.15.29.13 to be protective of human health, the environment, and groundwater. As such, WPX respectfully requests Closure of Incident Number nAPP2215732821.



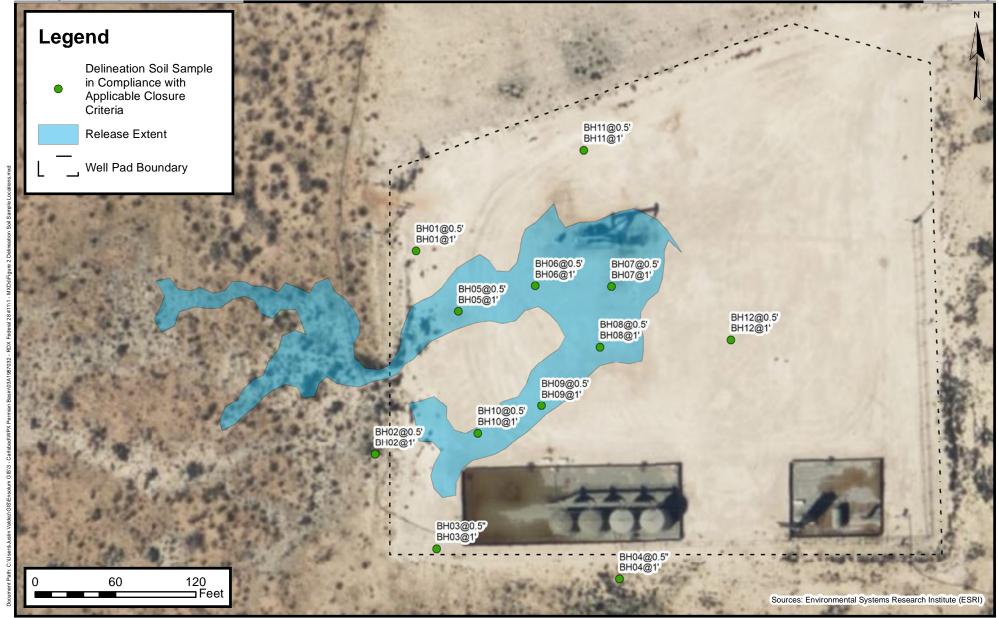
APPENDIX A

Figures



Eddy County, New Mexico

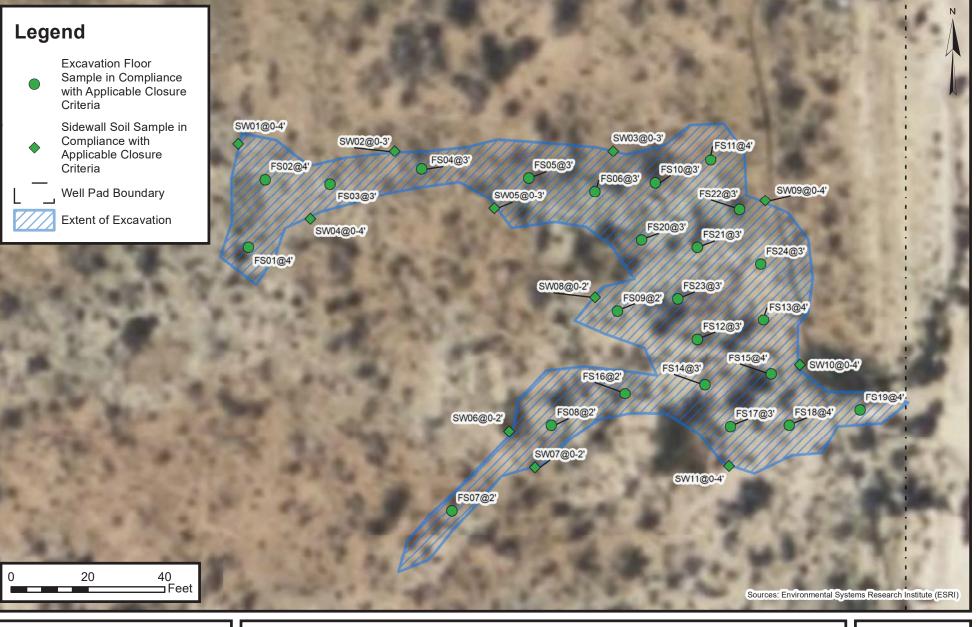
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Delineation Soil Sample Locations

RDX Federal 28 #011 WPX Energy Permian, LLC Unit D Sec 22 T26S R30E Eddy County, New Mexico FIGURE 2





Excavation Soil Sample Locations

RDX Federal 28 #011 WPX Energy Permian, LLC Unit D Sec 22 T26S R30E Eddy County, New Mexico FIGURE 3



APPENDIX B

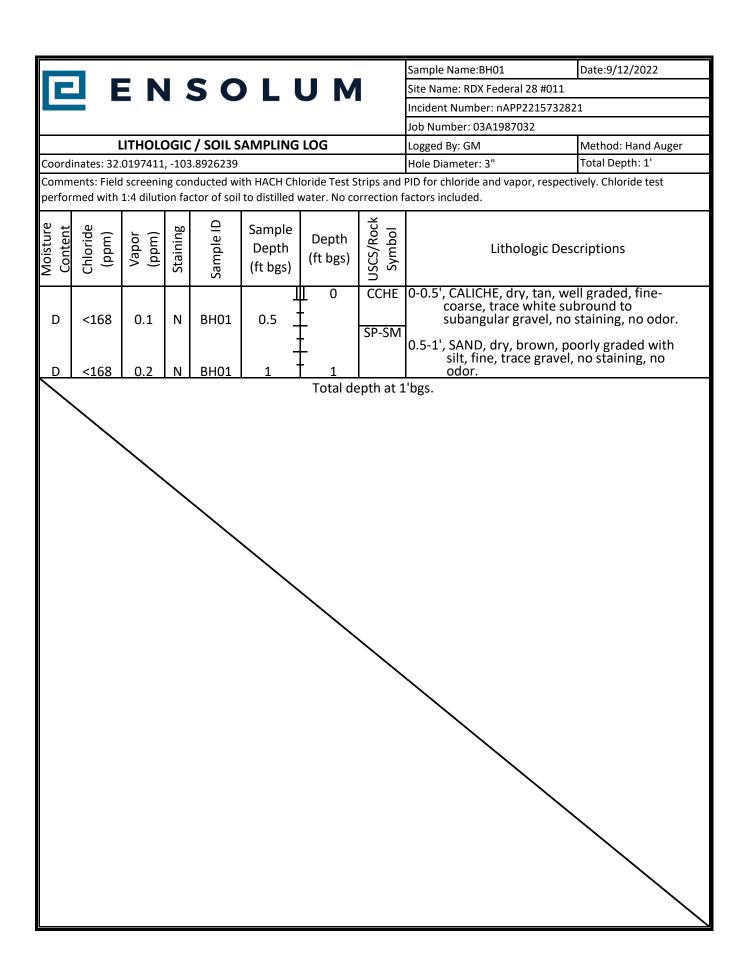
Well Record

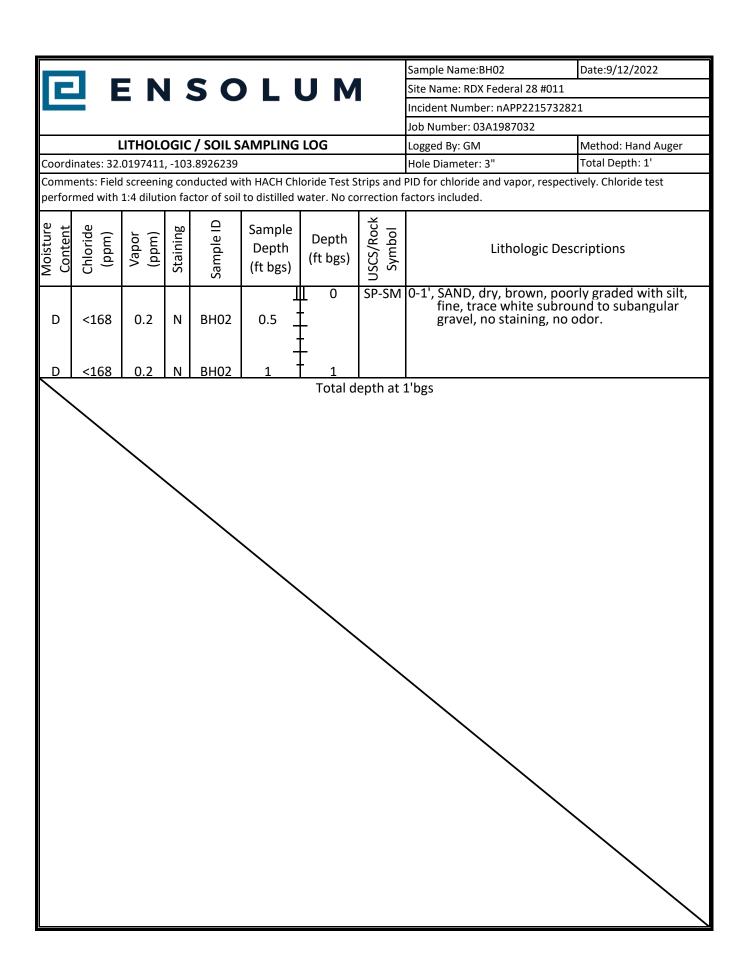
		HR	ı						MONITORING W	ELL COMPLETION	N DIAGRA	AM
\nearrow				IAN	C F		Boring/Wel		W-1	Location: RDX Federal C	Com 21-43	
		S D	Ϊ II -	rini	N S		Date:			Client:		
Drilling Me	th ode		Sampling 1	Mathadi			Logged By:		9/2020	WPX En	ergy	
_	inou: Air Rotar	v	Sampling .		ne		Logged By		nn, P.G.	Talon L	PF	
Gravel Pack			Gravel Pac	ck Depth Inte			Seal Type:		Seal Depth Interval:	Latitude:		
	0/20 Sar			3 B				lone	None	32.0225	71	
Casing Typ PVC	e:	Diameter: 2-inch		Depth Inter			Boring Tota	al Depth (ft. Bo	GS): 10	Longitude: -103.884	271	
Screen Typ	e:	Slot:		Diameter:	Depth :	Interval:	Well Total	Depth (ft. BGS			DTW Date:	
PVC		0.010-in	nch	2-inch		105 ft			05	> 105	12/16/20	020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	NSCS	Sample ID	Litholog	y/Remarks	Well Complet	
0 5 10 15	NM	L	D	N	N	NM	SP	NS	_	n poorly graded fine and		
20	NM	Н	D	N	N	NM	CL	NS		le red clay, dry, with and minor caliche		
25 30 35 40 45	NM	L	D	N	N	NM	SP	NS		e red poorly graded sand	-	
50 55 60	NM	L	D	N	N	NM	SP	NS		orly graded fine sand silt and clay	† †	
65 70 75	NM	L	D	N	N	NM	SP	NS		e red poorly graded in minor silt/clay	† •	
80 85 90	NM	M	D	N	N	NM	SC	NS		olor fine sand with and and clay		
95	NM	Н	D	N	N	NM	CL	NS	Brown orange clay w	ith silt and fine sand	†	
100	NM	Н	D	N	N	NM	SC	NS	Golden yellow and I	buff colored clay with g: 110' BGS; Sand 110'		

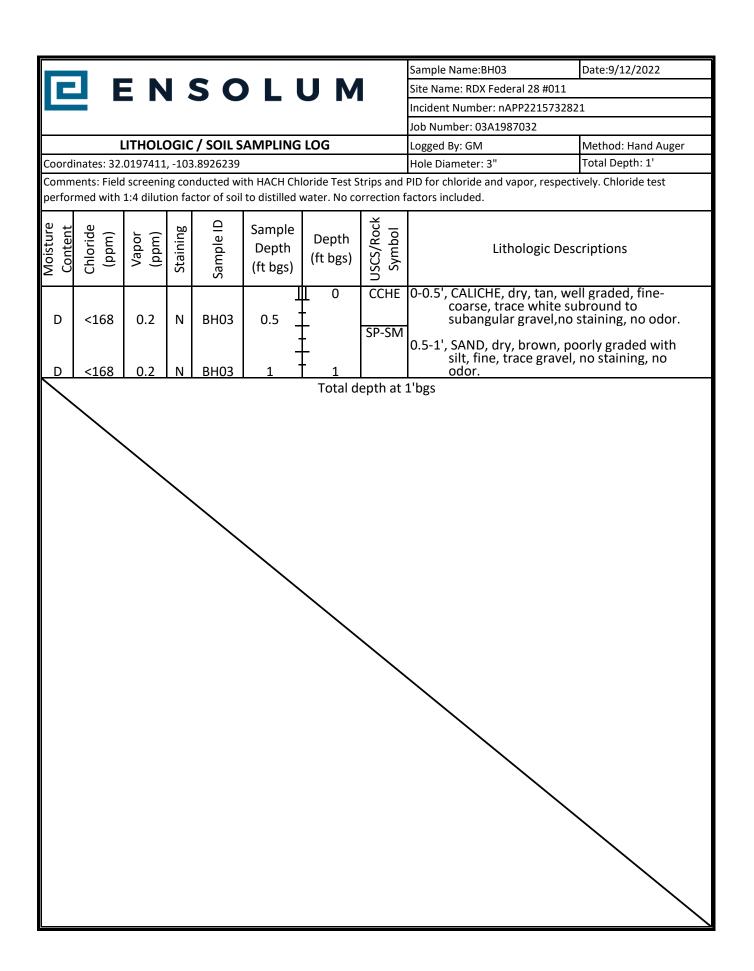


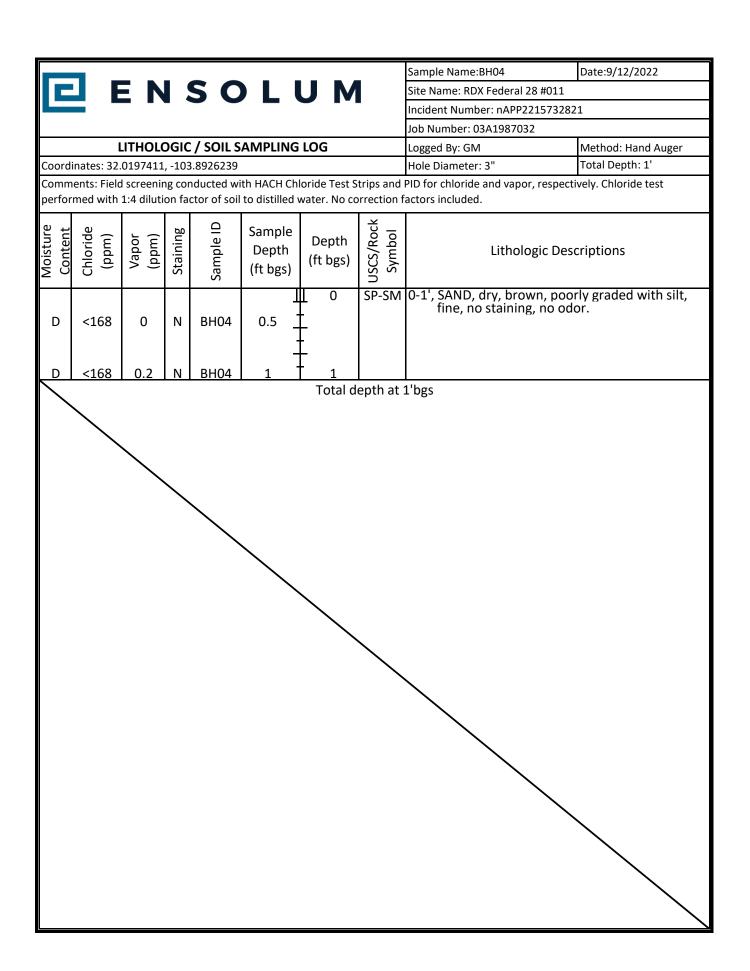
APPENDIX C

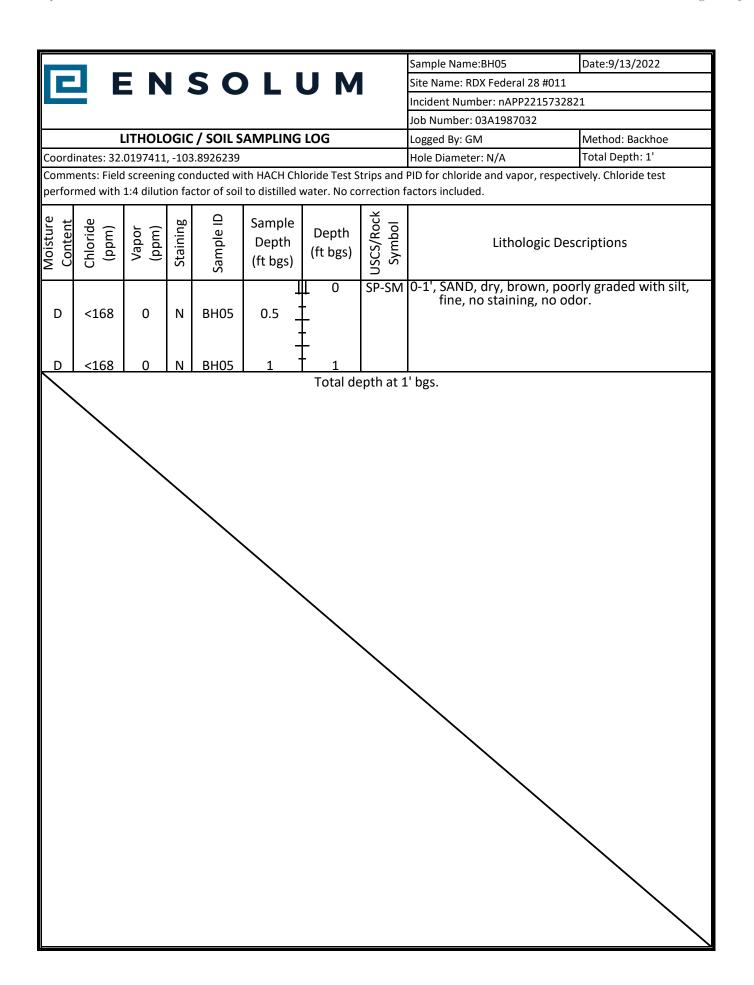
Lithologic Soil Sampling Logs

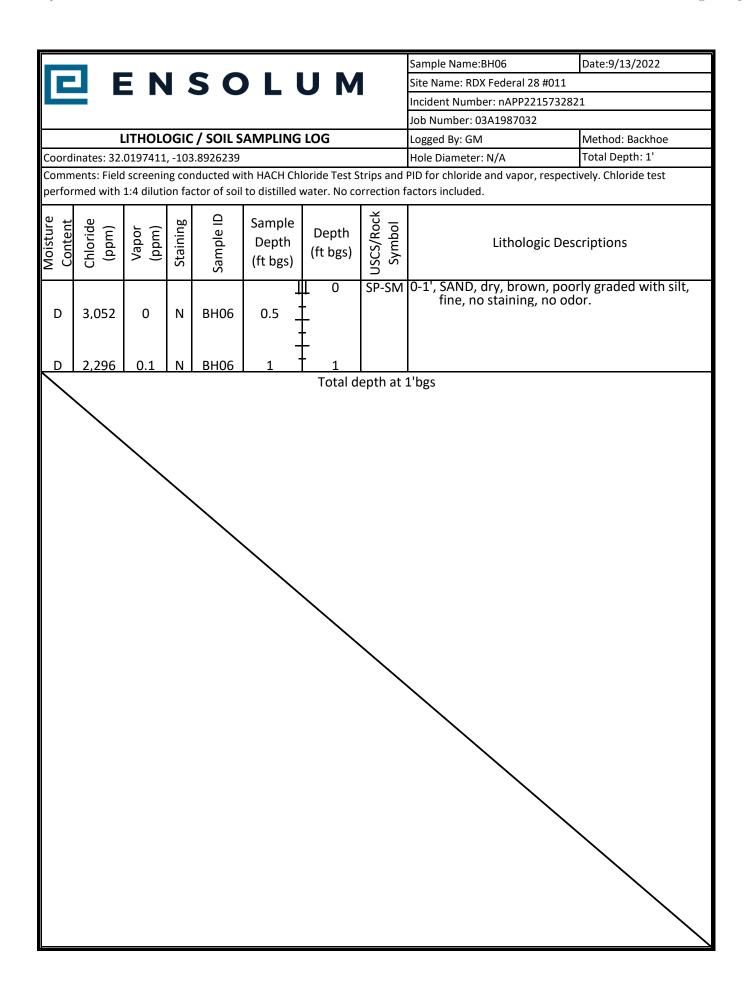


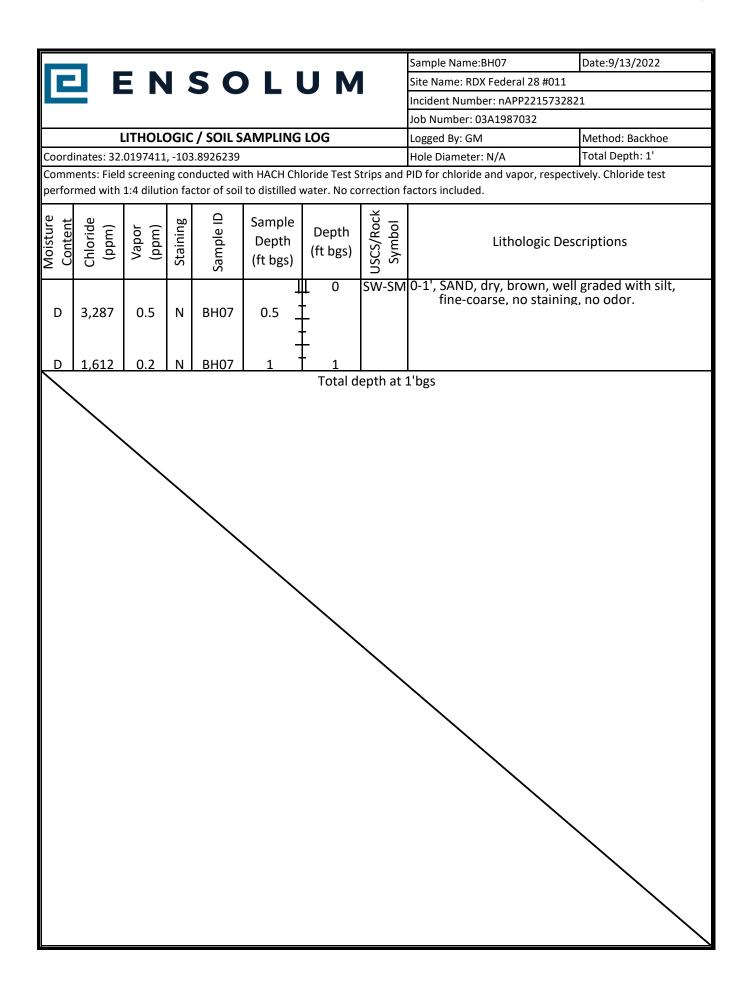








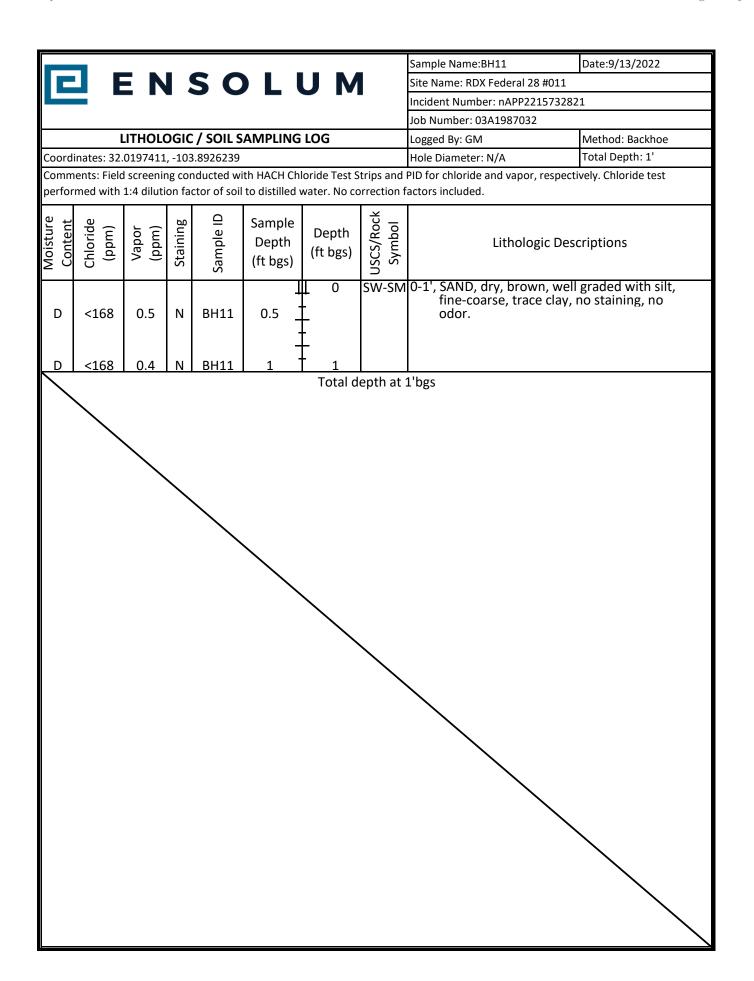




Site Name: RDX Federal 28 #011 Incident Number: nAPP2215732821 Job Number: 03A1987032 LUTHOLOGIC / SOIL SAMPLING LOG Logged By: GM Method: Backhoe Coordinates: 32.0197411, -103.8926239 Hole Diameter: N/A Total Depth: 1' Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) SW-SM 0-1', SAND, dry, brown, well graded with silt, fine-coarse, no staining, no odor. Total depth at 1'bgs								Sample Name:BH08	Date:9/13/2022
LITHOLOGIC / SOIL SAMPLING LOG Logged By: GM Method: Backhoe Coordinates: 32.0197411, -103.8926239 Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) D		FN		50		U M		Site Name: RDX Federal 28	#011
LITHOLOGIC / SOIL SAMPLING LOG Logged By: GM Method: Backhoe Coordinates: 32.0197411, -103.8926239 Hole Diameter: N/A Total Depth: 1' Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) Depth OSW-SM Depth Fine-coarse, no staining, no odor.		•				,	•	Incident Number: nAPP221	15732821
Coordinates: 32.0197411, -103.8926239 Hole Diameter: N/A Total Depth: 1' Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) Depth (ft bg								Job Number: 03A1987032	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Output Out		LITHOL	OGIC	/ SOIL S	AMPLING	LOG		Logged By: GM	Method: Backhoe
performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Output Outp									· ·
Depth (ft bgs) Depth (ft bgs)			_						respectively. Chloride test
D 414 0.5 N BH08 0.5 T SW-SM 0-1', SAND, dry, brown, well graded with silt, fine-coarse, no staining, no odor. D 414 0.4 N BH08 1 1	performed witl	n 1:4 diluti	on fac	tor of soil	to distilled v	water. No co	orrection f	actors included.	
D 414 0.5 N BH08 0.5 T fine-coarse, no staining, no odor. D 414 0.4 N BH08 1 1	Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Depth	(ft bgs)	_		
	D 414	0.5	N	BH08	0.5 <u>-</u> -	# ⁰	SW-SM	fine-coarse, no sta	n, well graded with slit, aining, no odor.
	D 414	0.4	N	BH08	1 .	1			
	<u> </u>	1 0.7	1 4	טווטט		Total d	epth at	1'bgs	
			\						

Site Name: RDX Federal 28 #011 Incident Number: 03A1987032 LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.0197411, -103.8926239 Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1.4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (fit bgs) De								Sample Name:BH09	Date:9/13/2022
LITHOLOGIC / SOIL SAMPLING LOG Logged By: GM Method: Backhoe Coordinates: 32.0197411, -103.8926239 Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) D		FN		50		U M		Site Name: RDX Federal 28	#011
LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.0197411, -103.8926239 Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) D		_ • •					•	Incident Number: nAPP221	15732821
Coordinates: 32.0197411, -103.8926239 Hole Diameter: N/A Total Depth: 1' Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) Depth (ft bgs) Depth (ft bgs) Depth Operh (ft bgs) Depth Operh Operh (ft bgs) Depth Operh Oper								Job Number: 03A1987032	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Output Out		LITHOL	OGIC	/ SOIL S	AMPLING	LOG		Logged By: GM	Method: Backhoe
performed with 1:4 dilution factor of soil to distilled water. No correction factors included. Sample Depth (ft bgs) Dep	Coordinates: 3	2.0197411	, -103	.8926239				Hole Diameter: N/A	Total Depth: 1'
Depth (ft bgs) Depth (ft bgs)			_						respectively. Chloride test
D 1,388 0.5 N BH09 0.5 T T T T T T T T T T T T T T T T T T T	performed wit	1:4 diluti	on fac	tor of soil	to distilled v	water. No co	rrection f	actors included.	
D 1,388 0.5 N BH09 0.5 T fine-coarse, no staining, no odor. D 1,013 0.4 N BH09 1 1	Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Depth	(ft bgs)	_	_	·
	D 1,388	0.5	N	вн09	0.5 <u>-</u> -	₩ ⁰ - -	SW-SM	fine-coarse, no sta	n, well graded with silt, aining, no odor.
	D 1.013	0.4	N	BH09	1 -	[1			
	7 1 2,013	, U.T		5.105	<u> </u>	Total d	epth at	1'bgs	
			\						

				-					Sample Name:BH10	Date:9/13/2022
				5	L		M	I	Site Name: RDX Federal 28	
	_		•	5					Incident Number: nAPP2215	
									Job Number: 03A1987032	
	ı	ITHOLO	OGIC	/ SOIL S	AMPLING	LOG			Logged By: GM	Method: Backhoe
Coord				3.8926239					Hole Diameter: N/A	Total Depth: 1'
Comm	ents: Field	screenir	ng cor	nducted wi	ith HACH Ch	loride 7	Test S	trips and	PID for chloride and vapor, r	espectively. Chloride test
perfor	med with	1:4 diluti	on fac	ctor of soil	to distilled	water.	No co	rrection f	actors included.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Der (ft b	gs)	USCS/Rock Symbol		c Descriptions
D	<168	0.4	N	BH10	0.5		0	SW-SM	0-1', SAND, dry, brown fine-coarse, trace no odor.	, well graded with silt, clay, no staining,
D	<168	0.2	N	BH10	1	Ŧ .	1			
<u> </u>	/TOO	0.2		DITTO	<u> </u>	To	: tal d	epth at :	1'bgs	



								Sample Name:BH12	Date:9/13/2022
				50	L			Site Name: RDX Federal 28	
			•			J 14		Incident Number: nAPP221	
								Job Number: 03A1987032	
	L	ITHOLO	OGIC	/ SOIL S	AMPLING	LOG		Logged By: GM	Method: Backhoe
Coord	inates: 32.	0197411	, -103	.8926239				Hole Diameter: N/A	Total Depth: 1'
Comm	ents: Field	Screenir	ng cor	nducted wi	th HACH Ch	loride Test S	trips and	PID for chloride and vapor, r	espectively. Chloride test
perfor	med with	1:4 diluti	on fa	ctor of soil	to distilled	water. No co	orrection f	actors included.	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		c Descriptions
D	<168	0.3	N	BH12	0.5 <u> </u>	0	SW-SM	0-1', SAND, dry, browr fine-coarse, trace odor.	n, well graded with silt, clay, no staining, no
D	<168	0.4	N	BH12	1 -	1			
$\overline{}$						Total d	epth at :	1'bgs	



APPENDIX D

Photographic Log



Photographic Log

WPX Energy Permian, LLC RDX Federal 28 #011 Incident Number: nAPP2215732821





Photograph: 1

Description: Site Location

View: southwest

Date: 8/31/2022

Photograph: 2

Description: Excavation activities

View: northeast





Photograph: 3

Date: 9/12/2022

Photograph: 4

Date: 10/18/2022

Date: 9/8/2022

Description: Excavation activities

View: southwest

Description: Backfilling activities

View: northwest



APPENDIX E

Tables

Received by OCD: 11/28/2022 9:25:01 AM



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC - RDX Federal 28 #011 Eddy County, New Mexico

Ensolum Project No. 03A1987032

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Excavation	Floor Soil Sample Ar	alytical Results				
FS01	09/09/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	535
FS02	09/09/2022	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	51.4
FS03	09/09/2022	3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	21.2
FS04	09/09/2022	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	31.3
FS05	09/09/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	37.5
FS06	09/09/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	35.0
FS07	09/12/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	43.1
FS08	09/12/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	38.9
FS09	09/12/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	54.3
FS10	09/12/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	16.4
FS11	09/12/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	18.0
FS12	09/12/2022	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	29.9
FS13	09/12/2022	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	845
FS14	09/12/2022	3	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	27.8
FS15	09/12/2022	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,420
FS16	09/12/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	158
FS17	09/12/2022	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	31.2
FS18	09/12/2022	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	179
FS19	09/12/2022	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	3,730
FS20	09/12/2022	3	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	47.7
FS21	09/12/2022	3	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	24.8
FS22	09/12/2022	3	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	30.2
FS23	09/12/2022	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	30.8
FS24	09/12/2022	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	121

Ensolum 1 of 3



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC - RDX Federal 28 #011 Eddy County, New Mexico

Ensolum Project No. 03A1987032

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Excavation S	idewall Soil Sample	Analytical Results				
SW01	09/09/2022	0 - 4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	118
SW02	09/09/2022	0 - 3	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	41.7
SW03	09/09/2022	0 - 3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	41.2
SW04	09/12/2022	0 - 4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	37.1
SW05	09/12/2022	0 - 3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	28.6
SW06	09/12/2022	0 - 2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	20.5
SW07	09/12/2022	0 - 2	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	21.3
SW08	09/12/2022	0 - 2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	35.0
SW09	09/12/2022	0 - 4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	15.5
SW10	09/12/2022	0 - 4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	13.7
SW11	09/12/2022	0 - 4	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	30.8
				Delineation	on Soil Sample Analy	tical Results				
BH01	09/12/2022	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	15.8
BH01	09/12/2022	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	28.2
BH02	09/12/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	20.3
BH02	09/12/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	42.2
BH03	09/12/2022	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	40.6
BH03	09/12/2022	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	53.5
BH04	09/12/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	8.80
BH04	09/12/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	9.52
BH05	09/13/2022	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	26.1
BH05	09/13/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	144
BH06	09/13/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,380
BH06	09/13/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,940
BH07	09/13/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	1,940
BH07	09/13/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,750

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Received by OCD: 11/28/2022 9:25:01 AM



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS WPX Energy Permian, LLC - RDX Federal 28 #011 Eddy County, New Mexico

Ensolum Project No. 03A1987032

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 0	Closure Criteria	(NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
BH08	09/13/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,310
BH08	09/13/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	668
BH09	09/13/2022	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	1,390
BH09	09/13/2022	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,050
BH10	09/13/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	71.0
BH10	09/13/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	57.3
BH11	09/13/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	19.3
BH11	09/13/2022	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	18.1
BH12	09/13/2022	0.5	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	142
BH12	09/13/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	139

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria and/or Reclamation

Standard for Soils Impacted by a Release

Ensolum



APPENDIX F

Laboratory Analytical Reports & Chain-of-Custody Documentation

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2933-1

Laboratory Sample Delivery Group: 03A1987032 Client Project/Site: RDX Federal 28 #011H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Devon Team

MAMER

Authorized for release by: 9/22/2022 7:07:56 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

····· Links ······

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

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Client: Ensolum
Project/Site: RDX Federal 28 #011H
Laboratory Job ID: 890-2933-1
SDG: 03A1987032

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Definitions/Glossary

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H

SDG: 03A1987032

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.
HPI C/IC	

Indicates the analyte was analyzed for but not detected.

Glossary

Ciocoary	
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 **Practical Quantitation Limit PQL**

PRES Presumptive **Quality Control** QC

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)

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TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: RDX Federal 28 #011H

Job ID: 890-2933-1

SDG: 03A1987032

Job ID: 890-2933-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2933-1

Receipt

The samples were received on 9/12/2022 11:23 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA

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

GC Semi VOA

Method 8015MOD NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) samples: (890-2933-A-1-B MS) and (890-2933-A-1-C MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34416 and analytical batch 880-34433 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-34495/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: (880-19130-A-12-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34495 and analytical batch 880-34439 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34495 and analytical batch 880-34439 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

Lab Sample ID: 890-2933-1

Client Sample Results

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: FS01

Date Collected: 09/09/22 09:00 Date Received: 09/12/22 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				09/20/22 13:33	09/22/22 16:50	1
1,4-Difluorobenzene (Surr)	92		70 - 130				09/20/22 13:33	09/22/22 16:50	1
Method: Total BTEX - Total BTE	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/22/22 19:56	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/14/22 17:04	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/22 15:30	09/14/22 10:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		09/13/22 15:30	09/14/22 10:57	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 15:30	09/14/22 10:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				09/13/22 15:30	09/14/22 10:57	1
o-Terphenyl	83		70 - 130				09/13/22 15:30	09/14/22 10:57	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte		Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS02

Date Collected: 09/09/22 09:10 Date Received: 09/12/22 11:23

Sample Depth: 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/20/22 13:33	09/22/22 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				09/20/22 13:33	09/22/22 17:11	

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Lab Sample ID: 890-2933-2

Matrix: Solid

Lab Sample ID: 890-2933-2

Job ID: 890-2933-1

Client: Ensolum Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: FS02

Date Collected: 09/09/22 09:10 Date Received: 09/12/22 11:23

Sample Depth: 4

Method: 8021B - Volatile Organic Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	(Continuou,

Surrogate	%Recovery C	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71	70 - 130	09/20/22 13:33	09/22/22 17:11	1

ı	Mothodi	Total DTEV	- Total BTEX	Coloulation
ı	wethou.	TOTAL DIEV	- IUIAI DIEA	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399		0.00399		mg/Kg			09/22/22 19:56	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/K			09/14/22 17:04	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/22 15:30	09/14/22 12:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 15:30	09/14/22 12:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 15:30	09/14/22 12:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88	70 - 130	09/13/22 15:30	09/14/22 12:00	1
o-Terphenyl	87	70 - 130	09/13/22 15:30	09/14/22 12:00	1

Method: 300.0 - Anions, Ion C	Chromatography - Soluble

Analyte	Result Qualifi		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.4	5.02	mg/Kg			09/17/22 05:26	1

Client Sample ID: FS03 Lab Sample ID: 890-2933-3 Matrix: Solid

Date Collected: 09/09/22 09:20 Date Received: 09/12/22 11:23

Sample Depth: 3

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

motification of ga	(33)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/20/22 13:33	09/22/22 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				09/20/22 13:33	09/22/22 17:31	1
1,4-Difluorobenzene (Surr)	79		70 - 130				09/20/22 13:33	09/22/22 17:31	1

Method:	Total R	TFY - T	ntal RT	FX Calcu	ılation

Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402		ma/Ka			09/22/22 19:56	1

	Method: 8015 NM - Diesel	Range Organics (DRC)) (GC)
ı	Michiga. 00 to Min - Diese	i italige Organica (bite	,, (00)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/14/22 17:04	1

Matrix: Solid

Lab Sample ID: 890-2933-3

Job ID: 890-2933-1

Client: Ensolum Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: FS03

Date Collected: 09/09/22 09:20 Date Received: 09/12/22 11:23

Sample Depth: 3

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 12:21	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 12:21	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 12:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				09/13/22 15:30	09/14/22 12:21	1
o-Terphenyl	82		70 - 130				09/13/22 15:30	09/14/22 12:21	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.2		4.97		mg/Kg			09/17/22 05:31	1

Client Sample ID: FS04 Lab Sample ID: 890-2933-4

Date Collected: 09/09/22 09:30 Date Received: 09/12/22 11:23

Sample Depth: 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/20/22 13:33	09/22/22 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				09/20/22 13:33	09/22/22 17:52	1
1,4-Difluorobenzene (Surr)	72		70 - 130				09/20/22 13:33	09/22/22 17:52	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/22/22 19:56	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/14/22 17:04	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:25	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				09/14/22 11:55	09/15/22 01:25	1

Job ID: 890-2933-1

Matrix: Solid

Lab Sample ID: 890-2933-4

Client: Ensolum Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: FS04

Date Collected: 09/09/22 09:30 Date Received: 09/12/22 11:23

Sample Depth: 3

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	31.3		4.96		mg/Kg			09/17/22 05:36	1	

Client Sample ID: FS05 Lab Sample ID: 890-2933-5 Matrix: Solid

Date Collected: 09/09/22 11:00 Date Received: 09/12/22 11:23

Sample Depth: 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:12	
Toluene	< 0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:12	
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:12	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 18:12	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:12	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 18:12	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	113		70 - 130				09/20/22 13:33	09/22/22 18:12	
1,4-Difluorobenzene (Surr)	88		70 - 130				09/20/22 13:33	09/22/22 18:12	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/22/22 19:56	
Method: 8015 NM - Diesel Range	•					_	_		
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0		mg/Kg			09/14/22 17:04	
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:47	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:47	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/15/22 01:47	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	110		70 - 130				09/14/22 11:55	09/15/22 01:47	
o-Terphenyl	110		70 - 130				09/14/22 11:55	09/15/22 01:47	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa

Lab Sample ID: 890-2933-6

Client Sample Results

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

Client Sample ID: FS06

Date Collected: 09/09/22 11:10 Date Received: 09/12/22 11:23

Sample Depth: 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/20/22 13:33	09/22/22 18:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				09/20/22 13:33	09/22/22 18:33	1
1,4-Difluorobenzene (Surr)	91		70 - 130				09/20/22 13:33	09/22/22 18:33	1
- Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/22/22 19:56	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/14/22 17:04	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	П			mg/Kg		09/13/22 15:37	00/44/00 47:05	
(GRO)-C6-C10	00.0	O	50.0		5 5		09/10/22 10:07	09/14/22 17:35	1
Diesel Range Organics (Over	<50.0		50.0		mg/Kg		09/13/22 15:37	09/14/22 17:35	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)		U							
Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 15:37	09/14/22 17:35	1
Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	<50.0 <50.0	U	50.0 50.0		mg/Kg		09/13/22 15:37 09/13/22 15:37	09/14/22 17:35 09/14/22 17:35	1
C10-C28)	<50.0 <50.0 %Recovery	U	50.0 50.0 <i>Limits</i>		mg/Kg		09/13/22 15:37 09/13/22 15:37 <i>Prepared</i>	09/14/22 17:35 09/14/22 17:35 <i>Analyzed</i>	1 1 Dil Fac
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 <50.0 %Recovery 120 120	U U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130		mg/Kg		09/13/22 15:37 09/13/22 15:37 Prepared 09/13/22 15:37	09/14/22 17:35 09/14/22 17:35 Analyzed 09/14/22 17:35	1 1 <i>Dil Fac</i>
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 <50.0 **Recovery 120 120 comatography -	U U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130	MDL	mg/Kg	D	09/13/22 15:37 09/13/22 15:37 Prepared 09/13/22 15:37	09/14/22 17:35 09/14/22 17:35 Analyzed 09/14/22 17:35	1 1 1 Dil Fac

Client Sample ID: SW01

Date Collected: 09/09/22 11:05 Date Received: 09/12/22 11:23

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/20/22 13:33	09/22/22 18:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/20/22 13:33	09/22/22 18:53	

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Lab Sample ID: 890-2933-7

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Matrix: Solid

Job ID: 890-2933-1

Client: Ensolum SDG: 03A1987032 Project/Site: RDX Federal 28 #011H

Client Sample ID: SW01 Lab Sample ID: 890-2933-7 Date Collected: 09/09/22 11:05

Matrix: Solid

Date Received: 09/12/22 11:23 Sample Depth: 0 - 4

Method: 8021B - Volatile Or	ganic Compounds	(GC)	(Continued)	
mothodi coz iz tolatile ci	garno compounac	1/	(Continuou)	

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	89	70 - 130	09/20/22 13:33	09/22/22 18:53	

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	ma/Ka			09/22/22 19:56	1

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

Analyte	Result	Qualifier	RL	MDL Ur		D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mo	a/Ka			09/14/22 17:04	1

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

Result	Qualifier	RL	MDL (Unit	D	Prepared	Analyzed	Dil Fac
<49.9	U	49.9		mg/Kg		09/13/22 15:37	09/14/22 17:56	1
<49.9	U	49.9	ı	mg/Kg		09/13/22 15:37	09/14/22 17:56	1
<49.9	U	49.9	1	mg/Kg		09/13/22 15:37	09/14/22 17:56	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	<49.9 <49.9 <49.9	Result Qualifier	<49.9 U 49.9 <49.9 U 49.9 <49.9 U 49.9	<49.9 U 49.9 <49.9 U 49.9 <49.9 U 49.9	<49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg	<49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg <49.9 U 49.9 mg/Kg	<49.9	<49.9 U

1-Chlorooctane	114	70 - 130
o-Terphenyl	116	70 - 130

1-Chlorooctane	114	70 - 130	09/13/22 15:37	09/14/22 17:56	1
o-Terphenyl	116	70 - 130	09/13/22 15:37	09/14/22 17:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qual		MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	118	5.02	mg/Kg			09/17/22 06:00	1

Client Sample ID: SW02 Lab Sample ID: 890-2933-8 **Matrix: Solid**

Date Collected: 09/09/22 11:20 Date Received: 09/12/22 11:23

Sample Depth: 0 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/20/22 13:33	09/22/22 19:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/20/22 13:33	09/22/22 19:14	1
1,4-Difluorobenzene (Surr)	89		70 - 130				09/20/22 13:33	09/22/22 19:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/22/22 19:56	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	49.8	mg/Kg			09/14/22 17:04	1

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: SW02 Lab Sample ID: 890-2933-8

Date Collected: 09/09/22 11:20 Matrix: Solid Date Received: 09/12/22 11:23

Sample Depth: 0 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8		mg/Kg		09/13/22 15:37	09/14/22 18:17	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.8	U	49.8		mg/Kg		09/13/22 15:37	09/14/22 18:17	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/22 15:37	09/14/22 18:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				09/13/22 15:37	09/14/22 18:17	1
o-Terphenyl	120		70 - 130				09/13/22 15:37	09/14/22 18:17	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
		Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	NL.	IVIDE	OTHE		riepaieu	Allulyzou	Dii i ac

Lab Sample ID: 890-2933-9 **Client Sample ID: SW03** Matrix: Solid

Date Collected: 09/09/22 11:30

Date Received: 09/12/22 11:23

Sample Depth: 0 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/20/22 13:33	09/22/22 19:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				09/20/22 13:33	09/22/22 19:34	1
1,4-Difluorobenzene (Surr)	70		70 - 130				09/20/22 13:33	09/22/22 19:34	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/22/22 19:56	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
- Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/14/22 17:04	Dil Fac
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9	Qualifier U		MDL MDL	mg/Kg	D	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			09/14/22 17:04	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (D Result	Qualifier U RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	09/14/22 17:04 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (D Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/13/22 15:37	09/14/22 17:04 Analyzed 09/14/22 18:38	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/13/22 15:37 09/13/22 15:37	09/14/22 17:04 Analyzed 09/14/22 18:38 09/14/22 18:38	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/13/22 15:37 09/13/22 15:37	09/14/22 17:04 Analyzed 09/14/22 18:38 09/14/22 18:38	

Client Sample Results

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

Client Sample ID: SW03

Lab Sample ID: 890-2933-9

Date Collected: 09/09/22 11:30
Date Received: 09/12/22 11:23

Sample Depth: 0 - 3

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.2		5.05		mg/Kg			09/17/22 06:10	1

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Surrogate Summary

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-2933-1	FS01	111	92	
390-2933-2	FS02	97	71	
390-2933-3	FS03	104	79	
390-2933-4	FS04	104	72	
390-2933-5	FS05	113	88	
390-2933-6	FS06	111	91	
390-2933-7	SW01	113	89	
390-2933-8	SW02	110	89	
890-2933-9	SW03	104	70	

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

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

Matrix: Solid Prep Type: Total/NA

		1CO1	ОТРН1	Percent Surrogate Recovery (Acceptance Limit
b Sample ID	Client Sample ID	(70-130)	(70-130)	
0-19130-A-12-E MS	Matrix Spike	92	84	· — — — — — — — — — — — — — — — — — — —
0-19130-A-12-F MSD	Matrix Spike Duplicate	94	87	
0-2931-A-1-C MS	Matrix Spike	106	95	
0-2931-A-1-D MSD	Matrix Spike Duplicate	106	95	
0-2933-1	FS01	83	83	
0-2933-1 MS	FS01	73	66 S1-	
0-2933-1 MSD	FS01	78	68 S1-	
0-2933-2	FS02	88	87	
0-2933-3	FS03	85	82	
0-2933-4	FS04	118	119	
0-2933-5	FS05	110	110	
0-2933-6	FS06	120	120	
)-2933-7	SW01	114	116	
0-2933-8	SW02	120	120	
)-2933-9	SW03	113	113	
S 880-34416/2-A	Lab Control Sample	96	98	
S 880-34417/2-A	Lab Control Sample	99	109	
S 880-34495/2-A	Lab Control Sample	147 S1+	151 S1+	
SD 880-34416/3-A	Lab Control Sample Dup	81	82	
SD 880-34417/3-A	Lab Control Sample Dup	97	107	
SD 880-34495/3-A	Lab Control Sample Dup	127	130	
3 880-34416/1-A	Method Blank	109	111	
3 880-34417/1-A	Method Blank	115	120	
3 880-34495/1-A	Method Blank	121	125	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H

SDG: 03A1987032

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

MD MD

Lab Sample ID: MB 880-34416/1-A

Matrix: Solid

Analysis Batch: 34433

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 34416

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 09:53	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 09:53	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 15:30	09/14/22 09:53	1
	МВ	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				09/13/22 15:30	09/14/22 09:53	1
o-Terphenyl	111		70 - 130				09/13/22 15:30	09/14/22 09:53	1

Lab Sample ID: LCS 880-34416/2-A

Analysis Batch: 34433

Matrix: Solid

Client Sample ID: Lab Control Sample)
Prep Type: Total/NA	N.
Durin District 04440	

Prep Batch: 34416

LCS LCS Spike Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 1035 103 70 - 130 mg/Kg (GRO)-C6-C10 1000 Diesel Range Organics (Over 1127 mg/Kg 113 70 - 130C10-C28)

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 96 70 - 130 o-Terphenyl 98 70 - 130

Lab Sample ID: LCSD 880-34416/3-A

Matrix: Solid

Analysis Batch: 34433

Client	Sample	ID:	Lab	Contr	ol S	Sample	e Dup	o
				_	_	_		_

Prep Type: Total/NA

Prep Batch: 34416

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	879.7		mg/Kg		88	70 - 130	16	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	920.3		mg/Kg		92	70 - 130	20	20
C10-C28)									

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 81 82 70 - 130 o-Terphenyl

Lab Sample ID: 890-2933-1 MS

Matrix: Solid

Analysis Batch: 34433

Client Sample ID: FS01 Prep Type: Total/NA Prep Batch: 34416

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	781.2		mg/Kg		78	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U F1	996	640.2	F1	mg/Kg		63	70 - 130	
C10-C28)										

Project/Site: RDX Federal 28 #011H

Client: Ensolum

Job ID: 890-2933-1 SDG: 03A1987032

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

Lab Sample ID: 890-2933-1 MS **Matrix: Solid**

Analysis Batch: 34433

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 34416

Prep Batch: 34416

MS MS %Recovery Qualifier Limits 73 70 - 130

66 S1-

MB MB

Lab Sample ID: 890-2933-1 MSD **Client Sample ID: FS01** Prep Type: Total/NA

Matrix: Solid

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 34433

70 - 130

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.9 U 999 829.0 83 70 - 1306 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 999 662.5 F1 65 <49.9 U F1 mg/Kg 70 - 1303 20 C10-C28)

MSD MSD %Recovery Surrogate Qualifier Limits 70 - 130 1-Chlorooctane 78

68 S1-70 - 130 o-Terphenyl

Lab Sample ID: MB 880-34417/1-A

Matrix: Solid

Analysis Batch: 34435

Prep Type: Total/NA

Prep Batch: 34417

Client Sample ID: Method Blank

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/13/22 15:37 09/14/22 09:53 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/13/22 15:37 09/14/22 09:53 C10-C28) 50.0 Oll Range Organics (Over C28-C36) <50.0 U 09/13/22 15:37 09/14/22 09:53 mg/Kg

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 115 70 - 130 09/13/22 15:37 09/14/22 09:53 120 70 - 130 09/13/22 15:37 o-Terphenyl 09/14/22 09:53

Lab Sample ID: LCS 880-34417/2-A

Released to Imaging: 2/21/2023 9:04:04 AM

Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 34435 Prep Batch: 34417 LCS LCS

Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits D 1000 Gasoline Range Organics 1047 105 70 - 130 mg/Kg (GRO)-C6-C10 1000 1022 102 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	109		70 - 130

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H

SDG: 03A1987032

Prep Batch: 34417

Prep Type: Total/NA

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

Lab Sample ID: LCSD 880-34417/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 34435 Prep Batch: 34417 Spike LCSD LCSD RPD Added RPD Limit Analyte Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 970.3 mg/Kg 97 70 - 130 8 20 (GRO)-C6-C10 1000 1008

mg/Kg

101

70 - 130

Diesel Range Organics (Over C10-C28)

LCSD	LCSD	
%Recovery	Qualifier	Limits
97		70 - 130
107		70 - 130
	%Recovery 97	

Lab Sample ID: 890-2931-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 34435

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1098		mg/Kg		108	70 - 130	
Diesel Range Organics (Over	<49.9	U	996	958.6		mg/Kg		96	70 - 130	

C10-C28)

	MS MS	
Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	106	70 - 130
o-Terphenyl	95	70 - 130

Lab Sample ID: 890-2931-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 34435									Prep	Batch:	34417
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1097		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	961.7		mg/Kg		96	70 - 130	0	20

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: MB 880-34495/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 34439

	MR	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/14/22 19:42	1
(GRO)-C6-C10	4F0.0		50.0				00/44/00 44:55	00/44/00 40:40	4
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/14/22 19:42	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/14/22 11:55	09/14/22 19:42	1

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Prep Type: Total/NA Prep Batch: 34495 Job ID: 890-2933-1

Client: Ensolum Project/Site: RDX Federal 28 #011H SDG: 03A1987032

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

MB MB

%Recovery Qualifier

121

Lab Sample ID: MB 880-34495/1-A

Matrix: Solid

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 34439

Client Sample ID: Method Blank

Analyzed

09/14/22 19:42

Prepared

09/14/22 11:55

Prep Type: Total/NA

Prep Batch: 34495

Dil Fac

o-Terphenyl 125 70 - 130 09/14/22 11:55 09/14/22 19:42

Limits

70 - 130

Lab Sample ID: LCS 880-34495/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 34439 Prep Batch: 34495

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 1000 1079 108 70 - 130Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1089 109 mg/Kg 70 - 130C10-C28)

LCS LCS Surrogate %Recovery Qualifier Limits 147 S1+ 70 - 130

1-Chlorooctane 151 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: LCSD 880-34495/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 34439** Prep Batch: 34495

Spike LCSD LCSD RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics 1000 874.7 mg/Kg 87 70 - 130 21 20 (GRO)-C6-C10

Diesel Range Organics (Over 1000 949.4 mg/Kg 95 70 - 130 14 20 C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 127 70 - 130

130

Lab Sample ID: 880-19130-A-12-E MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA Analysis Batch: 34439

Prep Batch: 34495 Sample Sample MS MS %Rec Spike

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits U *1 F1 996 611.6 F1 Gasoline Range Organics <49.9 mg/Kg 59 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 996 885.8 mg/Kg 86 70 - 130 C10-C28)

MS MS

Qualifier %Recovery Surrogate Limits 1-Chlorooctane 92 70 - 130 84 70 - 130 o-Terphenyl

Lab Sample ID: 880-19130-A-12-F MSD

QC Sample Results

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H SDG: 03A1987032

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34495

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U *1 F1	999	623.4	F1	mg/Kg		60	70 - 130	2	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	911.6		mg/Kg		89	70 - 130	3	20
C10-C28)											

Matrix: Solid

Analysis Batch: 34439

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	87		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34526/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34646

мв мв

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/17/22 04:57	1

Lab Sample ID: LCS 880-34526/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34646

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	255.1	·	mg/Kg		102	90 - 110	

Lab Sample ID: LCSD 880-34526/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 34646

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	255.7		mg/Kg		102	90 - 110		20	

Lab Sample ID: 890-2933-1 MS Client Sample ID: FS01 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34646

	Sample	Sample	Бріке	IVIS	M2				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	535		2520	3133		mg/Kg		103	90 - 110	

Lab Sample ID: 890-2933-1 MSD **Client Sample ID: FS01 Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34646

Allalysis Datoll. 04040												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	535		2520	3136		ma/Ka		103	90 - 110		20	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

GC VOA

Prep Batch: 34943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	5035	
890-2933-2	FS02	Total/NA	Solid	5035	
890-2933-3	FS03	Total/NA	Solid	5035	
890-2933-4	FS04	Total/NA	Solid	5035	
890-2933-5	FS05	Total/NA	Solid	5035	
890-2933-6	FS06	Total/NA	Solid	5035	
890-2933-7	SW01	Total/NA	Solid	5035	
890-2933-8	SW02	Total/NA	Solid	5035	
890-2933-9	SW03	Total/NA	Solid	5035	

Analysis Batch: 35129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	8021B	34943
890-2933-2	FS02	Total/NA	Solid	8021B	34943
890-2933-3	FS03	Total/NA	Solid	8021B	34943
890-2933-4	FS04	Total/NA	Solid	8021B	34943
890-2933-5	FS05	Total/NA	Solid	8021B	34943
890-2933-6	FS06	Total/NA	Solid	8021B	34943
890-2933-7	SW01	Total/NA	Solid	8021B	34943
890-2933-8	SW02	Total/NA	Solid	8021B	34943
890-2933-9	SW03	Total/NA	Solid	8021B	34943

Analysis Batch: 35217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	Total BTEX	
890-2933-2	FS02	Total/NA	Solid	Total BTEX	
890-2933-3	FS03	Total/NA	Solid	Total BTEX	
890-2933-4	FS04	Total/NA	Solid	Total BTEX	
890-2933-5	FS05	Total/NA	Solid	Total BTEX	
890-2933-6	FS06	Total/NA	Solid	Total BTEX	
890-2933-7	SW01	Total/NA	Solid	Total BTEX	
890-2933-8	SW02	Total/NA	Solid	Total BTEX	
890-2933-9	SW03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34416

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	8015NM Prep	
890-2933-2	FS02	Total/NA	Solid	8015NM Prep	
890-2933-3	FS03	Total/NA	Solid	8015NM Prep	
MB 880-34416/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34416/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34416/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2933-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-2933-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Prep Batch: 34417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-6	FS06	Total/NA	Solid	8015NM Prep	
890-2933-7	SW01	Total/NA	Solid	8015NM Prep	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

GC Semi VOA (Continued)

Prep Batch: 34417 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-8	SW02	Total/NA	Solid	8015NM Prep	
890-2933-9	SW03	Total/NA	Solid	8015NM Prep	
MB 880-34417/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34417/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2931-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2931-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	8015B NM	34416
890-2933-2	FS02	Total/NA	Solid	8015B NM	34416
890-2933-3	FS03	Total/NA	Solid	8015B NM	34416
MB 880-34416/1-A	Method Blank	Total/NA	Solid	8015B NM	34416
LCS 880-34416/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34416
LCSD 880-34416/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34416
890-2933-1 MS	FS01	Total/NA	Solid	8015B NM	34416
890-2933-1 MSD	FS01	Total/NA	Solid	8015B NM	34416

Analysis Batch: 34435

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-6	FS06	Total/NA	Solid	8015B NM	34417
890-2933-7	SW01	Total/NA	Solid	8015B NM	34417
890-2933-8	SW02	Total/NA	Solid	8015B NM	34417
890-2933-9	SW03	Total/NA	Solid	8015B NM	34417
MB 880-34417/1-A	Method Blank	Total/NA	Solid	8015B NM	34417
LCS 880-34417/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34417
LCSD 880-34417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34417
890-2931-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	34417
890-2931-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34417

Analysis Batch: 34439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-4	FS04	Total/NA	Solid	8015B NM	34495
890-2933-5	FS05	Total/NA	Solid	8015B NM	34495
MB 880-34495/1-A	Method Blank	Total/NA	Solid	8015B NM	34495
LCS 880-34495/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34495
LCSD 880-34495/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34495
880-19130-A-12-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34495
880-19130-A-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34495

Prep Batch: 34495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-4	FS04	Total/NA	Solid	8015NM Prep	
890-2933-5	FS05	Total/NA	Solid	8015NM Prep	
MB 880-34495/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34495/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34495/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19130-A-12-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19130-A-12-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H SDG: 03A1987032

GC Semi VOA

Analysis Batch: 34530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Total/NA	Solid	8015 NM	
890-2933-2	FS02	Total/NA	Solid	8015 NM	
890-2933-3	FS03	Total/NA	Solid	8015 NM	
890-2933-4	FS04	Total/NA	Solid	8015 NM	
890-2933-5	FS05	Total/NA	Solid	8015 NM	
890-2933-6	FS06	Total/NA	Solid	8015 NM	
890-2933-7	SW01	Total/NA	Solid	8015 NM	
890-2933-8	SW02	Total/NA	Solid	8015 NM	
890-2933-9	SW03	Total/NA	Solid	8015 NM	
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Leach Batch: 34526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Soluble	Solid	DI Leach	
890-2933-2	FS02	Soluble	Solid	DI Leach	
890-2933-3	FS03	Soluble	Solid	DI Leach	
890-2933-4	FS04	Soluble	Solid	DI Leach	
890-2933-5	FS05	Soluble	Solid	DI Leach	
890-2933-6	FS06	Soluble	Solid	DI Leach	
890-2933-7	SW01	Soluble	Solid	DI Leach	
890-2933-8	SW02	Soluble	Solid	DI Leach	
890-2933-9	SW03	Soluble	Solid	DI Leach	
MB 880-34526/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34526/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34526/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2933-1 MS	FS01	Soluble	Solid	DI Leach	
890-2933-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 34646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2933-1	FS01	Soluble	Solid	300.0	34526
890-2933-2	FS02	Soluble	Solid	300.0	34526
890-2933-3	FS03	Soluble	Solid	300.0	34526
890-2933-4	FS04	Soluble	Solid	300.0	34526
890-2933-5	FS05	Soluble	Solid	300.0	34526
890-2933-6	FS06	Soluble	Solid	300.0	34526
890-2933-7	SW01	Soluble	Solid	300.0	34526
890-2933-8	SW02	Soluble	Solid	300.0	34526
890-2933-9	SW03	Soluble	Solid	300.0	34526
MB 880-34526/1-A	Method Blank	Soluble	Solid	300.0	34526
LCS 880-34526/2-A	Lab Control Sample	Soluble	Solid	300.0	34526
LCSD 880-34526/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34526
890-2933-1 MS	FS01	Soluble	Solid	300.0	34526
890-2933-1 MSD	FS01	Soluble	Solid	300.0	34526

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

Client Sample ID: FS01 Lab Sample ID: 890-2933-1

Date Collected: 09/09/22 09:00 Matrix: Solid
Date Received: 09/12/22 11:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 16:50	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34416	09/13/22 15:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 10:57	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34526	09/14/22 16:43	KS	EET MID
Soluble	Analysis	300.0		10			34646	09/17/22 05:12	CH	EET MID

Client Sample ID: FS02

Date Collected: 09/09/22 09:10

Lab Sample ID: 890-2933-2

Matrix: Solid

Date Collected: 09/09/22 09:10
Date Received: 09/12/22 11:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 17:11	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34416	09/13/22 15:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 12:00	SM	EET MIC
Soluble	Leach	DI Leach			4.98 g	50 mL	34526	09/14/22 16:43	KS	EET MIC
Soluble	Analysis	300.0		1			34646	09/17/22 05:26	CH	EET MID

Client Sample ID: FS03

Date Collected: 09/09/22 09:20

Lab Sample ID: 890-2933-3

Matrix: Solid

Date Received: 09/12/22 11:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 17:31	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34416	09/13/22 15:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 12:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34526	09/14/22 16:43	KS	EET MID
Soluble	Analysis	300.0		1			34646	09/17/22 05:31	CH	EET MID

Client Sample ID: FS04 Lab Sample ID: 890-2933-4

Date Collected: 09/09/22 09:30 Date Received: 09/12/22 11:23

	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	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 17:52	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID

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890-2933-4 Matrix: Solid

Lab Chronicle

Client: Ensolum Job ID: 890-2933-1 Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Client Sample ID: FS04

Date Collected: 09/09/22 09:30 Date Received: 09/12/22 11:23

Lab Sample ID: 890-2933-4

Matrix: Solid

Matrix: Solid

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34495	09/14/22 11:55	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34439	09/15/22 01:25	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34526	09/14/22 16:43	KS	EET MID
Soluble	Analysis	300.0		1			34646	09/17/22 05:36	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-2933-5

Date Collected: 09/09/22 11:00 Date Received: 09/12/22 11:23

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab Total/NA 5035 Prep 5.02 g 5 mL 34943 09/20/22 13:33 MR **EET MID** Total/NA Analysis 8021B 5 mL 5 mL 35129 09/22/22 18:12 MR **EET MID** 1 Total/NA Total BTEX 35217 **EET MID** Analysis 1 09/22/22 19:56 ΑJ Total/NA Analysis 8015 NM 34530 09/14/22 17:04 SM **EET MID** Total/NA Prep 8015NM Prep 10.01 g 10 mL 34495 09/14/22 11:55 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 34439 09/15/22 01:47 SM **EET MID** Soluble Leach DI Leach 5.04 g 50 mL 34526 09/14/22 16:43 KS **EET MID** EET MID Soluble Analysis 300.0 1 34646 09/17/22 05:41 СН

Client Sample ID: FS06 Lab Sample ID: 890-2933-6

Date Collected: 09/09/22 11:10 Date Received: 09/12/22 11:23

	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	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 18:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34417	09/13/22 15:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34435	09/14/22 17:35	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34526	09/14/22 16:43	KS	EET MID
Soluble	Analysis	300.0		1			34646	09/17/22 05:55	CH	EET MID

Client Sample ID: SW01 Lab Sample ID: 890-2933-7

Date Collected: 09/09/22 11:05 Date Received: 09/12/22 11:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 18:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	34417 34435	09/13/22 15:37 09/14/22 17:56	DM SM	EET MID EET MID

Job ID: 890-2933-1

SDG: 03A1987032

Client: Ensolum

Project/Site: RDX Federal 28 #011H

Client Sample ID: SW01 Lab Sample ID: 890-2933-7

Date Collected: 09/09/22 11:05 **Matrix: Solid** Date Received: 09/12/22 11:23

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble 4.98 g DI Leach 50 mL 34526 09/14/22 16:43 KS **EET MID** Leach Soluble Analysis 300.0 1 34646 09/17/22 06:00 СН **EET MID**

Client Sample ID: SW02 Lab Sample ID: 890-2933-8

Date Collected: 09/09/22 11:20 **Matrix: Solid**

Date Received: 09/12/22 11:23

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34943	09/20/22 13:33	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35129	09/22/22 19:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35217	09/22/22 19:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34530	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34417	09/13/22 15:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34435	09/14/22 18:17	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34526	09/14/22 16:43	KS	EET MID
Soluble	Analysis	300.0		1			34646	09/17/22 06:05	CH	EET MID

Client Sample ID: SW03 Lab Sample ID: 890-2933-9

Date Collected: 09/09/22 11:30 **Matrix: Solid** Date Received: 09/12/22 11:23

Final Batch Dil Batch Initial Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 5.01 g 5 mL 34943 09/20/22 13:33 MR **EET MID** 8021B Total/NA 5 mL 5 mL 09/22/22 19:34 **EET MID** Analysis 1 35129 MR Total/NA Analysis Total BTEX 1 35217 09/22/22 19:56 AJ **EET MID** Total/NA Analysis 8015 NM 1 34530 09/14/22 17:04 SM **EET MID** Total/NA Prep 8015NM Prep 10.03 g 10 mL 34417 09/13/22 15:37 DM EET MID Analysis Total/NA 8015B NM 1 1 uL 1 uL 34435 09/14/22 18:38 SM **EET MID** Soluble Leach DI Leach 4.95 g 50 mL 34526 09/14/22 16:43 KS **EET MID**

34646

09/17/22 06:10

CH

EET MID

1

Laboratory References:

Analysis

Soluble

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

300.0

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2933-1

 Project/Site: RDX Federal 28 #011H
 SDG: 03A1987032

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NELAP		T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for
the agency does not of	fer certification.	•	, , ,	.,
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	-,
0 ,		Matrix Solid	Analyte Total TPH	

Method Summary

Job ID: 890-2933-1 Client: Ensolum Project/Site: RDX Federal 28 #011H SDG: 03A1987032

Method Laboratory **Method Description** Protocol

Total BTEXTotal BTEX CalculationTAL SOPEET MID8015 NMDiesel Range Organics (DRO) (GC)SW846EET MID8015B NMDiesel Range Organics (DRO) (GC)SW846EET MID300.0Anions, Ion ChromatographyMCAWWEET MID5035Closed System Purge and TrapSW846EET MID8015NM PrepMicroextractionSW846EET MIDDI LeachDeionized Water Leaching ProcedureASTMEET MID	8021B	Volatile Organic Compounds (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	Total BTEX	Total BTEX Calculation	TAL SOP	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	8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
5035 Closed System Purge and Trap SW846 EET MID 8015NM Prep Microextraction SW846 EET MID	8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015NM Prep Microextraction SW846 EET MID	300.0	Anions, Ion Chromatography	MCAWW	EET MID
	5035	Closed System Purge and Trap	SW846	EET MID
DI Leach Deionized Water Leaching Procedure ASTM 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

Sample Summary

Client: Ensolum

Project/Site: RDX Federal 28 #011H

Job ID: 890-2933-1

SDG: 03A1987032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2933-1	FS01	Solid	09/09/22 09:00	09/12/22 11:23	4
890-2933-2	FS02	Solid	09/09/22 09:10	09/12/22 11:23	4
890-2933-3	FS03	Solid	09/09/22 09:20	09/12/22 11:23	3
890-2933-4	FS04	Solid	09/09/22 09:30	09/12/22 11:23	3
890-2933-5	FS05	Solid	09/09/22 11:00	09/12/22 11:23	3
890-2933-6	FS06	Solid	09/09/22 11:10	09/12/22 11:23	3
890-2933-7	SW01	Solid	09/09/22 11:05	09/12/22 11:23	0 - 4
890-2933-8	SW02	Solid	09/09/22 11:20	09/12/22 11:23	0 - 3
890-2933-9	SW03	Solid	09/09/22 11:30	09/12/22 11:23	0 - 3

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

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM

Sw03 2005 5001

200

2007

なら 5505

tice: Signature of this document and relinquishment of samples constitutes a valid purchase of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any re

Relinquished by: (Signature)

Received by: (Signature)

9.18.22

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 08/25/2020 Rev 2020 2

eurofins 🔆

Xenco **Environment Testing**

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Work Order No:

O B	Bill to: (if different) Company Name:	rent)	Jim R WPX	Jim Raley WPX								Program: UST/PST PF	Work Order Comments ☐ PRP☐ Brownfields ☐ RRC	RC Superfund
D	Address:		53	15 Bue	5315 Buena Vista Dr	ta Dr					_	State of Project:		
0	City, State ZIP:	.0	င္သ	risbad	Carlsbad, NM 88220	8220						Reporting: Level II Level III PST/UST	HIII PST/UST TF	TRRP
Email: ji	jhernandez@Ensolum.com,	@Ens	olum.	com,	jim.raley@dvn.com	ey@d	/n.cor	3				Deliverables: EDD	ADaPT Ot	Other:
Turn A	Turn Around							AN	ANALYSIS REQUEST	SIS	Ω Ω	EST	Preserva	rvative Codes
☑ Routine	Rush	ဂ္ဂ မှ	Pres. Code										None: NO	DI Water: H ₂ O
Due Date:	5 Day TAT								-	_			Cool: Cool	MeOH: Me
tarts the	TAT starts the day received by	₹		H	-			H	H				HCL: HC	HNO ₃ : HN
ab, if recei	the lab, if received by 4:30pm	-	S			-	Ŧ	<u></u>	_	_	_		H ₂ S0 ₄ : H ₂	NaOH: Na
Wet Ice:	₹ Z		eter	,, 	-								H₃PO₄: HP	
7	13			300.0		-	÷				-		NaHSO ₄ : NABIS	ABIS
actor:	0.0			-A: .									Na ₂ S ₂ O ₃ : Na	aSO ₃
Reading:	ঠা থ	Ш) (E)			_	8					Zn Acetate+NaOH: Zn	NaOH: Zn
emperature:	5.0			_	_			800	890-2933	C	2	Chain of Custody	NaOH+Ascorbi	orbic Acid: SAPC
Time Sampled	Depth Grab/		# of Cont	CHLOR	TPH (80	D127 (_					Sample	le Comments
9:00	H' Co	SMO	_	×	×				-					
9:10	41								_					
9:20	W					_		_	-	<u> </u>				Incident ID
9.30	3												nAPP22	P2215732821
11:00	S							\vdash						
11:10	Ci													
1:15	0-4"								_					
1:20	9-3'						H	-	H					
	03'	_			7		_	•	1					
Ш		H	-	H	H			She	0	17				
RCRA 13PPM	M Texas 11	- 11	Al Sb	As Ba	Be		Cd Ca	S C	5	Fe	2	S	200 100	n U V Zn
	こてしてていること	BRCRA		As	g 8	2 2	מ מי	ဂ္ဂ	В	<u> </u>	<u> </u>	Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se A	Ag SiO ₂ Na Sr II Sn L Hg: 1631 / 245.1 / 7470 /	_

SAMPLE RECEIPT

Temp Blank: Yes) No

Yes No

Samples Received Intact:

Cooler Custody Seals:

Yes No (N/A) Yes No

Correction Factor: Thermometer ID:

KA

Corrected Temperature: Temperature Reading:

ample Custody Seals: otal Containers:

Sample Identification

Matrix

Sampled

Date

S

9.9.22

9:00 Sampled

205

100

Sampler's Name:

Gilbert Moreno

Rural Eddy, NM

1061174901

roject Location:

Project Number:

03A1987032

RDX Federal 28 #011H

roject Name:

Phone:

281-702-2329

Carlsbad, NM 88220

Address:

3122 National Parks HWY

Company Name: Project Manager:

Ensolum

Joseph Hernandez

City, State ZIP:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2933-1 SDG Number: 03A1987032

List Source: Eurofins Carlsbad

Login Number: 2933 List Number: 1 Creator: Clifton, Cloe

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

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2933-1 SDG Number: 03A1987032

Login Number: 2933 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/13/22 10:37 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2940-1

Laboratory Sample Delivery Group: 03A1987032 Client Project/Site: RDX FEDERAL 28 #011H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Devon Team

JURAMER

Authorized for release by: 9/26/2022 11:48:40 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

results through
EO L.

Have a Question?

····· Links ······

Review your project

A ala



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 2/21/2023 9:04:04 AM

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

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

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Client: Ensolum
Project/Site: RDX FEDERAL 28 #011H

Laboratory Job ID: 890-2940-1
SDG: 03A1987032

SDG: 03/

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Qualifier Description

Definitions/Glossary

Job ID: 890-2940-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Qualifiers

GC	VOA
Qua	lifier

*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery 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.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD 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

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

MDL Method Detection Limit MI 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 Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2940-1

SDG: 03A1987032

Job ID: 890-2940-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2940-1

Receipt

The samples were received on 9/13/2022 8:26 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-35092/1-A) and (LCSD 880-35092/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2940-A-1-E MS) and (890-2940-A-1-F 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: SW05 (890-2940-2), SW06 (890-2940-3), SW07 (890-2940-4), SW08 (890-2940-5), SW09 (890-2940-6) and SW10 (890-2940-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-35092 and analytical batch 880-35226 recovered outside control limits for the following analytes: Ethylbenzene, m-Xylene & p-Xylene, o-Xylene and Xylenes, Total. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-35092 and analytical batch 880-35226. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC Semi VOA

Method 8015MOD NM: The surrogate recovery for the blank associated with preparation batch 880-34601 and analytical batch 880-34628 was outside the upper control limits.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-34601/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34601 and analytical batch 880-34628 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

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

Eurofins Carlsbad 9/26/2022
 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: SW04 Lab Sample ID: 890-2940-1

Date Collected: 09/12/22 09:20 Matrix: Solid
Date Received: 09/13/22 08:26

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F2 F1	0.00202		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
Toluene	<0.00202	U F2 F1	0.00202		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
Ethylbenzene	<0.00202	U *+ F2 F1	0.00202		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
m-Xylene & p-Xylene	<0.00403	U *+ F2 F1	0.00403		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
o-Xylene	<0.00202	U *+ F2 F1	0.00202		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
Xylenes, Total	<0.00403	U *+ F2 F1	0.00403		mg/Kg		09/21/22 15:19	09/23/22 11:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130				09/21/22 15:19	09/23/22 11:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130				09/21/22 15:19	09/23/22 11:40	1
- Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/26/22 12:34	1
Analyte Total TPH	Result <49.9	Qualifier U	49.9 —	MDL	Unit mg/Kg	D	Prepared	Analyzed 09/19/22 12:57	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 12:57	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte		Qualifier	RL_	MDL	Unit	D	Prepared	Analyzed	D:: E
Gasoline Range Organics	10.0								Dil Fac
5 5	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 08:33	1 Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9 <49.9		49.9 49.9		mg/Kg		09/15/22 15:04	09/16/22 08:33 09/16/22 08:33	
5 5		U							1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.9	U U	49.9		mg/Kg		09/15/22 15:04	09/16/22 08:33	1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	<49.9 <49.9	U U	49.9 49.9		mg/Kg		09/15/22 15:04 09/15/22 15:04	09/16/22 08:33 09/16/22 08:33	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <49.9 %Recovery	U U	49.9 49.9 <i>Limits</i>		mg/Kg		09/15/22 15:04 09/15/22 15:04 Prepared	09/16/22 08:33 09/16/22 08:33 <i>Analyzed</i>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.9 <49.9 %Recovery 96 103	U U Qualifier	49.9 49.9 Limits 70 - 130		mg/Kg		09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 08:33 09/16/22 08:33 Analyzed 09/16/22 08:33	1 1 1 Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 <49.9 **Recovery 96 103 comatography -	U U Qualifier	49.9 49.9 Limits 70 - 130	MDL	mg/Kg	D	09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 08:33 09/16/22 08:33 Analyzed 09/16/22 08:33	1 1 1 1 1 Dil Fac

Client Sample ID: SW05 Lab Sample ID: 890-2940-2

Date Collected: 09/12/22 09:30

Date Received: 09/13/22 08:26

Matrix: Solid

Sample Depth: 0 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	162	S1+	70 - 130				09/21/22 15:19	09/23/22 12:02	1

Eurofins Carlsbad

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Client Sample Results

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: SW05 Lab Sample ID: 890-2940-2

Date Collected: 09/12/22 09:30

Matrix: Solid

Date Received: 09/13/22 08:26

Sample Depth: 0 - 3

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96	70 - 130	09/21/22 15:19	09/23/22 12:02	1

Method: Total	BTFX - Total	BTEX Calculation
mothiod: rotal		DIE/ Guidalation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg	 	_	09/26/22 12:34	1

П				
ı	Method: 8015 NM	Diocal Rand	no Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg	 		09/19/22 12:57	1

Method: 8015B	NM - Diesel	Range Oro	anice (DRO)	(GC)
Methou. ou 136	MINI - DIESEI	Range Org	jailius (DRU)	GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9	mg/K	 g	09/15/22 15:04	09/16/22 09:43	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/K	g	09/15/22 15:04	09/16/22 09:43	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/K	g	09/15/22 15:04	09/16/22 09:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/15/22 15:04	09/16/22 09:43	1
o-Terphenyl	109		70 - 130	09/15/22 15:04	09/16/22 09:43	1

Method: 300.0 - Anions, lor	n Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Chloride	28.6		5.05		mg/Kg				09/19/22 10:04	1

Client Sample ID: SW06 Lab Sample ID: 890-2940-3

Date Collected: 09/12/22 09:40 Date Received: 09/13/22 08:26

Sample Depth: 0 - 2

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

		()							
Analyte	Result	Qualifier	RL	MDL Unit	t	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/	/Kg	_	09/21/22 15:19	09/23/22 12:22	1
Toluene	<0.00198	U	0.00198	mg/	′Kg		09/21/22 15:19	09/23/22 12:22	1
Ethylbenzene	<0.00198	U *+	0.00198	mg/	'Kg		09/21/22 15:19	09/23/22 12:22	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396	mg/	′Kg		09/21/22 15:19	09/23/22 12:22	1
o-Xylene	<0.00198	U *+	0.00198	mg/	'Kg		09/21/22 15:19	09/23/22 12:22	1
Xylenes, Total	<0.00396	U *+	0.00396	mg/	′Kg		09/21/22 15:19	09/23/22 12:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	195	S1+	70 - 130				09/21/22 15:19	09/23/22 12:22	1
1,4-Difluorobenzene (Surr)	124		70 - 130				09/21/22 15:19	09/23/22 12:22	1

Method:	Total	RTFY -	Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg		_	09/26/22 12:34	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/19/22 12:57	1

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Matrix: Solid

Job ID: 890-2940-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: SW06 Lab Sample ID: 890-2940-3 Date Collected: 09/12/22 09:40 Matrix: Solid

Date Received: 09/13/22 08:26

Sample Depth: 0 - 2

Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		09/15/22 15:04	09/16/22 10:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 10:05	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 10:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/15/22 15:04	09/16/22 10:05	1
o-Terphenyl	113		70 - 130				09/15/22 15:04	09/16/22 10:05	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.5		5.01		mg/Kg			09/19/22 10:09	1

Client Sample ID: SW07 Lab Sample ID: 890-2940-4 Date Collected: 09/12/22 09:50 Matrix: Solid

Date Received: 09/13/22 08:26

Sample Depth: 0 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		09/21/22 15:19	09/23/22 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130				09/21/22 15:19	09/23/22 12:43	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/21/22 15:19	09/23/22 12:43	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/26/22 12:34	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 12:57	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 10:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 10:26	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 10:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/15/22 15:04	09/16/22 10:26	1
			70 - 130						1

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2940-1

SDG: 03A1987032

Client Sample ID: SW07

Lab Sample ID: 890-2940-4

Matrix: Solid

Date Collected: 09/12/22 09:50 Date Received: 09/13/22 08:26

Sample Depth: 0 - 2

Client: Ensolum

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result Qual	lifier RL	MDL (Unit D	Prepared	Analyzed	Dil Fac			
Chloride	21.3	4.98	r	mg/Kg		09/19/22 10:24	1			

Client Sample ID: SW08 Lab Sample ID: 890-2940-5 **Matrix: Solid**

Date Collected: 09/12/22 10:10 Date Received: 09/13/22 08:26

Sample Depth: 0 - 2

Analyte

(GRO)-C6-C10

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
Ethylbenzene	<0.00201	U *+	0.00201		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		09/21/22 15:19	09/23/22 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				09/21/22 15:19	09/23/22 13:04	1
1,4-Difluorobenzene (Surr)	100		70 - 130				09/21/22 15:19	09/23/22 13:04	1

Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 12:34	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 12:57	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		09/15/22 15:04	09/16/22 10:48	1

MDL Unit

mg/Kg

Prepared

09/15/22 15:04

Analyzed

09/16/22 10:48

Result Qualifier

<50.0 U

C10-C28) Oll Range	Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	09/15/22 15:04	09/16/22 10:48	1
Surrogate		%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooc	tane	102		70 - 130		09/15/22 15:04	09/16/22 10:48	1
o-Terpheny	1	114		70 - 130		09/15/22 15:04	09/16/22 10:48	1

50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	35.0		5.05		mg/Kg			09/19/22 10:29	1

Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: SW09 Lab Sample ID: 890-2940-6

Date Collected: 09/12/22 10:20
Date Received: 09/13/22 08:26

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 13:24	
Toluene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 13:24	
Ethylbenzene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 13:24	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		09/21/22 15:19	09/23/22 13:24	,
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 13:24	1
Xylenes, Total	<0.00396	U *+	0.00396		mg/Kg		09/21/22 15:19	09/23/22 13:24	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	165	S1+	70 - 130				09/21/22 15:19	09/23/22 13:24	
1,4-Difluorobenzene (Surr)	119		70 - 130				09/21/22 15:19	09/23/22 13:24	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/22 12:34	
Total TPH	<49.9		49.9		mg/Kg			09/19/22 12:57	,
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 11:10	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 11:10	
Diesel Range Organics (Over C10-C28)	<49.9 <49.9		49.9 49.9		mg/Kg mg/Kg		09/15/22 15:04 09/15/22 15:04	09/16/22 11:10 09/16/22 11:10	
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)		U							ź
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9				09/15/22 15:04	09/16/22 11:10	Dil Fac
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.9 %Recovery	U	49.9				09/15/22 15:04 Prepared	09/16/22 11:10 Analyzed	Dil Fa
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	<49.9 **Recovery 89 99	U Qualifier	49.9 <i>Limits</i> 70 - 130				09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 11:10 Analyzed 09/16/22 11:10	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 **Recovery 89 99 omatography -	U Qualifier	49.9 <i>Limits</i> 70 - 130	MDL	mg/Kg	D	09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 11:10 Analyzed 09/16/22 11:10	Dil Fac

Client Sample ID: SW10 Lab Sample ID: 890-2940-7

Date Collected: 09/12/22 10:30 Date Received: 09/13/22 08:26

Sample Depth: 0 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		09/21/22 15:19	09/23/22 13:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	194	S1+	70 - 130				09/21/22 15:19	09/23/22 13:45	1

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Matrix: Solid

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0/26/2022

Matrix: Solid

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: SW10

Lab Sample ID: 890-2940-7

Date Collected: 09/12/22 10:30
Date Received: 09/13/22 08:26

Sample Depth: 0 - 4

Method: 8021B - Volatile Organic Compound	s (GC) (Continued)
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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	121		70 - 130	09/21/22 15:19	09/23/22 13:45	1

Method: Total	BTEX - Total	BTEX Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	ma/Ka			09/26/22 12:34	1

Method: 8015 NM - Diesel Range Organics	(DPO) (GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/19/22 12:57	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 11:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 11:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 11:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/15/22 15:	04 09/16/22 11:31	1
o-Terphenyl	113		70 - 130	09/15/22 15:	04 09/16/22 11:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	ı	Prepared	Analyzed	Dil Fac
Chloride	13.7		5.03		mg/Kg				09/19/22 14:48	1

Client Sample ID: SW11 Lab Sample ID: 890-2940-8

Date Collected: 09/12/22 14:30 Date Received: 09/13/22 08:26

Sample Depth: 0 - 4

Mathadi 0004D	Valatile Overen	ic Compounds (GC)
Memoo: Auzib	- voianie Urdan	ic Compounds (GC)

motification of ga	illo compoundo ((33)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
Ethylbenzene	<0.00202	U *+	0.00202		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		09/21/22 15:19	09/23/22 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				09/21/22 15:19	09/23/22 16:10	1
1,4-Difluorobenzene (Surr)	111		70 - 130				09/21/22 15:19	09/23/22 16:10	1

Mothod:	Total RTFX	- Total RTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Pre	pared	Analyzed	Dil Fac
Total BTEX	< 0.00404	U	0.00404		ma/Ka				09/26/22 12:34	1

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IVIATO	od: 8015 NM	- I IIASAI R	anno Urna	inice ii iki i	1/(=(.)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/19/22 12:57	1

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<u>.</u>

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Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: SW11 Lab Sample ID: 890-2940-8

Date Collected: 09/12/22 14:30 Matrix: Solid

Date Received: 09/13/22 08:26 Sample Depth: 0 - 4

Chloride

Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U *1	50.0		mg/Kg		09/15/22 15:04	09/16/22 11:53	1
<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 11:53	1
<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 11:53	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
98		70 - 130				09/15/22 15:04	09/16/22 11:53	1
108		70 - 130				09/15/22 15:04	09/16/22 11:53	1
matography -	Solublo							
	<50.0 <50.0 <50.0 %Recovery 98 108	98 108			<50.0	<50.0	<50.0	<50.0 U *1 50.0 mg/Kg 09/15/22 15:04 09/16/22 11:53 <50.0

5.03

mg/Kg

30.8

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12

09/19/22 10:53

13

Surrogate Summary

Job ID: 890-2940-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2940-1	SW04	125	97	
90-2940-1 MS	SW04	172 S1+	123	
90-2940-1 MSD	SW04	173 S1+	142 S1+	
90-2940-2	SW05	162 S1+	96	
90-2940-3	SW06	195 S1+	124	
90-2940-4	SW07	158 S1+	103	
390-2940-5	SW08	142 S1+	100	
90-2940-6	SW09	165 S1+	119	
90-2940-7	SW10	194 S1+	121	
90-2940-8	SW11	120	111	
CS 880-35092/1-A	Lab Control Sample	138 S1+	126	
CSD 880-35092/2-A	Lab Control Sample Dup	166 S1+	136 S1+	
MB 880-35092/5-A	Method Blank	121	113	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Prep Type: Total/NA Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2940-1	SW04	96	103	
890-2940-1 MS	SW04	90	85	
890-2940-1 MSD	SW04	91	84	
890-2940-2	SW05	102	109	
890-2940-3	SW06	103	113	
890-2940-4	SW07	96	104	
890-2940-5	SW08	102	114	
890-2940-6	SW09	89	99	
890-2940-7	SW10	102	113	
890-2940-8	SW11	98	108	
LCS 880-34601/2-A	Lab Control Sample	118	132 S1+	
LCSD 880-34601/3-A	Lab Control Sample Dup	99	110	
MB 880-34601/1-A	Method Blank	133 S1+	151 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2940-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35092/5-A

Matrix: Solid Analysis Batch: 35226 Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 35092

	IND	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/21/22 15:19	09/23/22 11:20	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/21/22 15:19	09/23/22 11:20	

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/21/22 15:19	09/23/22 11:20	1
1.4-Difluorobenzene (Surr)	113		70 - 130	09/21/22 15:19	09/23/22 11:20	1

Lab Sample ID: LCS 880-35092/1-A

Matrix: Solid

Analysis Batch: 35226

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 35092

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09803 mg/Kg 98 70 - 130 Toluene 0.100 0.09879 mg/Kg 99 70 - 130 0.100 Ethylbenzene 0.1144 mg/Kg 114 70 - 130 0.200 131 70 - 130 m-Xylene & p-Xylene 0.2610 *+ mg/Kg 0.100 0.1269 70 - 130 o-Xylene mg/Kg 127

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	126		70 - 130

Lab Sample ID: LCSD 880-35092/2-A

Matrix: Solid

Analysis Batch: 35226

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35092

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1127		mg/Kg		113	70 - 130	14	35
Toluene	0.100	0.1105		mg/Kg		110	70 - 130	11	35
Ethylbenzene	0.100	0.1355	*+	mg/Kg		136	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.3060	*+	mg/Kg		153	70 - 130	16	35
o-Xylene	0.100	0.1482	*+	mg/Kg		148	70 - 130	16	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	166	S1+	70 - 130		
1.4-Difluorobenzene (Surr)	136	S1+	70 - 130		

Lab Sample ID: 890-2940-1 MS

Matrix: Solid

Analysis Batch: 35226

Client Sample ID: SW04 Prep Type: Total/NA

Prep Batch: 35092

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F2 F1	0.101	<0.00202	U F1	mg/Kg		0.8	70 - 130	
Toluene	<0.00202	U F2 F1	0.101	0.003123	F1	mg/Kg		3	70 - 130	

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QC Sample Results

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

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

Lab Sample ID: 890-2940-1 MS

Matrix: Solid

Client Sample ID: SW04

Prep Type: Total/NA

Matrix: Solid
Analysis Batch: 35226
Prep Type: Total/NA
Prep Batch: 35092

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U *+ F2	0.101	0.003518	F1	mg/Kg		3	70 - 130	
		F1								
m-Xylene & p-Xylene	<0.00403	U *+ F2	0.202	0.007024	F1	mg/Kg		3	70 - 130	
		F1								
o-Xylene	<0.00202	U *+ F2	0.101	0.005178	F1	mg/Kg		5	70 - 130	
		F1								

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 172
 S1+
 70 - 130

 1,4-Difluorobenzene (Surr)
 123
 70 - 130

Lab Sample ID: 890-2940-1 MSD

Matrix: Solid

Analysis Batch: 35226

Client Sample ID: SW04

Prep Type: Total/NA

Prep Batch: 35092

Analysis Batch: 35226

Sample Sample Spike MSD MSD %Rec RPD

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F2 F1	0.0996	0.02824	F2 F1	mg/Kg		28	70 - 130	188	35
Toluene	<0.00202	U F2 F1	0.0996	0.03493	F2 F1	mg/Kg		35	70 - 130	167	35
Ethylbenzene	<0.00202	U *+ F2 F1	0.0996	0.04667	F2 F1	mg/Kg		47	70 - 130	172	35
m-Xylene & p-Xylene	<0.00403	U *+ F2 F1	0.199	0.1134	F2 F1	mg/Kg		57	70 - 130	177	35
o-Xylene	<0.00202	U *+ F2 F1	0.0996	0.06160	F2 F1	mg/Kg		62	70 - 130	169	35

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 173
 S1+
 70 - 130

 1,4-Difluorobenzene (Surr)
 142
 S1+
 70 - 130

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

Lab Sample ID: MB 880-34601/1-A

Matrix: Solid

Analysis Batch: 34628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34601

MB MB Analyte Result Qualifier RL MDL Unit Dil Fac D Prepared Analyzed 50.0 09/15/22 15:04 <50.0 U 09/16/22 07:29 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/15/22 15:04 09/16/22 07:29 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 09/15/22 15:04 09/16/22 07:29 mg/Kg мв мв %Recovery Qualifier Surrogate Limits Prepared Dil Fac Analyzed 1-Chlorooctane 133 S1+ 70 - 130 09/15/22 15:04 09/16/22 07:29

70 - 130

151 S1+

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09/16/22 07:29

09/15/22 15:04

o-Terphenyl

4

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-

9

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16

Job ID: 890-2940-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Lab Sample ID: LCS 880-34601/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 34628

Prep Batch: 34601 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 988.0 mg/Kg 99 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 909 1 70 - 130 mg/Kg 91

C10-C28)

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 118 o-Terphenyl 132 S1+ 70 - 130

Lab Sample ID: LCSD 880-34601/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 34628

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 Gasoline Range Organics 720.6 mg/Kg 72 70 - 130 31 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 752.2 mg/Kg 75 70 - 130 19 20 C10-C28)

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 99 70 - 130 110 70 - 130 o-Terphenyl

Lab Sample ID: 890-2940-1 MS Client Sample ID: SW04 **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 34628 Prep Batch: 34601

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.9 U *1 996 866.0 85 Gasoline Range Organics 70 - 130 mg/Kg (GRO)-C6-C10 996 1008 70 - 130 Diesel Range Organics (Over <49.9 LI mg/Kg 99

C10-C28)

MS MS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 90 70 - 130 85 70 - 130 o-Terphenyl

Lab Sample ID: 890-2940-1 MSD Client Sample ID: SW04

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 34628** Prep Batch: 34601

RPD Sample Sample Spike MSD MSD %Rec Result Qualifier Limit Analyte Added Result Qualifier Limits RPD Unit D %Rec Gasoline Range Organics <49.9 U*1 999 920.4 90 70 - 130 20 mg/Kg 6 (GRO)-C6-C10

1015

mg/Kg

99

70 - 130

999

C10-C28)

Diesel Range Organics (Over

MSD MSD %Recovery Surrogate Qualifier Limits 1-Chlorooctane 70 - 130 91

<49.9 U

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Prep Type: Total/NA

Prep Batch: 34601

Project/Site: RDX FEDERAL 28 #011H

Lab Sample ID: 890-2940-1 MSD

Client: Ensolum

Job ID: 890-2940-1

SDG: 03A1987032

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

Matrix: Solid

Analysis Batch: 34628

Client Sample ID: SW04 Prep Type: Total/NA Prep Batch: 34601

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 84 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34507/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34836

MB MB

Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride <5.00 5.00 09/19/22 08:46 U mg/Kg

Lab Sample ID: LCS 880-34507/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34836

LCS LCS Spike %Rec Added Result Qualifier Analyte Unit %Rec Limits Chloride 250 246.3 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-34507/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34836

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 247.4 90 - 110 mg/Kg 20

Lab Sample ID: 890-2940-3 MS Client Sample ID: SW06 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34836

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 20.5 251 271.7 100 90 - 110 mg/Kg

Lab Sample ID: 890-2940-3 MSD

Matrix: Solid

Analysis Batch: 34836

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Qualifier Limits RPD Limit Result Unit %Rec Chloride 251 100 20.5 271.8 90 - 110 20 mg/Kg

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Client Sample ID: SW06

Prep Type: Soluble

QC Association Summary

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

GC VOA

Prep Batch: 35092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	5035	
890-2940-2	SW05	Total/NA	Solid	5035	
890-2940-3	SW06	Total/NA	Solid	5035	
890-2940-4	SW07	Total/NA	Solid	5035	
890-2940-5	SW08	Total/NA	Solid	5035	
890-2940-6	SW09	Total/NA	Solid	5035	
890-2940-7	SW10	Total/NA	Solid	5035	
890-2940-8	SW11	Total/NA	Solid	5035	
MB 880-35092/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35092/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35092/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2940-1 MS	SW04	Total/NA	Solid	5035	
890-2940-1 MSD	SW04	Total/NA	Solid	5035	

Analysis Batch: 35226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	8021B	35092
890-2940-2	SW05	Total/NA	Solid	8021B	35092
890-2940-3	SW06	Total/NA	Solid	8021B	35092
890-2940-4	SW07	Total/NA	Solid	8021B	35092
890-2940-5	SW08	Total/NA	Solid	8021B	35092
890-2940-6	SW09	Total/NA	Solid	8021B	35092
890-2940-7	SW10	Total/NA	Solid	8021B	35092
890-2940-8	SW11	Total/NA	Solid	8021B	35092
MB 880-35092/5-A	Method Blank	Total/NA	Solid	8021B	35092
LCS 880-35092/1-A	Lab Control Sample	Total/NA	Solid	8021B	35092
LCSD 880-35092/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35092
890-2940-1 MS	SW04	Total/NA	Solid	8021B	35092
890-2940-1 MSD	SW04	Total/NA	Solid	8021B	35092

Analysis Batch: 35401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	Total BTEX	
890-2940-2	SW05	Total/NA	Solid	Total BTEX	
890-2940-3	SW06	Total/NA	Solid	Total BTEX	
890-2940-4	SW07	Total/NA	Solid	Total BTEX	
890-2940-5	SW08	Total/NA	Solid	Total BTEX	
890-2940-6	SW09	Total/NA	Solid	Total BTEX	
890-2940-7	SW10	Total/NA	Solid	Total BTEX	
890-2940-8	SW11	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	8015NM Prep	
890-2940-2	SW05	Total/NA	Solid	8015NM Prep	
890-2940-3	SW06	Total/NA	Solid	8015NM Prep	
890-2940-4	SW07	Total/NA	Solid	8015NM Prep	
890-2940-5	SW08	Total/NA	Solid	8015NM Prep	
890-2940-6	SW09	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum Job ID: 890-2940-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

GC Semi VOA (Continued)

Prep Batch: 34601 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-7	SW10	Total/NA	Solid	8015NM Prep	
890-2940-8	SW11	Total/NA	Solid	8015NM Prep	
MB 880-34601/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34601/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34601/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2940-1 MS	SW04	Total/NA	Solid	8015NM Prep	
890-2940-1 MSD	SW04	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	8015B NM	34601
890-2940-2	SW05	Total/NA	Solid	8015B NM	34601
890-2940-3	SW06	Total/NA	Solid	8015B NM	34601
890-2940-4	SW07	Total/NA	Solid	8015B NM	34601
890-2940-5	SW08	Total/NA	Solid	8015B NM	34601
890-2940-6	SW09	Total/NA	Solid	8015B NM	34601
890-2940-7	SW10	Total/NA	Solid	8015B NM	34601
890-2940-8	SW11	Total/NA	Solid	8015B NM	34601
MB 880-34601/1-A	Method Blank	Total/NA	Solid	8015B NM	34601
LCS 880-34601/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34601
LCSD 880-34601/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34601
890-2940-1 MS	SW04	Total/NA	Solid	8015B NM	34601
890-2940-1 MSD	SW04	Total/NA	Solid	8015B NM	34601

Analysis Batch: 34837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Total/NA	Solid	8015 NM	
890-2940-2	SW05	Total/NA	Solid	8015 NM	
890-2940-3	SW06	Total/NA	Solid	8015 NM	
890-2940-4	SW07	Total/NA	Solid	8015 NM	
890-2940-5	SW08	Total/NA	Solid	8015 NM	
890-2940-6	SW09	Total/NA	Solid	8015 NM	
890-2940-7	SW10	Total/NA	Solid	8015 NM	
890-2940-8	SW11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2940-1	SW04	Soluble	Solid	DI Leach	_
890-2940-2	SW05	Soluble	Solid	DI Leach	
390-2940-3	SW06	Soluble	Solid	DI Leach	
890-2940-4	SW07	Soluble	Solid	DI Leach	
890-2940-5	SW08	Soluble	Solid	DI Leach	
390-2940-6	SW09	Soluble	Solid	DI Leach	
390-2940-7	SW10	Soluble	Solid	DI Leach	
390-2940-8	SW11	Soluble	Solid	DI Leach	
MB 880-34507/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34507/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34507/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2940-3 MS	SW06	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum Job ID: 890-2940-1
Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

HPLC/IC (Continued)

Leach Batch: 34507 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-3 MSD	SW06	Soluble	Solid	DI Leach	

Analysis Batch: 34836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2940-1	SW04	Soluble	Solid	300.0	34507
890-2940-2	SW05	Soluble	Solid	300.0	34507
890-2940-3	SW06	Soluble	Solid	300.0	34507
890-2940-4	SW07	Soluble	Solid	300.0	34507
890-2940-5	SW08	Soluble	Solid	300.0	34507
890-2940-6	SW09	Soluble	Solid	300.0	34507
890-2940-7	SW10	Soluble	Solid	300.0	34507
890-2940-8	SW11	Soluble	Solid	300.0	34507
MB 880-34507/1-A	Method Blank	Soluble	Solid	300.0	34507
LCS 880-34507/2-A	Lab Control Sample	Soluble	Solid	300.0	34507
LCSD 880-34507/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34507
890-2940-3 MS	SW06	Soluble	Solid	300.0	34507
890-2940-3 MSD	SW06	Soluble	Solid	300.0	34507

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Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2940-1

SDG: 03A1987032

Client Sample ID: SW04 Date Collected: 09/12/22 09:20

Lab Sample ID: 890-2940-1 Matrix: Solid

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 11:40	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 08:33	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:00	CH	EET MID

Client Sample ID: SW05 Lab Sample ID: 890-2940-2 Matrix: Solid

Date Collected: 09/12/22 09:30

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 12:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 09:43	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:04	CH	EET MID

Client Sample ID: SW06 Lab Sample ID: 890-2940-3 Date Collected: 09/12/22 09:40 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 12:22	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 10:05	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:09	CH	EET MID

Client Sample ID: SW07 Lab Sample ID: 890-2940-4

Date Collected: 09/12/22 09:50 Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 12:43	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID

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Matrix: Solid

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2940-1

SDG: 03A1987032

Client Sample ID: SW07

Date Received: 09/13/22 08:26

Date Collected: 09/12/22 09:50

Lab Sample ID: 890-2940-4

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA 8015 NM 34837 Analysis 09/19/22 12:57 SM EET MID Total/NA Prep 8015NM Prep 10.02 g 10 mL 34601 09/15/22 15:04 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 34628 09/16/22 10:26 SM EET MID 50 mL Soluble 34507 09/14/22 13:32 SMC Leach DI Leach 5.02 g **EET MID** 34836 09/19/22 10:24 Soluble Analysis 300.0 1 50 mL 50 mL СН **EET MID**

Client Sample ID: SW08 Lab Sample ID: 890-2940-5

Date Collected: 09/12/22 10:10 Date Received: 09/13/22 08:26

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 13:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 10:48	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:29	CH	EET MID

Client Sample ID: SW09 Lab Sample ID: 890-2940-6

Date Collected: 09/12/22 10:20 Date Received: 09/13/22 08:26

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 13:24	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 11:10	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 14:43	CH	EET MID

Client Sample ID: SW10 Lab Sample ID: 890-2940-7

Date Collected: 09/12/22 10:30 Date Received: 09/13/22 08:26

	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	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 13:45	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 11:31	SM	EET MID

Eurofins Carlsbad

Matrix: Solid

Client: Ensolum Job ID: 890-2940-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: SW10 Lab Sample ID: 890-2940-7

Date Collected: 09/12/22 10:30 Matrix: Solid

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 14:48	CH	EET MID

Client Sample ID: SW11 Lab Sample ID: 890-2940-8

Date Collected: 09/12/22 14:30 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 16:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35401	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34837	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 11:53	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:53	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2940-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of	' '	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
0 ,		Matrix Solid	Analyte Total TPH	

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Method Summary

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H Job ID: 890-2940-1

SDG: 03A1987032

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID

Method **Method Description** 8021B Volatile Organic Compounds (GC) Total BTEX Calculation Total BTEX 8015 NM Diesel Range Organics (DRO) (GC) 8015B NM Diesel Range Organics (DRO) (GC) 300.0 Anions, Ion Chromatography MCAWW EET MID 5035 SW846 **EET MID** Closed System Purge and Trap 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

Eurofins Carlsbad

Released to Imaging: 2/21/2023 9:04:04 AM

Sample Summary

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2940-1

SDG: 03A1987032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2940-1	SW04	Solid	09/12/22 09:20	09/13/22 08:26	0 - 4
890-2940-2	SW05	Solid	09/12/22 09:30	09/13/22 08:26	0 - 3
890-2940-3	SW06	Solid	09/12/22 09:40	09/13/22 08:26	0 - 2
890-2940-4	SW07	Solid	09/12/22 09:50	09/13/22 08:26	0 - 2
890-2940-5	SW08	Solid	09/12/22 10:10	09/13/22 08:26	0 - 2
890-2940-6	SW09	Solid	09/12/22 10:20	09/13/22 08:26	0 - 4
890-2940-7	SW10	Solid	09/12/22 10:30	09/13/22 08:26	0 - 4
890-2940-8	SW11	Solid	09/12/22 14:30	09/13/22 08:26	0 - 4

Relinquished by: (Signature)

Received by: (Signature)

B

218.22 824

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 08/25/2020 Rev. 2020.2

eurofins

Project Manager:

Company Name:

Environment Testing

Xenco

Chain of Custody

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

Work Order No:

Trainglet Manager: Joseph Hernandez Bill to (if different) Jim Raloy	Bill to (if different) Company Name: WPX Address: 5315 Buena Vista Dr. City, State ZIP: Carlsbad, NM 88220 Email: hernandez@Ensolum.com, im ralev@dvn.com Turn Around Turn Around Pres. Carlsbad, NM 88220 Carlsbad, NM 88220 Carlsbad, NM 88220 Carlsbad, NM 88220 Pres. Carlsbad,
Bill to (it different)	
Bill to, (if different) Jim Raley WPX Company Name: WPX Address: S315 Buena Vista Dr. City, State ZIP: Carlsbad, NM 88220 Carlsbad, NM 8	Bill to (if different)
Bill to (If different) Jim Raley	Bill to (if different) Jim Raley WWW.Melroc.oc Work Orde
Bill to (if different) Jim Raley Company Name: WPX Address: 5315 Buena Vista Dr. City, State ZIP: Carlsbad, NM 88220 ihernandez@Ensolum.com, ilm.raley@dvn.com Pres. Code 5 Day TAT e day received by 4:30pm Celly No Para 300.0	Depth Grab # of Comp 1 X X X X X X X X X
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	WWW.Xelrop.co Work Orde Program: UST/PST PRP Bro State of Project: Reporting: Level II Level III F Deliverables: EDD ADa UEST Custody

SAMPLE RECEIPT

Sampler's Name:

Project Number: Project Name:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2940-1 SDG Number: 03A1987032

Login Number: 2940 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job Numb

Job Number: 890-2940-1 SDG Number: 03A1987032

Login Number: 2940
List Source: Eurofins Midland
List Number: 2
List Creation: 09/14/22 11:07 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2941-1

Laboratory Sample Delivery Group: 03A1987032 Client Project/Site: RDX FEDERAL 28 #011H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Devon Team

MAMER

Authorized for release by: 9/26/2022 11:48:59 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through

····· Links ······

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 2/21/2023 9:04:04 AM

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

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

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Client: Ensolum
Project/Site: RDX FEDERAL 28 #011H

Laboratory Job ID: 890-2941-1
SDG: 03A1987032

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Definitions/Glossary

Job ID: 890-2941-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Qualifiers

GC VOA Qualifier

*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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

Qualifier Description

GC Semi VOA

Qualifier	Qualitier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.
U	indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualitier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Appreviation These commonly used apprevial		These commonly used appreviations may or may not be present in this report.
	n	Listed under the "D" column to designate that the result is reported on a dry weight basis
	%R	Percent Recovery

CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid DER

Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDL Method Detection Limit MI 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 Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2941-1

SDG: 03A1987032

Job ID: 890-2941-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2941-1

Receipt

The samples were received on 9/13/2022 8:26 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-35092/1-A) and (LCSD 880-35092/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2940-A-1-E MS) and (890-2940-A-1-F 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: BH01 (890-2941-1), BH01 (890-2941-2), BH02 (890-2941-3), BH02 (890-2941-4), BH03 (890-2941-5) and BH03 (890-2941-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: BH04 (890-2941-8). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-35092 and analytical batch 880-35226 recovered outside control limits for the following analytes: Ethylbenzene, m-Xylene & p-Xylene, o-Xylene and Xylenes, Total. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-35092 and analytical batch 880-35226. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC Semi VOA

Method 8015MOD NM: The surrogate recovery for the blank associated with preparation batch 880-34601 and analytical batch 880-34628 was outside the upper control limits.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-34601/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-34601 and analytical batch 880-34628 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

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

Job ID: 890-2941-1

Matrix: Solid

Lab Sample ID: 890-2941-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH01

Date Collected: 09/12/22 10:40 Date Received: 09/13/22 08:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
Ethylbenzene	<0.00201	U *+	0.00201		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		09/21/22 15:19	09/23/22 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130				09/21/22 15:19	09/23/22 16:32	1
1,4-Difluorobenzene (Surr)	107		70 - 130				09/21/22 15:19	09/23/22 16:32	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 12:34	1
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9	MDL	mg/Kg	D	Prepared	Analyzed 09/19/22 12:57	Dil Fac
				MDL		D	Prepared		Dil Fac
Mathadi 2045D NM Diasal Dani									
	no Organice (D	POV (CC)							
			RI	MDI	Unit	n	Prenared	Analyzed	·
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared 09/15/22 15:04	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared 09/15/22 15:04	Analyzed 09/16/22 12:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U *1		MDL		<u>D</u>			Dil Fac
Analyte Gasoline Range Organics	Result <49.9	Qualifier U *1	49.9	MDL	mg/Kg	<u>D</u>	09/15/22 15:04	09/16/22 12:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9	Qualifier U *1 U	49.9	MDL	mg/Kg	<u>D</u>	09/15/22 15:04 09/15/22 15:04	09/16/22 12:14 09/16/22 12:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	Qualifier U *1 U	49.9 49.9 49.9	MDL	mg/Kg	<u> </u>	09/15/22 15:04 09/15/22 15:04 09/15/22 15:04	09/16/22 12:14 09/16/22 12:14 09/16/22 12:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U *1 U	49.9 49.9 49.9 <i>Limits</i>	MDL	mg/Kg	<u>D</u>	09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared	09/16/22 12:14 09/16/22 12:14 09/16/22 12:14 Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U*1 U Qualifier	49.9 49.9 49.9 Limits 70 - 130	MDL	mg/Kg	<u>D</u>	09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 12:14 09/16/22 12:14 09/16/22 12:14 Analyzed 09/16/22 12:14	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U*1 U Qualifier	49.9 49.9 49.9 Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	<u>D</u>	09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/16/22 12:14 09/16/22 12:14 09/16/22 12:14 Analyzed 09/16/22 12:14	Dil Face 1 1 1 Dil Face

Client Sample ID: BH01

Date Collected: 09/12/22 10:50 Date Received: 09/13/22 08:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	175	S1+	70 - 130				09/21/22 15:19	09/23/22 16:53	

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Lab Sample ID: 890-2941-2

Matrix: Solid

Job ID: 890-2941-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Lab Sample ID: 890-2941-2 Client Sample ID: BH01

Date Collected: 09/12/22 10:50 **Matrix: Solid** Date Received: 09/13/22 08:26

Sample Depth: 1

Surrogate	%Recovery Q	ualifier	Limits	Prepared
motriou. 0021B Volutilo Organio	compounds (C	o) (oontiin	acu,	
Method: 8021B - Volatile Organic	เ.กพทกเมทกร แรเ	L.) (L.Ontini	IEA)	

Analyzed Dil Fac 09/21/22 15:19 09/23/22 16:53 1,4-Difluorobenzene (Surr) 114 70 - 130

Method: Total BTEX - Total BTEX Calculation

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00398 U 0.00398 09/26/22 12:34 mg/Kg

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

RL **MDL** Unit D Prepared Analyzed Dil Fac Total TPH <49.8 U 49.8 mg/Kg 09/19/22 12:57

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

MDL Unit D Analyte Result Qualifier RL Prepared Analyzed Dil Fac <49.8 U *1 49.8 09/15/22 15:04 09/16/22 12:36 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 49.8 mg/Kg 09/15/22 15:04 09/16/22 12:36 C10-C28) 09/15/22 15:04 OII Range Organics (Over C28-C36) <49.8 U 49.8 mg/Kg 09/16/22 12:36

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 94 70 - 130 09/15/22 15:04 09/16/22 12:36 09/15/22 15:04 o-Terphenyl 105 70 - 130 09/16/22 12:36

Method: 300.0 - Anions, Ion Chromatography - Soluble

MDL Unit Analyte Result Qualifier RL D Prepared Analyzed Dil Fac 5.01 09/19/22 14:53 Chloride 28.2 mg/Kg

Client Sample ID: BH02 Lab Sample ID: 890-2941-3

Date Collected: 09/12/22 11:00 Date Received: 09/13/22 08:26

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		09/21/22 15:19	09/23/22 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130				09/21/22 15:19	09/23/22 17:14	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Anaiyzea	DII Fac
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130	09/21/22 15:19	09/23/22 17:14	1
1,4-Difluorobenzene (Surr)	118		70 - 130	09/21/22 15:19	09/23/22 17:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Total BTEX <0.00399 U 0.00399 09/26/22 12:34 mg/Kg

Mothod: 9045 NM Discal Bango Organico (DBO) (CC)
Method: 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte		alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			09/19/22 12:57	1

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Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-2941-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH02

Lab Sample ID: 890-2941-3 Matrix: Solid

Date Collected: 09/12/22 11:00 Date Received: 09/13/22 08:26

Sample Depth: 0.5

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 13:48	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 13:48	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 13:48	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	95		70 - 130				09/15/22 15:04	09/16/22 13:48	
o-Terphenyl	103		70 - 130				09/15/22 15:04	09/16/22 13:48	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.3		4.99		mg/Kg			09/19/22 11:07	

Lab Sample ID: 890-2941-4 **Client Sample ID: BH02** Date Collected: 09/12/22 11:10 Matrix: Solid

Date Received: 09/13/22 08:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		09/21/22 15:19	09/23/22 17:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130				09/21/22 15:19	09/23/22 17:34	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/21/22 15:19	09/23/22 17:34	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 12:34	1
Total BTEX - Method: 8015 NM - Diesel Range			0.00401		mg/Kg			09/26/22 12:34	1
- -	Organics (DR		0.00401 RL	MDL		D	Prepared	09/26/22 12:34 Analyzed	1 Dil Fac
ି Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte	e Organics (DR) Result <50.0	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	o Organics (DR Result <50.0	O) (GC) Qualifier	RL	MDL MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	o Organics (DR Result <50.0	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		<u> </u>	Analyzed 09/19/22 12:57	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U *1	RL 50.0		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 15:04	Analyzed 09/19/22 12:57 Analyzed 09/16/22 14:13	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <50.0 ge Organics (DI Result	Qualifier U RO) (GC) Qualifier U *1	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 12:57 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U *1	RL 50.0		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 15:04	Analyzed 09/19/22 12:57 Analyzed 09/16/22 14:13	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U *1 U	RL 50.0 S0.0 S0.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04	Analyzed 09/19/22 12:57 Analyzed 09/16/22 14:13 09/16/22 14:13	Dil Fac Dil Fac 1 1 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR/Result <50.0 ge Organics (D/Result <50.0 <p><50.0</p> <50.0	Qualifier U RO) (GC) Qualifier U *1 U	RL 50.0 S0.0 S0.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04	Analyzed 09/19/22 12:57 Analyzed 09/16/22 14:13 09/16/22 14:13	Dil Fac Dil Fac 1

Job ID: 890-2941-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH02 Lab Sample ID: 890-2941-4

Date Collected: 09/12/22 11:10 Matrix: Solid Date Received: 09/13/22 08:26

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromat	ography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.2		4.97		mg/Kg			09/19/22 11:12	1

Client Sample ID: BH03 Lab Sample ID: 890-2941-5 Matrix: Solid

Date Collected: 09/12/22 11:20 Date Received: 09/13/22 08:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 17:55	
Toluene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 17:55	
Ethylbenzene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 17:55	
m-Xylene & p-Xylene	<0.00397	U *+	0.00397		mg/Kg		09/21/22 15:19	09/23/22 17:55	
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 17:55	
Xylenes, Total	<0.00397	U *+	0.00397		mg/Kg		09/21/22 15:19	09/23/22 17:55	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130				09/21/22 15:19	09/23/22 17:55	
1,4-Difluorobenzene (Surr)	102		70 - 130				09/21/22 15:19	09/23/22 17:55	
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00397		0.00397		mg/Kg			09/26/22 12:34	•
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 12:57	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		09/15/22 15:04	09/16/22 14:34	•
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 14:34	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:04	09/16/22 14:34	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	108		70 - 130				09/15/22 15:04	09/16/22 14:34	
o-Terphenyl	116		70 - 130				09/15/22 15:04	09/16/22 14:34	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Method: 300.0 - Anions, Ion Chro Analyte	• • •	Qualifier	RL	MDL	Unit mg/Kg	D	Prepared	Analyzed 09/19/22 11:51	Dil Fac

Matrix: Solid

Lab Sample ID: 890-2941-6

Job ID: 890-2941-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH03

Date Collected: 09/12/22 11:30 Date Received: 09/13/22 08:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		09/21/22 15:19	09/23/22 18:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130				09/21/22 15:19	09/23/22 18:16	1
1,4-Difluorobenzene (Surr)	89		70 - 130				09/21/22 15:19	09/23/22 18:16	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/26/22 12:34	1
Method: 8015 NM - Diesel Range	Organics (DR)	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
_	•	Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 12:57	
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result <49.9 ge Organics (Di	Qualifier U				<u>D</u> 	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Ran	Result <49.9 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg		<u> </u>	09/19/22 12:57	1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U *1	49.9		mg/Kg		Prepared	09/19/22 12:57 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U *1	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/15/22 15:04	09/19/22 12:57 Analyzed 09/16/22 14:56	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U *1 U	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04	09/19/22 12:57 Analyzed 09/16/22 14:56 09/16/22 14:56	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U RO) (GC) Qualifier U *1 U	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04	09/19/22 12:57 Analyzed 09/16/22 14:56 09/16/22 14:56	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U RO) (GC) Qualifier U *1 U	49.9 RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared	09/19/22 12:57 Analyzed 09/16/22 14:56 09/16/22 14:56 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U RO) (GC) Qualifier U *1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/19/22 12:57 Analyzed 09/16/22 14:56 09/16/22 14:56 Analyzed 09/16/22 14:56	1 Dil Fac 1 1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U RO) (GC) Qualifier U *1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:04 09/15/22 15:04 09/15/22 15:04 Prepared 09/15/22 15:04	09/19/22 12:57 Analyzed 09/16/22 14:56 09/16/22 14:56 Analyzed 09/16/22 14:56	Dil Fac 1 1 1 Dil Fac 1

Client Sample ID: BH04

Date Collected: 09/12/22 11:40 Date Received: 09/13/22 08:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		09/21/22 15:19	09/23/22 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				09/21/22 15:19	09/23/22 18:36	1

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Lab Sample ID: 890-2941-7

Matrix: Solid

Project/Site: RDX FEDERAL 28 #011H

Client: Ensolum

Job ID: 890-2941-1

SDG: 03A1987032

Client Sample ID: BH04

Date Collected: 09/12/22 11:40 Date Received: 09/13/22 08:26

Sample Depth: 0.5

Lab Sample ID: 890-2941-7

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	77		70 - 130	09/21/22 15:19	09/23/22 18:36	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	ma/Ka			09/26/22 12:34	1

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

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	ma/Ka		·	09/19/22 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg	 _	09/15/22 15:04	09/16/22 15:18	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 15:18	1
C10-C28)									
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/15/22 1	15:04	09/16/22 15:18	1
o-Terphenyl	118		70 - 130	09/15/22 1	15:04	09/16/22 15:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.80	4.99	mg/Kg			09/19/22 15:07	1

Lab Sample ID: 890-2941-8 Client Sample ID: BH04 **Matrix: Solid**

Date Collected: 09/12/22 11:50 Date Received: 09/13/22 08:26

Sample Depth: 1

Method: 8021B -	Volatile Organ	ic Compounds	s (GC)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
Ethylbenzene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
Xylenes, Total	<0.00396	U *+	0.00396		mg/Kg		09/21/22 15:19	09/23/22 18:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	162	S1+	70 - 130				09/21/22 15:19	09/23/22 18:57	1
1,4-Difluorobenzene (Surr)	98		70 - 130				09/21/22 15:19	09/23/22 18:57	1

Mothod:	Total RT	Y - Total I	RTEY Ca	lculation

Analyte	Result	Qualifier	RL	MDL	Unit	ı	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396		ma/Ka				09/26/22 12:34	1

Method: 8015 NM - Diese	Dongo Organica		(CC)
Metriou, ou la Min - Diese	i Range Organics	IDRUI	IGCI

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	 <50.0	U	50.0	mg/Kg			09/19/22 12:57	1

Matrix: Solid

Lab Sample ID: 890-2941-8

Client Sample Results

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: BH04

Date Collected: 09/12/22 11:50 Date Received: 09/13/22 08:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0		mg/Kg		09/15/22 15:04	09/16/22 15:39	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 15:39	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:04	09/16/22 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				09/15/22 15:04	09/16/22 15:39	1
o-Terphenyl	114		70 - 130				09/15/22 15:04	09/16/22 15:39	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

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Surrogate Summary

Job ID: 890-2941-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2940-A-1-E MS	Matrix Spike	172 S1+	123	
890-2940-A-1-F MSD	Matrix Spike Duplicate	173 S1+	142 S1+	
890-2941-1	BH01	155 S1+	107	
890-2941-2	BH01	175 S1+	114	
890-2941-3	BH02	178 S1+	118	
890-2941-4	BH02	159 S1+	95	
890-2941-5	BH03	159 S1+	102	
890-2941-6	BH03	141 S1+	89	
890-2941-7	BH04	127	77	
890-2941-8	BH04	162 S1+	98	
LCS 880-35092/1-A	Lab Control Sample	138 S1+	126	
LCSD 880-35092/2-A	Lab Control Sample Dup	166 S1+	136 S1+	
MB 880-35092/5-A	Method Blank	121	113	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Prep Type: Total/NA Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2940-A-1-C MS	Matrix Spike	90	85	
890-2940-A-1-D MSD	Matrix Spike Duplicate	91	84	
890-2941-1	BH01	108	120	
890-2941-2	BH01	94	105	
890-2941-3	BH02	95	103	
890-2941-4	BH02	98	106	
890-2941-5	BH03	108	116	
890-2941-6	BH03	112	122	
890-2941-7	BH04	108	118	
890-2941-8	BH04	105	114	
LCS 880-34601/2-A	Lab Control Sample	118	132 S1+	
LCSD 880-34601/3-A	Lab Control Sample Dup	99	110	
MB 880-34601/1-A	Method Blank	133 S1+	151 S1+	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum

Job ID: 890-2941-1

SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35092/5-A

Project/Site: RDX FEDERAL 28 #011H

Matrix: Solid Analysis Batch: 35226 Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 35092

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/21/22 15:19	09/23/22 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 15:19	09/23/22 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/21/22 15:19	09/23/22 11:20	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/21/22 15:1	9 09/23/22 11:20	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/21/22 15:1	9 09/23/22 11:20	1

Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 35226

Lab Sample ID: LCS 880-35092/1-A

Prep Type: Total/NA Prep Batch: 35092

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09803 mg/Kg 98 70 - 130 Toluene 0.100 0.09879 mg/Kg 99 70 - 130 0.100 Ethylbenzene 0.1144 mg/Kg 114 70 - 130 0.200 131 70 - 130 m-Xylene & p-Xylene 0.2610 *+ mg/Kg 0.100 70 - 130 o-Xylene 0.1269 mg/Kg 127

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	126		70 - 130

Lab Sample ID: LCSD 880-35092/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 35226

Prep Type: Total/NA Prep Batch: 35092

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1127		mg/Kg		113	70 - 130	14	35	
Toluene	0.100	0.1105		mg/Kg		110	70 - 130	11	35	
Ethylbenzene	0.100	0.1355	*+	mg/Kg		136	70 - 130	17	35	
m-Xylene & p-Xylene	0.200	0.3060	*+	mg/Kg		153	70 - 130	16	35	
o-Xylene	0.100	0.1482	*+	mg/Kg		148	70 - 130	16	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	166	S1+	70 - 130		
1 4-Difluorobenzene (Surr)	136	S1+	70 130		

Lab Sample ID: 890-2940-A-1-E MS

Matrix: Solid

Analysis Batch: 35226

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

Prep Batch: 35092

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F2 F1	0.101	<0.00202	U F1	mg/Kg		0.8	70 - 130	
Toluene	<0.00202	U F2 F1	0.101	0.003123	F1	mg/Kg		3	70 - 130	

1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Ensolum Job ID: 890-2941-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Lab Sample ID: 890-2940-A-1-E MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35226 Prep Batch: 35092

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U *+ F2 F1	0.101	0.003518	F1	mg/Kg		3	70 - 130	
m-Xylene & p-Xylene	<0.00403	U *+ F2 F1	0.202	0.007024	F1	mg/Kg		3	70 - 130	
o-Xylene	<0.00202	U *+ F2 F1	0.101	0.005178	F1	mg/Kg		5	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 172 S1+ 70 - 130

123

Lab Sample ID: 890-2940-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

70 - 130

Matrix: Solid Prep Type: Total/NA Analysis Batch: 35226 Prep Batch: 35092

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U F2 F1	0.0996	0.02824	F2 F1	mg/Kg		28	70 - 130	188	35
Toluene	<0.00202	U F2 F1	0.0996	0.03493	F2 F1	mg/Kg		35	70 - 130	167	35
Ethylbenzene	<0.00202	U *+ F2	0.0996	0.04667	F2 F1	mg/Kg		47	70 - 130	172	35
		F1									
m-Xylene & p-Xylene	<0.00403	U *+ F2	0.199	0.1134	F2 F1	mg/Kg		57	70 - 130	177	35
		F1									
o-Xylene	<0.00202	U *+ F2	0.0996	0.06160	F2 F1	mg/Kg		62	70 - 130	169	35
		F1									

MSD MSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 173 S1+ 70 - 130 142 S1+ 1,4-Difluorobenzene (Surr) 70 - 130

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

Lab Sample ID: MB 880-34601/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 34628**

MB MB Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed 50.0 09/15/22 15:04 <50.0 U 09/16/22 07:29 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/15/22 15:04 09/16/22 07:29 C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 09/15/22 15:04 09/16/22 07:29 mg/Kg MD MD

	IVID	INID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	09/15/22 15:04	09/16/22 07:29	1
o-Terphenyl	151	S1+	70 - 130	09/15/22 15:04	09/16/22 07:29	1

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Prep Batch: 34601

Lab Sample ID: LCS 880-34601/2-A

Client: Ensolum Job ID: 890-2941-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

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

LCS LCS %Recovery Qualifier

132 S1+

118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34601

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	988.0		mg/Kg		99	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	909.1		mg/Kg		91	70 - 130	
C10-C28)								

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 880-34601/3-A

Surrogate

o-Terphenyl

1-Chlorooctane

Matrix: Solid

Analysis Batch: 34628

Analysis Batch: 34628

Matrix: Solid

Limits

70 - 130

70 - 130

Prep Type: Total/NA Prep Batch: 34601

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	720.6	*1	mg/Kg		72	70 - 130	31	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	752.2		mg/Kg		75	70 - 130	19	20
C10-C28)									

LCSD LCSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 99 70 - 130 o-Terphenyl 110 70 - 130

Lab Sample ID: 890-2940-A-1-C MS

Lab Sample ID: 890-2940-A-1-D MSD

Matrix: Solid

Analysis Batch: 34628

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 34601

•	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	996	866.0		mg/Kg		85	70 - 130
Diesel Range Organics (Over	<49.9	U	996	1008		mg/Kg		99	70 - 130

Matrix: Solid

Surrogate

1-Chlorooctane

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	85		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 34601

Analysis Batch: 34628									Prep	Batch:	34601
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	920.4		mg/Kg		90	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1015		mg/Kg		99	70 - 130	1	20

MSD MSD %Recovery Qualifier

91

MS MS

70 - 130

Limits

Job ID: 890-2941-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Lab Sample ID: 890-2940-A-1-D MSD

Matrix: Solid Analysis Batch: 34628 Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Total/NA

Prep Type: Soluble

Prep Batch: 34601

MSD MSD

Surrogate %Recovery Qualifier Limits o-Terphenyl 84 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34507/1-A

Matrix: Solid

Analysis Batch: 34836

MB MB

Analyte Result Qualifier RL MDL Unit D Dil Fac Prepared Analyzed Chloride <5.00 5.00 09/19/22 08:46 U mg/Kg

Lab Sample ID: LCS 880-34507/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34836

LCS LCS Spike %Rec Added Result Qualifier Analyte Unit D %Rec Limits Chloride 250 246.3 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-34507/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34836

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 90 - 110 247 4 mg/Kg 20

Lab Sample ID: 890-2940-A-3-B MS

Matrix: Solid

Analysis Batch: 34836

Spike MS MS %Rec Sample Sample Analyte Qualifier Added Qualifier Unit %Rec Result Result Limits Chloride 20.5 251 271.7 100 90 - 110 mg/Kg

Lab Sample ID: 890-2940-A-3-C MSD

Matrix: Solid

Analysis Batch: 34836

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Qualifier RPD Limit Analyte Result Unit %Rec Limits Chloride 251 20.5 271.8 100 90 - 110 mg/Kg

Lab Sample ID: MB 880-34509/1-A

Matrix: Solid

Analysis Batch: 34844

MB MB

Result Qualifier RL MDL Dil Fac Analyte Unit D Prepared Analyzed Chloride 5.00 <5.00 U 09/19/22 11:37 mg/Kg

QC Sample Results

Client: Ensolum Job ID: 890-2941-1 Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-34509/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34844

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 248.0 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-34509/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34844

Spike LCSD LCSD %Rec RPD Added Result Qualifier RPD Limit Analyte Unit D %Rec Limits Chloride 250 248.7 mg/Kg 99 0

Lab Sample ID: 890-2941-5 MS Client Sample ID: BH03 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34844

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 40.6 251 288.2 90 - 110 mg/Kg

Lab Sample ID: 890-2941-5 MSD Client Sample ID: BH03 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34844

Spike Sample Sample MSD MSD RPD %Rec Analyte Result Qualifier Added Qualifier Unit %Rec RPD Limit Result Limits Chloride 40.6 251 291.1 100 90 - 110 20 mg/Kg

QC Association Summary

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

GC VOA

Prep Batch: 35092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Total/NA	Solid	5035	
890-2941-2	BH01	Total/NA	Solid	5035	
890-2941-3	BH02	Total/NA	Solid	5035	
890-2941-4	BH02	Total/NA	Solid	5035	
890-2941-5	BH03	Total/NA	Solid	5035	
890-2941-6	BH03	Total/NA	Solid	5035	
890-2941-7	BH04	Total/NA	Solid	5035	
890-2941-8	BH04	Total/NA	Solid	5035	
MB 880-35092/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35092/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35092/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2940-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2940-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 35226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Total/NA	Solid	8021B	35092
890-2941-2	BH01	Total/NA	Solid	8021B	35092
890-2941-3	BH02	Total/NA	Solid	8021B	35092
890-2941-4	BH02	Total/NA	Solid	8021B	35092
890-2941-5	BH03	Total/NA	Solid	8021B	35092
890-2941-6	BH03	Total/NA	Solid	8021B	35092
890-2941-7	BH04	Total/NA	Solid	8021B	35092
890-2941-8	BH04	Total/NA	Solid	8021B	35092
MB 880-35092/5-A	Method Blank	Total/NA	Solid	8021B	35092
LCS 880-35092/1-A	Lab Control Sample	Total/NA	Solid	8021B	35092
LCSD 880-35092/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35092
890-2940-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35092
890-2940-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35092

Analysis Batch: 35403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Total/NA	Solid	Total BTEX	
890-2941-2	BH01	Total/NA	Solid	Total BTEX	
890-2941-3	BH02	Total/NA	Solid	Total BTEX	
890-2941-4	BH02	Total/NA	Solid	Total BTEX	
890-2941-5	BH03	Total/NA	Solid	Total BTEX	
890-2941-6	BH03	Total/NA	Solid	Total BTEX	
890-2941-7	BH04	Total/NA	Solid	Total BTEX	
890-2941-8	BH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Total/NA	Solid	8015NM Prep	
890-2941-2	BH01	Total/NA	Solid	8015NM Prep	
890-2941-3	BH02	Total/NA	Solid	8015NM Prep	
890-2941-4	BH02	Total/NA	Solid	8015NM Prep	
890-2941-5	BH03	Total/NA	Solid	8015NM Prep	
890-2941-6	BH03	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

GC Semi VOA (Continued)

Prep Batch: 34601 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-7	BH04	Total/NA	Solid	8015NM Prep	
890-2941-8	BH04	Total/NA	Solid	8015NM Prep	
MB 880-34601/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34601/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34601/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2940-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2940-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Total/NA	Solid	8015B NM	34601
890-2941-2	BH01	Total/NA	Solid	8015B NM	34601
890-2941-3	BH02	Total/NA	Solid	8015B NM	34601
890-2941-4	BH02	Total/NA	Solid	8015B NM	34601
890-2941-5	BH03	Total/NA	Solid	8015B NM	34601
890-2941-6	BH03	Total/NA	Solid	8015B NM	34601
890-2941-7	BH04	Total/NA	Solid	8015B NM	34601
890-2941-8	BH04	Total/NA	Solid	8015B NM	34601
MB 880-34601/1-A	Method Blank	Total/NA	Solid	8015B NM	34601
LCS 880-34601/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34601
LCSD 880-34601/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34601
890-2940-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	34601
890-2940-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34601

Analysis Batch: 34838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2941-1	BH01	Total/NA	Solid	8015 NM	
890-2941-2	BH01	Total/NA	Solid	8015 NM	
890-2941-3	BH02	Total/NA	Solid	8015 NM	
890-2941-4	BH02	Total/NA	Solid	8015 NM	
890-2941-5	BH03	Total/NA	Solid	8015 NM	
890-2941-6	BH03	Total/NA	Solid	8015 NM	
890-2941-7	BH04	Total/NA	Solid	8015 NM	
890-2941-8	BH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34507

Released to Imaging: 2/21/2023 9:04:04 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2941-1	BH01	Soluble	Solid	DI Leach	
890-2941-2	BH01	Soluble	Solid	DI Leach	
890-2941-3	BH02	Soluble	Solid	DI Leach	
890-2941-4	BH02	Soluble	Solid	DI Leach	
MB 880-34507/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34507/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
_CSD 880-34507/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-2940-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2940-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Carlsbad

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

HPLC/IC

Leach Batch: 34509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-5	BH03	Soluble	Solid	DI Leach	
890-2941-6	BH03	Soluble	Solid	DI Leach	
890-2941-7	BH04	Soluble	Solid	DI Leach	
890-2941-8	BH04	Soluble	Solid	DI Leach	
MB 880-34509/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34509/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34509/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2941-5 MS	BH03	Soluble	Solid	DI Leach	
890-2941-5 MSD	BH03	Soluble	Solid	DI Leach	

Analysis Batch: 34836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-1	BH01	Soluble	Solid	300.0	34507
890-2941-2	BH01	Soluble	Solid	300.0	34507
890-2941-3	BH02	Soluble	Solid	300.0	34507
890-2941-4	BH02	Soluble	Solid	300.0	34507
MB 880-34507/1-A	Method Blank	Soluble	Solid	300.0	34507
LCS 880-34507/2-A	Lab Control Sample	Soluble	Solid	300.0	34507
LCSD 880-34507/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34507
890-2940-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	34507
890-2940-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34507

Analysis Batch: 34844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2941-5	BH03	Soluble	Solid	300.0	34509
890-2941-6	BH03	Soluble	Solid	300.0	34509
890-2941-7	BH04	Soluble	Solid	300.0	34509
890-2941-8	BH04	Soluble	Solid	300.0	34509
MB 880-34509/1-A	Method Blank	Soluble	Solid	300.0	34509
LCS 880-34509/2-A	Lab Control Sample	Soluble	Solid	300.0	34509
LCSD 880-34509/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34509
890-2941-5 MS	BH03	Soluble	Solid	300.0	34509
890-2941-5 MSD	BH03	Soluble	Solid	300.0	34509

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2941-1

SDG: 03A1987032

Client Sample ID: BH01

Date Collected: 09/12/22 10:40 Date Received: 09/13/22 08:26 Lab Sample ID: 890-2941-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 16:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 12:14	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 10:58	CH	EET MID

Client Sample ID: BH01 Lab Sample ID: 890-2941-2

Date Collected: 09/12/22 10:50

Date Received: 09/13/22 08:26

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 16:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 12:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 14:53	CH	EET MID

Client Sample ID: BH02 Lab Sample ID: 890-2941-3 Date Collected: 09/12/22 11:00 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 17:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 13:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 11:07	CH	EET MID

Client Sample ID: BH02 Lab Sample ID: 890-2941-4

Date Collected: 09/12/22 11:10 Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 17:34	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID

Eurofins Carlsbad

Page 21 of 29

Matrix: Solid

Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Client Sample ID: BH02

Date Received: 09/13/22 08:26

Client: Ensolum

Date Collected: 09/12/22 11:10

Lab Sample ID: 890-2941-4

Matrix: Solid

	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			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 14:13	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34507	09/14/22 13:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34836	09/19/22 11:12	CH	EET MID

Client Sample ID: BH03 Lab Sample ID: 890-2941-5

Date Collected: 09/12/22 11:20

Matrix: Solid

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 17:55	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 14:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 11:51	CH	EET MID

Client Sample ID: BH03 Lab Sample ID: 890-2941-6

Date Collected: 09/12/22 11:30 Date Received: 09/13/22 08:26

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 18:16	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 14:56	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:06	CH	EET MID

Lab Sample ID: 890-2941-7 Client Sample ID: BH04

Date Collected: 09/12/22 11:40 Date Received: 09/13/22 08:26 **Matrix: Solid**

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 18:36	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g 1 uL	10 mL 1 uL	34601 34628	09/15/22 15:04 09/16/22 15:18	DM SM	EET MID EET MID

Client: Ensolum

Job ID: 890-2941-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH04 Lab Sample ID: 890-2941-7

Date Collected: 09/12/22 11:40 Matrix: Solid Date Received: 09/13/22 08:26

Batch Batch Dil Initial Final Batch Prepared Method Prep Type Туре Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble DI Leach 34509 SMC Leach 5.01 g 50 mL 09/14/22 13:35 **EET MID** 300.0 09/19/22 15:07 Soluble Analysis 1 34844 СН **EET MID**

Client Sample ID: BH04 Lab Sample ID: 890-2941-8

Date Collected: 09/12/22 11:50 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35092	09/21/22 15:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35226	09/23/22 18:57	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35403	09/26/22 12:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			34838	09/19/22 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34601	09/15/22 15:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34628	09/16/22 15:39	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:16	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report hi	it the laboratory is not certific	ed by the governing authority. This list ma	vindudo analytas for y
the agency does not of	. ,	at the laboratory is not certify	ed by the governing admonty. This list his	ay include analytes for t
0 ,	. ,	Matrix	Analyte	ay include analytes for t
the agency does not of	fer certification.	•	, , ,	ay include analytes for v

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Method Summary

 Client: Ensolum
 Job ID: 890-2941-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

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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Sample Summary

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2941-1

SDG: 03A1987032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2941-1	BH01	Solid	09/12/22 10:40	09/13/22 08:26	0.5
890-2941-2	BH01	Solid	09/12/22 10:50	09/13/22 08:26	1
890-2941-3	BH02	Solid	09/12/22 11:00	09/13/22 08:26	0.5
890-2941-4	BH02	Solid	09/12/22 11:10	09/13/22 08:26	1
890-2941-5	BH03	Solid	09/12/22 11:20	09/13/22 08:26	0.5
890-2941-6	BH03	Solid	09/12/22 11:30	09/13/22 08:26	1
890-2941-7	BH04	Solid	09/12/22 11:40	09/13/22 08:26	0.5
890-2941-8	BH04	Solid	09/12/22 11:50	09/13/22 08:26	1

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

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As

TCLP / SPLP 6010: 8RCRA Sb As

BH04 BH03 **BH03**

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11:40 11:30

0.5

Grab/ Grab/ 11:20

0.5

Grab/

9.12.22 9.12.22 9.12.22 9.12.22 9.12.22 9.12.22 9.12.22 9.12.22 Sampled

1.50

B104

of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$6 for each sample submitted

Received by: (Signature)

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Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020.2

Relingaished by: (Signature)

lotice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to

eurofins

Project Manager:

Joseph Hernandez

Company Name: ddress:

Ensolum

3122 National Parks HWY

Carlsbad, NM 88220

Xenco **Environment Testing**

Chain of Custody

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

Work Order No.

010) 082-1000, 041	(313) 322-1330, (valished, INIX (313) 300-0133	www.xenco.com	Page of	
Jim Raley		Work Order Comments	Comments	
WPX	Progr	ram: UST/PST ☐ PRP☐ Brow	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
5315 Buena Vista Dr		State of Project:	1	
Carlsbad, NM 88220		Reporting: Level II 🗌 Level III 🔲 PST/UST 📗 TRRP 📗	T/UST TRRP Level IV	
ım com, im rale	dvn.com	Deliverables: EDD	↑ □ Other:	
	ANALYSIS REQUEST		Preservative Codes	
			None: NO DI Water: H ₂ O	
			Cool: Cool MeOH: Me	
		-	HCL: HC HNO3: HN	
			H ₂ SO ₄ : H ₂ NaOH: Na	
))			H ₃ PO ₄ : HP	
300.0			NaHSO ₄ : NABIS)
PA: 3			Na ₂ S ₂ O ₃ : NaSO ₃	29
S (EF	890-2941 Chain of Custody	ody	Zn Acetate+NaOH: Zn	of
015)	_	_	NaOH+Ascorbic Acid: SAPC	27
CHLOF			Sample Comments	Page
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Sb As Ba Be	B Cd Ca Cr Co Cu Fe Pb Mg N	Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na	la Sr Tl Sn U V Zn	202
Sb As Ba Be	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U		Hg: 1631 / 245.1 / 7470 / 7471	21/.
company to Eurofins	company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	ns standard terms and conditions		: 2/
ny losses or expense submitted to Eurofi	my losses or expenses incurred by the client if such losses are due to circumstances beyond the control e submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	circumstances beyond the control inforced unless previously negotiated.		ing

SAMPLE RECEIPT

Temp Blank: Yes

(Yes) No

Wet Ice:

Yes

No

Parameters

100m

Z

NA

Sample Custody Seals: Cooler Custody Seals: Samples Received Intact:

Yes Yes

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Temperature Reading: Correction Factor: Thermometer ID:

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Corrected Temperature:

Sample Identification

Matrix

Date

Time

Depth

Cont

Grab/

of

Sampled

10:50 10:40

Grab/ Grab/ Comp

0.5

11:00

0.5

Grab/

11:10

Grab/

BH01

BH02 BH01

BH02

Sampler's Name:

Gilbert Moreno

TAT starts the day received by the lab, if received by 4:30pm

Rural Eddy, NM

1061174901

Project Location:

Project Number:

03A1987032

☑ Routine Due Date:

Rush 5 Day TAT

Code

Turn Around

RDX Federal 28 #011H

Project Name:

City, State ZIP:

281-702-2329

Email: | jhernandez@Ensolum.com,

City, State ZIP:

Company Name Bill to: (if different)

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2941-1 SDG Number: 03A1987032

List Source: Eurofins Carlsbad

Login Number: 2941 List Number: 1 Creator: Clifton, Cloe

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2941-1 SDG Number: 03A1987032

Login Number: 2941 **List Source: Eurofins Midland** List Number: 2

List Creation: 09/14/22 11:07 AM

Creator: Rodriguez, Leticia

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



ANALYTICAL REPORT

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

Laboratory Job ID: 890-2942-1

Laboratory Sample Delivery Group: 03A1987032 Client Project/Site: RDX FEDERAL 28 #011H

For:

eurofins 🔆

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Devon Team



Authorized for release by: 9/26/2022 2:28:20 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: RDX FEDERAL 28 #011H

Laboratory Job ID: 890-2942-1
SDG: 03A1987032

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Definitions/Glossary

Job ID: 890-2942-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description** S1+ Surrogate recovery exceeds control limits, high biased. 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 Contains No Free Liquid **CNF** 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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

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

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1

SDG: 03A1987032

Job ID: 890-2942-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2942-1

Receipt

The samples were received on 9/13/2022 8:26 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35074 and analytical batch 880-35228 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-35074/1-A) and (LCSD 880-35074/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS09 (890-2942-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS20 (890-2942-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS24 (890-2942-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: FS17 (890-2942-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS19 (890-2942-13) and FS20 (890-2942-14). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS07 Lab Sample ID: 890-2942-1 Matrix: Solid

Date Collected: 09/12/22 09:00 Date Received: 09/13/22 08:26 Sample Depth: 0900 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
Toluene	<0.00201	U F1	0.00201		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		09/21/22 14:46	09/23/22 12:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/21/22 14:46	09/23/22 12:09	1
1,4-Difluorobenzene (Surr)	74		70 - 130				09/21/22 14:46	09/23/22 12:09	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range	•								
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 11:13	
Analyte Total TPH	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9 ge Organics (D	Qualifier U RO) (GC)	49.9		mg/Kg			09/19/22 11:13	1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <49.9 ge Organics (Di Result	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg	<u>D</u>	Prepared	09/19/22 11:13 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			09/19/22 11:13	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (Di Result	Qualifier U RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	09/19/22 11:13 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33 09/16/22 08:33	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33 09/16/22 08:33	Dil Face 1 1 1 Dil Face
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25 09/15/22 14:25 Prepared	09/19/22 11:13 Analyzed 09/16/22 08:33 09/16/22 08:33 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U RO) (GC) Qualifier U U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25 09/15/22 14:25 Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33 09/16/22 08:33 Analyzed 09/16/22 08:33	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U RO) (GC) Qualifier U U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25 09/15/22 14:25 Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 08:33 09/16/22 08:33 Analyzed 09/16/22 08:33	Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: FS08 Lab Sample ID: 890-2942-2

Date Collected: 09/12/22 09:10 **Matrix: Solid**

Date Received: 09/13/22 08:26 **Sample Depth: 0910 - 2**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 12:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/21/22 14:46	09/23/22 12:53	1

Job ID: 890-2942-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS08 Lab Sample ID: 890-2942-2 Matrix: Solid

Date Collected: 09/12/22 09:10 Date Received: 09/13/22 08:26 Sample Depth: 0910 - 2

Method: 8021B - Volatile Organic Compou	unds (GC) (Continued)
---	-----------------------

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	76	70 - 130	09/21/22 14:46	09/23/22 12:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	ma/Ka			09/23/22 17:25	1

Method: 8015 NM - Diesel Range Organics (DRO) (G	C
Method: 0013 NM - Dieser Kange Organics (DIXO) (C	, ,

Analyte	Result Quali	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			09/19/22 11:13	1

		_			
Method: 8015B	NM - Diesel	Range Org	ranics ('DROL	GC
motriou. ou rob	THE DIGGOL	itunge or	garnoo (D. (O)	(–

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 09:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 09:43	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 09:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/15/22 14	09/16/22 09:43	1
o-Terphenyl	105		70 - 130	09/15/22 14	2:25 09/16/22 09:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.9	5.02	mg/Kg			09/19/22 12:35	1

Client Sample ID: FS09 Lab Sample ID: 890-2942-3

Date Collected: 09/12/22 10:00 Date Received: 09/13/22 08:26

Sample Depth: 1000 - 2

Method: 8021B - Volatile Organic Compounds (GC)

monioa. our ib volunio oi gu	ino compoundo ((00)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 13:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130				09/21/22 14:46	09/23/22 13:44	1
1.4 Diffuorobenzene (Surr)	82		70 120				00/21/22 14:46	00/22/22 12:44	1

1,4-Difluorobenzene (Surr)	22	70 - 130	09/21/22 14:46	09/23/22 13:44	1
1,4-Dilluorobenzene (Surr)	02	70 - 130	09/21/22 14.40	09/23/22 13.44	'

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/23/22 17:25	1

	Method: 8015 NM - Diesel	Range Organics (DRC)) (GC)
ı	Michiga. 00 to Min - Diese	i italige Organica (bite	,, (00)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 11:13	1

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Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: FS09

Date Collected: 09/12/22 10:00 Date Received: 09/13/22 08:26

Sample Depth: 1000 - 2

ilent Sample ID: FS09	Lab Sample ID: 890-2942-3
ate Collected: 09/12/22 10:00	Matrix: Solid

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 10:05	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 10:05	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 10:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				09/15/22 14:25	09/16/22 10:05	1
o-Terphenyl	110		70 - 130				09/15/22 14:25	09/16/22 10:05	1
Method: 300.0 - Anions, Ion Chro	matagraphy	Solublo							
						_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54.3		5.03		mg/Kg			09/19/22 12:40	1

Client Sample ID: FS10

Lab Sample ID: 890-2942-4

Date Collected: 09/12/22 12:00

Matrix: Solid

Date Collected: 09/12/22 12:00 Date Received: 09/13/22 08:26

Sample Depth: 1200 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/21/22 14:46	09/23/22 14:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/21/22 14:46	09/23/22 14:09	1
1,4-Difluorobenzene (Surr)	79		70 - 130				09/21/22 14:46	09/23/22 14:09	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 11:13	Dil Fac
Analyte	Result <49.9	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg		<u> </u>	09/19/22 11:13	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier U	49.9		mg/Kg		Prepared	09/19/22 11:13 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 10:26	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 10:26 09/16/22 10:26	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 10:26 09/16/22 10:26	

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13

Job ID: 890-2942-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS10 Lab Sample ID: 890-2942-4 Matrix: Solid

Date Collected: 09/12/22 12:00 Date Received: 09/13/22 08:26

Sample Depth: 1200 - 3

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.4		5.05		mg/Kg			09/19/22 12:45	1

Client Sample ID: FS11 Lab Sample ID: 890-2942-5 Matrix: Solid

Date Collected: 09/12/22 12:10 Date Received: 09/13/22 08:26

Sample Depth: 1210 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 14:35	
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 14:35	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 14:35	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 14:35	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 14:35	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 14:35	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				09/21/22 14:46	09/23/22 14:35	1
1,4-Difluorobenzene (Surr)	72		70 - 130				09/21/22 14:46	09/23/22 14:35	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX - -	<0.00399	U	0.00399		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH			50.0	WIDE	mg/Kg			09/19/22 11:13	
	100.0	Ü	00.0		mg/rtg			03/13/22 11:10	,
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 10:48	1
(GRU)-C0-C10									
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 10:48	1
Diesel Range Organics (Over	<50.0 <50.0		50.0 50.0		mg/Kg		09/15/22 14:25 09/15/22 14:25	09/16/22 10:48 09/16/22 10:48	1
Diesel Range Organics (Over C10-C28)		U							
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0	U	50.0				09/15/22 14:25	09/16/22 10:48	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0 <i>Limits</i>				09/15/22 14:25 Prepared	09/16/22 10:48 Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 **Recovery 117 109	U Qualifier	50.0 Limits 70 - 130				09/15/22 14:25 Prepared 09/15/22 14:25	09/16/22 10:48 Analyzed 09/16/22 10:48	Dil Fac
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 **Recovery 117 109 pmatography -	U Qualifier	50.0 Limits 70 - 130	MDL		D_	09/15/22 14:25 Prepared 09/15/22 14:25	09/16/22 10:48 Analyzed 09/16/22 10:48	Dil Fac

Job ID: 890-2942-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS12 Lab Sample ID: 890-2942-6 Matrix: Solid

Date Collected: 09/12/22 12:20 Date Received: 09/13/22 08:26 Sample Depth: 1220 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				09/21/22 14:46	09/23/22 15:01	1
1,4-Difluorobenzene (Surr)	89		70 - 130				09/21/22 14:46	09/23/22 15:01	1
- Method: Total BTEX - Total B	TEX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Rai	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 11:13	1
Method: 8015B NM - Diesel R	ange Organics (D	RO) (GC)							
A b - d -	Posult	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Qualifier	IXL	IVIDE	Oilit	_	rrepared	Allalyzou	Diriac

C10-C28) Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	09/15/22 14:25	09/16/22 11:10	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130		09/15/22 14:25	09/16/22 11:10	1
o-Terphenyl	118		70 - 130		09/15/22 14:25	09/16/22 11:10	1

49.9

mg/Kg

<49.9 U

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.9	4.99	mg/Kg			09/19/22 12:54	1

Client Sample ID: FS13 Lab Sample ID: 890-2942-7

Date Collected: 09/12/22 12:30 Date Received: 09/13/22 08:26 Sample Depth: 1230 - 4

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/21/22 14:46	09/23/22 15:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/21/22 14:46	09/23/22 15:27	

Eurofins Carlsbad

09/16/22 11:10

09/15/22 14:25

Matrix: Solid

Client: Ensolum Job ID: 890-2942-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

Client Sample ID: FS13 Lab Sample ID: 890-2942-7

Date Collected: 09/12/22 12:30 Matrix: Solid Date Received: 09/13/22 08:26 Sample Depth: 1230 - 4

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	73	70 - 130	09/21/22 14:46	09/23/22 15:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/23/22 17:25	1

Mathadi OA4E NIM	Discal Banga Organica (DBO) (CC)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	ma/Ka			09/19/22 11:13	1

Method: 8015B	NM - Diesel	Range Ore	anice l	(DRO)	(GC)
Methou. ou isb	IAIN - DIESEI	Range Org	janics i	(DRU)	(GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 11:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 11:31	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 11:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114	70 - 130	09/15/22 14:25	09/16/22 11:31	1
o-Terphenyl	109	70 - 130	09/15/22 14:25	09/16/22 11:31	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	845		49.9		mg/Kg			09/19/22 13:00	10

Client Sample ID: FS14 Lab Sample ID: 890-2942-8 **Matrix: Solid**

Date Collected: 09/12/22 12:40 Date Received: 09/13/22 08:26 Sample Depth: 1240 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 15:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 15:53	1
Ethylbenzene	<0.00202	U	0.00202	1	mg/Kg		09/21/22 14:46	09/23/22 15:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/21/22 14:46	09/23/22 15:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 15:53	1
Xylenes, Total	<0.00404	U	0.00404	1	mg/Kg		09/21/22 14:46	09/23/22 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				09/21/22 14:46	09/23/22 15:53	1
1 1 Differenchemanne (Cerry)	04		70 400				00/04/00 44:46	00/02/00 45-52	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	DII Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/21/22 14:46	09/23/22 15:53	1
1,4-Difluorobenzene (Surr)	81		70 - 130	09/21/22 14:46	09/23/22 15:53	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg		_	09/23/22 17:25	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/19/22 11:13	1

Matrix: Solid

Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Lab Sample ID: 890-2942-8

Client Sample ID: FS14 Date Collected: 09/12/22 12:40 Date Received: 09/13/22 08:26

Sample Depth: 1240 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 11:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 11:53	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 11:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				09/15/22 14:25	09/16/22 11:53	1
o-Terphenyl	109		70 - 130				09/15/22 14:25	09/16/22 11:53	1

Dil Fac Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Chloride 4.96 09/19/22 13:14 27.8 mg/Kg

Client Sample ID: FS15 Lab Sample ID: 890-2942-9 Matrix: Solid

Date Collected: 09/12/22 12:50 Date Received: 09/13/22 08:26

Sample Depth: 1250 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 16:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130				09/21/22 14:46	09/23/22 16:19	1
1,4-Difluorobenzene (Surr)	82		70 - 130				09/21/22 14:46	09/23/22 16:19	1
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/23/22 17:25	
: Method: 8015 NM - Diesel Range	e Organics (DR	O) (GC)		MDI		D	Propared		
Method: 8015 NM - Diesel Range Analyte	e Organics (DR	O) (GC) Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed 09/19/22 11:13	Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR Result <50.0	O) (GC) Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR Result <50.0	O) (GC) Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		<u> </u>	Analyzed 09/19/22 11:13	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <50.0 ge Organics (D Result	Qualifier U RO) (GC) Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 11:13 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <50.0 ge Organics (D Result <50.0	O) (GC) Qualifier U RO) (GC) Qualifier U	RL 50.0		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 14:25	Analyzed 09/19/22 11:13 Analyzed 09/16/22 12:14	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <50.0 ge Organics (D Result <50.0 <50.0	O) (GC) Qualifier U RO) (GC) Qualifier U U	RL 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	Analyzed 09/19/22 11:13 Analyzed 09/16/22 12:14 09/16/22 12:14	Dil Fac Dil Fac 1 Dil Fac 1 Dil Fac 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR Result <50.0 ge Organics (D Result <50.0 <50.0 <50.0	O) (GC) Qualifier U RO) (GC) Qualifier U U	RL 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	Analyzed 09/19/22 11:13 Analyzed 09/16/22 12:14 09/16/22 12:14	Dil Fac

Job ID: 890-2942-1

Matrix: Solid

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS15 Lab Sample ID: 890-2942-9 Matrix: Solid

Date Collected: 09/12/22 12:50 Date Received: 09/13/22 08:26

Sample Depth: 1250 - 4

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1420		49.5		mg/Kg			09/19/22 13:19	10	

Client Sample ID: FS16 Lab Sample ID: 890-2942-10

Date Collected: 09/12/22 13:00 Date Received: 09/13/22 08:26

Sample Depth: 1300 - 2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 16:44	
Toluene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 16:44	•
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 16:44	
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 16:44	
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 16:44	
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 16:44	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	107		70 - 130				09/21/22 14:46	09/23/22 16:44	-
1,4-Difluorobenzene (Surr)	75		70 - 130				09/21/22 14:46	09/23/22 16:44	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 11:13	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 12:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 12:36	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 12:36	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				09/15/22 14:25	09/16/22 12:36	1
o-Terphenyl	109		70 - 130				09/15/22 14:25	09/16/22 12:36	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	158		4.95		mg/Kg			09/19/22 13:34	

Job ID: 890-2942-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS17 Lab Sample ID: 890-2942-11 Matrix: Solid

Date Collected: 09/12/22 13:10 Date Received: 09/13/22 08:26 Sample Depth: 1310 - 3

Method: 8021B - Volatile Orga	inic Compounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				09/21/22 14:46	09/23/22 18:29	1
1,4-Difluorobenzene (Surr)	74		70 - 130				09/21/22 14:46	09/23/22 18:29	1
Method: Total BTEX - Total BT	EX Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	11	50.0		mg/Kg		-	09/19/22 11:13	

Method: 8015B NM - Diesel Rang	15B NM - Diesel Range Organics (DRO) (GC)											
Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac				
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kç]	09/15/22 14:25	09/16/22 13:48	1				
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg]	09/15/22 14:25	09/16/22 13:48	1				
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	1	09/15/22 14:25	09/16/22 13:48	1				
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac				
1-Chlorooctane	137	S1+	70 - 130			09/15/22 14:25	09/16/22 13:48	1				
o-Terphenyl	130		70 - 130			09/15/22 14:25	09/16/22 13:48	1				

Method: 300.0 - Anions, Ion Chromatography - Soluble							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.2	5.03	mg/Kg			09/19/22 13:39	1

Client Sample ID: FS18 Lab Sample ID: 890-2942-12

Date Collected: 09/12/22 13:20 Date Received: 09/13/22 08:26 Sample Depth: 1320 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				09/21/22 14:46	09/23/22 18:55	1

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Matrix: Solid

Client: Ensolum

Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS18 Lab Sample ID: 890-2942-12 Matrix: Solid

Date Collected: 09/12/22 13:20 Date Received: 09/13/22 08:26 Sample Depth: 1320 - 4

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

Surrogate	%Recovery C	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111	70 - 130	09/21/22 14:46	09/23/22 18:55	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result Qualifier		MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398 U	0.00398	ma/Ka			09/23/22 17:25	1

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

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.9 U	49.9	ma/Ka			09/19/22 11:13	1	

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 14:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 14:13	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	09/15/22 14:25	09/16/22 14:13	1
o-Terphenyl	117		70 - 130	09/15/22 14:25	09/16/22 14:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit)	Prepared	Analyzed	Dil Fac
Chloride	179		4.97		mg/Kg			09/19/22 13:43	1

Lab Sample ID: 890-2942-13 **Client Sample ID: FS19 Matrix: Solid**

Date Collected: 09/12/22 13:30 Date Received: 09/13/22 08:26 Sample Depth: 1330 - 4

Method: 8021B - Volatile Organic Compounds (GC)

welliou. 602 ib - volalile Orgal	nic Compounds (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/21/22 14:46	09/23/22 19:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				09/21/22 14:46	09/23/22 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/21/22 14:46	09/23/22 19:21	1
1,4-Difluorobenzene (Surr)	74		70 - 130	09/21/22 14:46	09/23/22 19:21	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	09/23/22 17:25	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)
motification bicoof range organics (Bito) (Co)

Analyte	Result Qualific	•	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/19/22 11:13	1

Project/Site: RDX FEDERAL 28 #011H

Client: Ensolum

Job ID: 890-2942-1

SDG: 03A1987032

Client Sample ID: FS19

Date Collected: 09/12/22 13:30 Date Received: 09/13/22 08:26 Lab Sample ID: 890-2942-13 Matrix: Solid

Sample Depth: 1330 - 4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 14:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 14:34	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 14:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				09/15/22 14:25	09/16/22 14:34	1
o-Terphenyl	128		70 - 130				09/15/22 14:25	09/16/22 14:34	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2942-14 **Client Sample ID: FS20**

Date Collected: 09/12/22 13:40 Date Received: 09/13/22 08:26 Matrix: Solid

Sample Depth: 1340 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/21/22 14:46	09/23/22 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				09/21/22 14:46	09/23/22 19:47	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130				09/21/22 14:46	09/23/22 19:47	1
- Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 11:13	Dil Fac
Analyte	Result <50.0	Qualifier U		MDL		<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg			09/19/22 11:13	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0 ge Organics (D Result	Qualifier U RO) (GC) Qualifier U	50.0		mg/Kg		Prepared	09/19/22 11:13 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 ge Organics (D) Result <50.0	Qualifier U RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg Unit mg/Kg		Prepared 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 14:56	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 14:56 09/16/22 14:56	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U RO) (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 14:25 09/15/22 14:25	09/19/22 11:13 Analyzed 09/16/22 14:56 09/16/22 14:56	

Client: Ensolum Job ID: 890-2942-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

Lab Sample ID: 890-2942-14

Client Sample ID: FS20

Date Collected: 09/12/22 13:40 Date Received: 09/13/22 08:26 Matrix: Solid

Sample Depth: 1340 - 3

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.7		5.00		mg/Kg			09/19/22 13:53	1

Client Sample ID: FS21 Lab Sample ID: 890-2942-15

Date Collected: 09/12/22 13:50 Date Received: 09/13/22 08:26

Method: Total BTEX - Total BTEX Calculation

Sample Depth: 1350 - 3

Analyte

Matrix: Solid

Analyzed

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/21/22 14:46	09/23/22 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130				09/21/22 14:46	09/23/22 20:13	1
1,4-Difluorobenzene (Surr)	75		70 - 130				09/21/22 14:46	09/23/22 20:13	1

Total BTEX	<0.00404	U	0.00404		mg/Kg			09/23/22 17:25	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 11:13	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 15:18	1

MDL Unit

Prepared

Result Qualifier

1-Chlorooctane o-Terphenyl	104 101	Quanner	70 - 130 70 - 130		09/15/22 14:25 09/15/22 14:25	09/16/22 15:18 09/16/22 15:18	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analvzed	Dil Fac
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	09/15/22 14:25	09/16/22 15:18	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg	09/15/22 14:25	09/16/22 15:18	1
Gasoline Range Organics	<49.9	U	49.9	mg/Kg	09/15/22 14:25	09/16/22 15:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	24.8		5.00		mg/Kg			09/19/22 13:58	1	

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Dil Fac

Matrix: Solid

Lab Sample ID: 890-2942-16

Job ID: 890-2942-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS22 Date Collected: 09/12/22 14:00 Date Received: 09/13/22 08:26

Sample Depth: 1400 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/21/22 14:46	09/23/22 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				09/21/22 14:46	09/23/22 20:38	1
1,4-Difluorobenzene (Surr)	70		70 - 130				09/21/22 14:46	09/23/22 20:38	1
- Method: Total BTEX - Total BTE)	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/23/22 17:25	1
- Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/19/22 11:13	1
- Method: 8015B NM - Diesel Rang	ge Organics (Di	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 15:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 15:39	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/15/22 14:25	09/16/22 15:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				09/15/22 14:25	09/16/22 15:39	1
o-Terphenyl	110		70 - 130				09/15/22 14:25	09/16/22 15:39	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
· · · · · · · · · · · · · · · · · · ·									

Client Sample ID: FS23 Lab Sample ID: 890-2942-17

5.04

mg/Kg

30.2

Date Collected: 09/12/22 14:10 Date Received: 09/13/22 08:26

Sample Depth: 1410 - 3

Chloride

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 21:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/21/22 14:46	09/23/22 21:04	1

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09/19/22 14:03

Matrix: Solid

Matrix: Solid

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: FS23 Lab Sample ID: 890-2942-17

Date Collected: 09/12/22 14:10

Date Received: 09/13/22 08:26

Sample Depth: 1410 - 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	75		70 - 130	09/21/22 14:46	09/23/22 21:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00398	U	0.00398		ma/Ka			09/23/22 17:25	1

Method: 8015 NM - Diesel Rang	To Organice (DBO) (CC)
Welliou, outbiller Diesel Kalig	de Organica (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg		_	09/19/22 11:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 16:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 16:01	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 14:25	09/16/22 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery G	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	09/15/22 14:25	09/16/22 16:01	1
o-Terphenyl	111		70 - 130	09/15/22 14:25	09/16/22 16:01	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte		alifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.8	5.01	mg/Kg			09/19/22 11:11	1

Client Sample ID: FS24

Date Collected: 09/12/22 14:20

Lab Sample ID: 890-2942-18

Matrix: Solid

Date Collected: 09/12/22 14:20 Date Received: 09/13/22 08:26 Sample Depth: 1420 - 3

Method: 8021B - Volatile Organic Compounds (GC)

Method: 8021B - Volatile Orga	nic Compounds ((GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
Toluene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/21/22 14:46	09/23/22 21:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				09/21/22 14:46	09/23/22 21:30	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130				09/21/22 14:46	09/23/22 21:30	1

,					
1,4-Difluorobenzene (Surr)	67 S1-	70 - 130	09/21/22 14:46	09/23/22 21:30	1
- -					

wetnoa:	iotai B	IEX -	iotai Bi	EX	aiculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/23/22 17:25	1

14 () 1 004 T NIM DI 1		(DDO)	
Method: 8015 NM - Diesel	Range Organics	(DKO)	(GC)

Analyte		Result	Qualifier	RL	MDL Ur	nit	D	Prepared	Analyzed	Dil Fac
Total TPH		<49.9	U	49.9	mg	a/Ka			09/19/22 11:13	1

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Client Sample Results

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: FS24

Lab Sample ID: 890-2942-18

Matrix: Solid

Date Collected: 09/12/22 14:20 Date Received: 09/13/22 08:26 Sample Depth: 1420 - 3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 16:22	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 16:22	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 14:25	09/16/22 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				09/15/22 14:25	09/16/22 16:22	1
o-Terphenyl	118		70 - 130				09/15/22 14:25	09/16/22 16:22	1

Method: 300.0 - Anions, Ion Chro	matography - Soluble						
Analyte	Result Qualifier	RL	MDL Unit	. D	Prepared	Analyzed	Dil Fac
Chloride	121	5.05	mg/	Kg —	-	09/19/22 11:34	1

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Surrogate Summary

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Li
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2942-1	FS07	115	74	
390-2942-1 MS	FS07	110	74	
390-2942-1 MSD	FS07	120	77	
390-2942-2	FS08	119	76	
390-2942-3	FS09	141 S1+	82	
90-2942-4	FS10	115	79	
390-2942-5	FS11	95	72	
390-2942-6	FS12	116	89	
390-2942-7	FS13	127	73	
90-2942-8	FS14	90	81	
90-2942-9	FS15	127	82	
90-2942-10	FS16	107	75	
90-2942-11	FS17	124	74	
90-2942-12	FS18	94	111	
90-2942-13	FS19	116	74	
90-2942-14	FS20	102	65 S1-	
90-2942-15	FS21	116	75	
390-2942-16	FS22	105	70	
90-2942-17	FS23	115	75	
90-2942-18	FS24	95	67 S1-	
CS 880-35074/1-A	Lab Control Sample	109	64 S1-	
	Lab Control Sample Dup	131 S1+	79	
_CSD 880-35074/2-A				

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

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2942-1	FS07	101	96	
890-2942-1 MS	FS07	101	96	
890-2942-1 MSD	FS07	105	85	
890-2942-2	FS08	109	105	
890-2942-3	FS09	115	110	
890-2942-4	FS10	107	102	
890-2942-5	FS11	117	109	
890-2942-6	FS12	128	118	
890-2942-7	FS13	114	109	
890-2942-8	FS14	112	109	
890-2942-9	FS15	114	111	
890-2942-10	FS16	112	109	
890-2942-11	FS17	137 S1+	130	
890-2942-12	FS18	117	117	
890-2942-13	FS19	133 S1+	128	
890-2942-14	FS20	137 S1+	126	

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2942-15	FS21	104	101	
890-2942-16	FS22	112	110	
890-2942-17	FS23	110	111	
890-2942-18	FS24	116	118	
LCS 880-34596/2-A	Lab Control Sample	109	93	
LCSD 880-34596/3-A	Lab Control Sample Dup	102	96	
MB 880-34596/1-A	Method Blank	115	110	
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

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12

Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35074/5-A

Matrix: Solid Analysis Batch: 35228

Analyte

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35074

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 11:43	1
<0.00200	U	0.00200		mg/Kg		09/21/22 14:46	09/23/22 11:43	1
<0.00200	U	0.00200		ma/Ka		09/21/22 14:46	09/23/22 11:43	1

Benzene <(Toluene <(Ethylbenzene <0.00200 U mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 09/21/22 14:46 09/23/22 11:43 o-Xylene <0.00200 U 0.00200 09/21/22 14:46 09/23/22 11:43 mg/Kg Xylenes, Total <0.00400 U 0.00400 09/21/22 14:46 09/23/22 11:43 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/21/22 14:46	09/23/22 11:43	1
1.4-Difluorobenzene (Surr)	76		70 - 130	09/21/22 14:46	09/23/22 11:43	1

Lab Sample ID: LCS 880-35074/1-A

Matrix: Solid

Analysis Batch: 35228

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35074

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.07093 mg/Kg 71 70 - 130 Toluene 0.100 0.08035 mg/Kg 80 70 - 130 0.100 75 Ethylbenzene 0.07541 mg/Kg 70 - 130 0.200 76 70 - 130 m-Xylene & p-Xylene 0.1518 mg/Kg 0.100 0.07510 70 - 130 o-Xylene mg/Kg 75

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130

Lab Sample ID: LCSD 880-35074/2-A

Matrix: Solid

Analysis Batch: 35228

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

Prep Batch: 35074

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09722		mg/Kg		97	70 - 130	31	35	
Toluene	0.100	0.09378		mg/Kg		94	70 - 130	15	35	
Ethylbenzene	0.100	0.09269		mg/Kg		93	70 - 130	21	35	
m-Xylene & p-Xylene	0.200	0.1887		mg/Kg		94	70 - 130	22	35	
o-Xylene	0.100	0.09312		mg/Kg		93	70 - 130	21	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1.4-Difluorobenzene (Surr)	79		70 - 130

Lab Sample ID: 890-2942-1 MS

Matrix: Solid

Analysis Batch: 35228

Client Sample ID: FS07 Prep Type: Total/NA

Prep Batch: 35074

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.100	0.02522	F1	mg/Kg		25	70 - 130	
Toluene	<0.00201	U F1	0.100	0.02432	F1	mg/Kg		24	70 - 130	

QC Sample Results

Job ID: 890-2942-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Lab Sample ID: 890-2942-1 MS **Matrix: Solid**

Analysis Batch: 35228

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00201	U F1	0.100	0.02588	F1	mg/Kg		26	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.201	0.05207	F1	mg/Kg		26	70 - 130
o-Xylene	< 0.00201	U F1	0.100	0.02747	F1	mg/Kg		27	70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	74	70 - 130

Lab Sample ID: 890-2942-1 MSD

Matrix: Solid

Analysis Batch: 35228

Client Sample ID: FS07 Prep Type: Total/NA Prep Batch: 35074

Client Sample ID: FS07

Prep Type: Total/NA

Prep Batch: 35074

Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Analyte babbA Result Qualifier Unit Limits 0.0998 Benzene <0.00201 UF1 0.02569 F1 mg/Kg 26 70 - 130 2 35 25 Toluene <0.00201 UF1 0.0998 0.02507 F1 mg/Kg 70 - 130 3 35 Ethylbenzene <0.00201 UF1 0.0998 0.02505 F1 25 70 - 130 35 mg/Kg 3 0.200 0.05019 F1 25 70 - 130 35 m-Xylene & p-Xylene <0.00402 UF1 mg/Kg 0.0998 <0.00201 UF1 0.02817 F1 28 70 - 130 o-Xylene mg/Kg 3

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

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

Lab Sample ID: MB 880-34596/1-A

Matrix: Solid

Analysis Batch: 34626

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

Prep Batch: 34596

MB MB Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Analyte Gasoline Range Organics 50.0 09/15/22 14:25 09/16/22 07:29 <50.0 U mg/Kg (GRO)-C6-C10 50.0 09/15/22 14:25 09/16/22 07:29 Diesel Range Organics (Over <50.0 U mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/15/22 14:25 09/16/22 07:29 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	09/15/22 14:25	09/16/22 07:29	1
o-Terphenyl	110		70 - 130	09/15/22 14:25	09/16/22 07:29	1

Lab Sample ID: LCS 880-34596/2-A

Matrix: Solid

Analysis Batch: 34626

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

Prep Batch: 34596

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	1038		mg/Kg		104	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	831.5		mg/Kg		83	70 - 130
C10-C28)							

Limits

70 - 130

70 - 130

Job ID: 890-2942-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

LCS LCS

%Recovery Qualifier

109

93

Lab Sample ID: LCS 880-34596/2-A

Analysis Batch: 34626

Matrix: Solid

Surrogate

o-Terphenyl

1-Chlorooctane

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34596

Lab Sample ID: LCSD 880-34596/3-A

Matrix: Solid

Analysis Batch: 34626

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34596

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 987.7 99 70 - 1305 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 860.7 86 mg/Kg 70 - 1303 20 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 102 70 - 130 1-Chlorooctane 96 70 - 130 o-Terphenyl

Lab Sample ID: 890-2942-1 MS

Matrix: Solid

Analysis Batch: 34626

Client Sample ID: FS07 Prep Type: Total/NA

Prep Batch: 34596

Sample Sample MS MS Spike Analyte Added Result Qualifier Result Qualifier Unit %Rec Limits D Gasoline Range Organics <49.9 U 996 877.7 mg/Kg 88 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 996 1165 mg/Kg 112 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 101 o-Terphenyl 96 70 - 130

Lab Sample ID: 890-2942-1 MSD Client Sample ID: FS07

Matrix: Solid

Analysis Batch: 34626

Prep Type: Total/NA

Prep Batch: 34596

Sample Sample MSD MSD %Rec RPD Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U 999 784.3 79 Gasoline Range Organics <49.9 mg/Kg 70 - 130 11 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1029 mg/Kg 99 70 - 130 12 20 C10-C28)

MSD MSD

Surrogate	%Recovery Qualifi	er Limits
1-Chlorooctane	105	70 - 130
o-Terphenyl	85	70 - 130

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Released to Imaging: 2/21/2023 9:04:04 AM

Job ID: 890-2942-1

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: FS13

Client Sample ID: FS13

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34509/1-A

Matrix: Solid

Analysis Batch: 34844

мв мв

Analyte Result Qualifier RLMDL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 09/19/22 11:37

Lab Sample ID: LCS 880-34509/2-A

Matrix: Solid

Analysis Batch: 34844

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 248.0 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-34509/3-A

Matrix: Solid

Analysis Batch: 34844

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 248.7 90 - 110 ma/Ka

Lab Sample ID: 890-2942-7 MS

Matrix: Solid

Analysis Batch: 34844

MS MS Spike %Rec Sample Sample Added %Rec Analyte Result Qualifier Result Qualifier Unit Limits Chloride 845 2500 3301 90 - 110 mg/Kg

Lab Sample ID: 890-2942-7 MSD

Matrix: Solid

Analysis Batch: 34844

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	845		2500	3299		mg/Kg		98	90 - 110		20	

Lab Sample ID: MB 880-34584/1-A

Matrix: Solid

Analysis Batch: 34849

MB MB

Dil Fac Analyte Result Qualifier RL MDL Unit Prepared Analyzed Chloride <5.00 5.00 mg/Kg 09/19/22 10:49

Lab Sample ID: LCS 880-34584/2-A

Matrix: Solid

Analysis Batch: 34849

LCS LCS %Rec Spike Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 253.5 mg/Kg 101 90 - 110

Lab Sample ID: LCSD 880-34584/3-A

Matrix: Solid

Analysis Batch: 34849

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 251.2 mg/Kg 100 90 - 110 20

QC Sample Results

Job ID: 890-2942-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-2942-17 MS **Client Sample ID: FS23 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34849

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.8		251	268.1		mg/Kg		95	90 - 110	

Lab Sample ID: 890-2942-17 MSD **Client Sample ID: FS23** Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 34849

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	30.8		251	270.0		mg/Kg		96	90 - 110	1	20

Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

GC VOA

Prep Batch: 35074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2942-1	FS07	Total/NA	Solid	5035	
890-2942-2	FS08	Total/NA	Solid	5035	
890-2942-3	FS09	Total/NA	Solid	5035	
890-2942-4	FS10	Total/NA	Solid	5035	
890-2942-5	FS11	Total/NA	Solid	5035	
890-2942-6	FS12	Total/NA	Solid	5035	
890-2942-7	FS13	Total/NA	Solid	5035	
890-2942-8	FS14	Total/NA	Solid	5035	
890-2942-9	FS15	Total/NA	Solid	5035	
890-2942-10	FS16	Total/NA	Solid	5035	
890-2942-11	FS17	Total/NA	Solid	5035	
890-2942-12	FS18	Total/NA	Solid	5035	
890-2942-13	FS19	Total/NA	Solid	5035	
890-2942-14	FS20	Total/NA	Solid	5035	
890-2942-15	FS21	Total/NA	Solid	5035	
890-2942-16	FS22	Total/NA	Solid	5035	
890-2942-17	FS23	Total/NA	Solid	5035	
890-2942-18	FS24	Total/NA	Solid	5035	
MB 880-35074/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35074/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35074/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2942-1 MS	FS07	Total/NA	Solid	5035	
890-2942-1 MSD	FS07	Total/NA	Solid	5035	

Analysis Batch: 35228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-1	FS07	Total/NA	Solid	8021B	35074
890-2942-2	FS08	Total/NA	Solid	8021B	35074
890-2942-3	FS09	Total/NA	Solid	8021B	35074
890-2942-4	FS10	Total/NA	Solid	8021B	35074
890-2942-5	FS11	Total/NA	Solid	8021B	35074
890-2942-6	FS12	Total/NA	Solid	8021B	35074
890-2942-7	FS13	Total/NA	Solid	8021B	35074
890-2942-8	FS14	Total/NA	Solid	8021B	35074
890-2942-9	FS15	Total/NA	Solid	8021B	35074
890-2942-10	FS16	Total/NA	Solid	8021B	35074
390-2942-11	FS17	Total/NA	Solid	8021B	35074
890-2942-12	FS18	Total/NA	Solid	8021B	35074
390-2942-13	FS19	Total/NA	Solid	8021B	35074
890-2942-14	FS20	Total/NA	Solid	8021B	35074
890-2942-15	FS21	Total/NA	Solid	8021B	35074
390-2942-16	FS22	Total/NA	Solid	8021B	35074
890-2942-17	FS23	Total/NA	Solid	8021B	35074
890-2942-18	FS24	Total/NA	Solid	8021B	35074
MB 880-35074/5-A	Method Blank	Total/NA	Solid	8021B	35074
LCS 880-35074/1-A	Lab Control Sample	Total/NA	Solid	8021B	35074
LCSD 880-35074/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35074
890-2942-1 MS	FS07	Total/NA	Solid	8021B	35074
390-2942-1 MSD	FS07	Total/NA	Solid	8021B	35074

Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

GC VOA

Analysis Batch: 35310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-1	FS07	Total/NA	Solid	Total BTEX	
890-2942-2	FS08	Total/NA	Solid	Total BTEX	
890-2942-3	FS09	Total/NA	Solid	Total BTEX	
890-2942-4	FS10	Total/NA	Solid	Total BTEX	
890-2942-5	FS11	Total/NA	Solid	Total BTEX	
890-2942-6	FS12	Total/NA	Solid	Total BTEX	
890-2942-7	FS13	Total/NA	Solid	Total BTEX	
890-2942-8	FS14	Total/NA	Solid	Total BTEX	
890-2942-9	FS15	Total/NA	Solid	Total BTEX	
890-2942-10	FS16	Total/NA	Solid	Total BTEX	
890-2942-11	FS17	Total/NA	Solid	Total BTEX	
890-2942-12	FS18	Total/NA	Solid	Total BTEX	
890-2942-13	FS19	Total/NA	Solid	Total BTEX	
890-2942-14	FS20	Total/NA	Solid	Total BTEX	
890-2942-15	FS21	Total/NA	Solid	Total BTEX	
890-2942-16	FS22	Total/NA	Solid	Total BTEX	
890-2942-17	FS23	Total/NA	Solid	Total BTEX	
890-2942-18	FS24	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2942-1	FS07	Total/NA	Solid	8015NM Prep	
890-2942-2	FS08	Total/NA	Solid	8015NM Prep	
890-2942-3	FS09	Total/NA	Solid	8015NM Prep	
890-2942-4	FS10	Total/NA	Solid	8015NM Prep	
390-2942-5	FS11	Total/NA	Solid	8015NM Prep	
390-2942-6	FS12	Total/NA	Solid	8015NM Prep	
890-2942-7	FS13	Total/NA	Solid	8015NM Prep	
890-2942-8	FS14	Total/NA	Solid	8015NM Prep	
390-2942-9	FS15	Total/NA	Solid	8015NM Prep	
390-2942-10	FS16	Total/NA	Solid	8015NM Prep	
390-2942-11	FS17	Total/NA	Solid	8015NM Prep	
390-2942-12	FS18	Total/NA	Solid	8015NM Prep	
390-2942-13	FS19	Total/NA	Solid	8015NM Prep	
390-2942-14	FS20	Total/NA	Solid	8015NM Prep	
390-2942-15	FS21	Total/NA	Solid	8015NM Prep	
390-2942-16	FS22	Total/NA	Solid	8015NM Prep	
890-2942-17	FS23	Total/NA	Solid	8015NM Prep	
890-2942-18	FS24	Total/NA	Solid	8015NM Prep	
MB 880-34596/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34596/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34596/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2942-1 MS	FS07	Total/NA	Solid	8015NM Prep	
890-2942-1 MSD	FS07	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-1	FS07	Total/NA	Solid	8015B NM	34596
890-2942-2	FS08	Total/NA	Solid	8015B NM	34596

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Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

GC Semi VOA (Continued)

Analysis Batch: 34626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-3	FS09	Total/NA	Solid	8015B NM	34596
890-2942-4	FS10	Total/NA	Solid	8015B NM	34596
890-2942-5	FS11	Total/NA	Solid	8015B NM	34596
890-2942-6	FS12	Total/NA	Solid	8015B NM	34596
890-2942-7	FS13	Total/NA	Solid	8015B NM	34596
890-2942-8	FS14	Total/NA	Solid	8015B NM	34596
890-2942-9	FS15	Total/NA	Solid	8015B NM	34596
890-2942-10	FS16	Total/NA	Solid	8015B NM	34596
890-2942-11	FS17	Total/NA	Solid	8015B NM	34596
890-2942-12	FS18	Total/NA	Solid	8015B NM	34596
890-2942-13	FS19	Total/NA	Solid	8015B NM	34596
890-2942-14	FS20	Total/NA	Solid	8015B NM	34596
890-2942-15	FS21	Total/NA	Solid	8015B NM	34596
890-2942-16	FS22	Total/NA	Solid	8015B NM	34596
890-2942-17	FS23	Total/NA	Solid	8015B NM	34596
890-2942-18	FS24	Total/NA	Solid	8015B NM	34596
MB 880-34596/1-A	Method Blank	Total/NA	Solid	8015B NM	34596
LCS 880-34596/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34596
LCSD 880-34596/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34596
890-2942-1 MS	FS07	Total/NA	Solid	8015B NM	34596
890-2942-1 MSD	FS07	Total/NA	Solid	8015B NM	34596

Analysis Batch: 34820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2942-1	FS07	Total/NA	Solid	8015 NM	
890-2942-2	FS08	Total/NA	Solid	8015 NM	
890-2942-3	FS09	Total/NA	Solid	8015 NM	
890-2942-4	FS10	Total/NA	Solid	8015 NM	
890-2942-5	FS11	Total/NA	Solid	8015 NM	
890-2942-6	FS12	Total/NA	Solid	8015 NM	
890-2942-7	FS13	Total/NA	Solid	8015 NM	
890-2942-8	FS14	Total/NA	Solid	8015 NM	
890-2942-9	FS15	Total/NA	Solid	8015 NM	
890-2942-10	FS16	Total/NA	Solid	8015 NM	
890-2942-11	FS17	Total/NA	Solid	8015 NM	
890-2942-12	FS18	Total/NA	Solid	8015 NM	
890-2942-13	FS19	Total/NA	Solid	8015 NM	
890-2942-14	FS20	Total/NA	Solid	8015 NM	
890-2942-15	FS21	Total/NA	Solid	8015 NM	
890-2942-16	FS22	Total/NA	Solid	8015 NM	
890-2942-17	FS23	Total/NA	Solid	8015 NM	
890-2942-18	FS24	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34509

Released to Imaging: 2/21/2023 9:04:04 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-1	FS07	Soluble	Solid	DI Leach	
890-2942-2	FS08	Soluble	Solid	DI Leach	
890-2942-3	FS09	Soluble	Solid	DI Leach	
890-2942-4	FS10	Soluble	Solid	DI Leach	

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1

SDG: 03A1987032

HPLC/IC (Continued)

Leach Batch: 34509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-5	FS11	Soluble	Solid	DI Leach	_
890-2942-6	FS12	Soluble	Solid	DI Leach	
890-2942-7	FS13	Soluble	Solid	DI Leach	
890-2942-8	FS14	Soluble	Solid	DI Leach	
890-2942-9	FS15	Soluble	Solid	DI Leach	
890-2942-10	FS16	Soluble	Solid	DI Leach	
890-2942-11	FS17	Soluble	Solid	DI Leach	
890-2942-12	FS18	Soluble	Solid	DI Leach	
890-2942-13	FS19	Soluble	Solid	DI Leach	
890-2942-14	FS20	Soluble	Solid	DI Leach	
890-2942-15	FS21	Soluble	Solid	DI Leach	
890-2942-16	FS22	Soluble	Solid	DI Leach	
MB 880-34509/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34509/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34509/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2942-7 MS	FS13	Soluble	Solid	DI Leach	
890-2942-7 MSD	FS13	Soluble	Solid	DI Leach	

Leach Batch: 34584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-17	FS23	Soluble	Solid	DI Leach	
890-2942-18	FS24	Soluble	Solid	DI Leach	
MB 880-34584/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34584/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2942-17 MS	FS23	Soluble	Solid	DI Leach	
890-2942-17 MSD	FS23	Soluble	Solid	DI Leach	

Analysis Batch: 34844

Released to Imaging: 2/21/2023 9:04:04 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-1	FS07	Soluble	Solid	300.0	34509
890-2942-2	FS08	Soluble	Solid	300.0	34509
890-2942-3	FS09	Soluble	Solid	300.0	34509
890-2942-4	FS10	Soluble	Solid	300.0	34509
890-2942-5	FS11	Soluble	Solid	300.0	34509
890-2942-6	FS12	Soluble	Solid	300.0	34509
390-2942-7	FS13	Soluble	Solid	300.0	34509
390-2942-8	FS14	Soluble	Solid	300.0	34509
390-2942-9	FS15	Soluble	Solid	300.0	34509
390-2942-10	FS16	Soluble	Solid	300.0	34509
390-2942-11	FS17	Soluble	Solid	300.0	34509
390-2942-12	FS18	Soluble	Solid	300.0	34509
390-2942-13	FS19	Soluble	Solid	300.0	34509
390-2942-14	FS20	Soluble	Solid	300.0	34509
390-2942-15	FS21	Soluble	Solid	300.0	34509
390-2942-16	FS22	Soluble	Solid	300.0	34509
MB 880-34509/1-A	Method Blank	Soluble	Solid	300.0	34509
_CS 880-34509/2-A	Lab Control Sample	Soluble	Solid	300.0	34509
_CSD 880-34509/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34509
890-2942-7 MS	FS13	Soluble	Solid	300.0	34509
890-2942-7 MSD	FS13	Soluble	Solid	300.0	34509

Client: Ensolum
Project/Site: RDX FEDERAL 28 #011H
SDG: 03A1987032

HPLC/IC

Analysis Batch: 34849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-17	FS23	Soluble	Solid	300.0	34584
890-2942-18	FS24	Soluble	Solid	300.0	34584
MB 880-34584/1-A	Method Blank	Soluble	Solid	300.0	34584
LCS 880-34584/2-A	Lab Control Sample	Soluble	Solid	300.0	34584
LCSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34584
890-2942-17 MS	FS23	Soluble	Solid	300.0	34584
890-2942-17 MSD	FS23	Soluble	Solid	300.0	34584

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Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1 SDG: 03A1987032

Lab Sample ID: 890-2942-1

Matrix: Solid

Date Collected: 09/12/22 09:00 Date Received: 09/13/22 08:26

Client Sample ID: FS07

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 12:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 08:33	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:20	CH	EET MID

Client Sample ID: FS08 Lab Sample ID: 890-2942-2 Matrix: Solid

Date Collected: 09/12/22 09:10 Date Received: 09/13/22 08:26

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 35074 Total/NA 5.01 g 5 mL 09/21/22 14:46 MR EET MID Total/NA 8021B 5 mL 35228 09/23/22 12:53 **EET MID** Analysis 1 5 mL MR Total/NA Total BTEX 35310 09/23/22 17:25 SM Analysis **EET MID** 1 Total/NA Analysis 8015 NM 34820 09/19/22 11:13 SM **EET MID** Total/NA 34596 09/15/22 14:25 Prep 8015NM Prep 10.03 g 10 mL DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 34626 09/16/22 09:43 SM **EET MID** Soluble 34509 09/14/22 13:35 Leach DI Leach 4.98 g 50 mL SMC EET MID Soluble Analysis 300.0 34844 09/19/22 12:35 СН **EET MID**

Lab Sample ID: 890-2942-3 **Client Sample ID: FS09**

Date Collected: 09/12/22 10:00 **Matrix: Solid** Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 13:44	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 10:05	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:40	CH	EET MID

Client Sample ID: FS10 Lab Sample ID: 890-2942-4

Matrix: Solid Date Collected: 09/12/22 12:00 Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 14:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1

SDG: 03A1987032

Client Sample ID: FS10

Date Collected: 09/12/22 12:00 Date Received: 09/13/22 08:26 Lab Sample ID: 890-2942-4

Matrix: Solid

	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			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 10:26	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:45	CH	EET MID

Client Sample ID: FS11 Lab Sample ID: 890-2942-5

Date Collected: 09/12/22 12:10 Date Received: 09/13/22 08:26

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 14:35	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 10:48	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:50	CH	EET MID

Client Sample ID: FS12 Lab Sample ID: 890-2942-6

Date Collected: 09/12/22 12:20 Date Received: 09/13/22 08:26 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 15:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 11:10	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 12:54	CH	EET MID

Lab Sample ID: 890-2942-7 **Client Sample ID: FS13**

Date Collected: 09/12/22 12:30 Date Received: 09/13/22 08:26

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 15:27	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 11:31	SM	EET MID

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Matrix: Solid

Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS13 Lab Sample ID: 890-2942-7

Date Collected: 09/12/22 12:30 Matrix: Solid Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		10			34844	09/19/22 13:00	CH	EET MID

Client Sample ID: FS14 Lab Sample ID: 890-2942-8

Date Collected: 09/12/22 12:40 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 15:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 11:53	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:14	CH	EET MID

Client Sample ID: FS15 Lab Sample ID: 890-2942-9

Date Collected: 09/12/22 12:50 Date Received: 09/13/22 08:26

	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	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 16:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 12:14	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		10			34844	09/19/22 13:19	CH	EET MID

Client Sample ID: FS16 Lab Sample ID: 890-2942-10

Date Collected: 09/12/22 13:00 Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 16:44	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 12:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:34	CH	EET MID

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Matrix: Solid

Matrix: Solid

Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Client Sample ID: FS17

Client: Ensolum

Date Collected: 09/12/22 13:10 Date Received: 09/13/22 08:26 Lab Sample ID: 890-2942-11

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 18:29	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 13:48	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:39	CH	EET MID

Lab Sample ID: 890-2942-12

Matrix: Solid

Date Collected: 09/12/22 13:20 Date Received: 09/13/22 08:26

Client Sample ID: FS18

	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	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 18:55	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 14:13	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:43	CH	EET MID

Client Sample ID: FS19

Date Collected: 09/12/22 13:30

Date Received: 09/13/22 08:26

Lab Sample ID: 890-2942-13

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 19:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 14:34	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		20			34844	09/19/22 13:48	CH	EET MID

Client Sample ID: FS20

Date Collected: 09/12/22 13:40

Date Received: 09/13/22 08:26

	Lab Sam	ple ID:	890-2942-14
			Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 19:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID

Project/Site: RDX FEDERAL 28 #011H

Client Sample ID: FS20

Date Collected: 09/12/22 13:40

Date Received: 09/13/22 08:26

Job ID: 890-2942-1 SDG: 03A1987032

Lab Sample ID: 890-2942-14

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 14:56	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:53	CH	EET MID

Client Sample ID: FS21 Lab Sample ID: 890-2942-15

Date Collected: 09/12/22 13:50 **Matrix: Solid**

Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 20:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 15:18	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 13:58	CH	EET MID

Client Sample ID: FS22 Lab Sample ID: 890-2942-16

Date Collected: 09/12/22 14:00 **Matrix: Solid** Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 20:38	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 15:39	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34509	09/14/22 13:35	SMC	EET MID
Soluble	Analysis	300.0		1			34844	09/19/22 14:03	CH	EET MID

Lab Sample ID: 890-2942-17 Client Sample ID: FS23

Date Collected: 09/12/22 14:10 Date Received: 09/13/22 08:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 21:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 16:01	SM	EET MID

Eurofins Carlsbad

Released to Imaging: 2/21/2023 9:04:04 AM

Matrix: Solid

Lab Chronicle

Client: Ensolum Job ID: 890-2942-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: FS23 Lab Sample ID: 890-2942-17

Date Collected: 09/12/22 14:10 Matrix: Solid Date Received: 09/13/22 08:26

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Pre	ер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
So	luble	Leach	DI Leach			4.99 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
So	luble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 11:11	CH	EET MID

Client Sample ID: FS24 Lab Sample ID: 890-2942-18

Date Collected: 09/12/22 14:20 **Matrix: Solid**

Date Received: 09/13/22 08:26

	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	35074	09/21/22 14:46	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35228	09/23/22 21:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35310	09/23/22 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			34820	09/19/22 11:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34596	09/15/22 14:25	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34626	09/16/22 16:22	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 11:34	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2942-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report by	it the laboratory is not cortific	ed by the governing authority. This list ma	arrimalizada amaliztaa fe
the agency does not of	' '	it the laboratory is not certific	ed by the governing additionty. This list his	ay include analytes it
0 ,	' '	Matrix	Analyte	ay include analytes id
the agency does not of	fer certification.	,	, , ,	ay include analytes id

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Method Summary

Client: Ensolum
Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1 SDG: 03A1987032

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
3015NM Prep	Microextraction	SW846	EET MID
Ol 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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2942-1 SDG: 03A1987032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2942-1	FS07	Solid	09/12/22 09:00	09/13/22 08:26	0900 - 2
890-2942-2	FS08	Solid	09/12/22 09:10	09/13/22 08:26	0910 - 2
890-2942-3	FS09	Solid	09/12/22 10:00	09/13/22 08:26	1000 - 2
890-2942-4	FS10	Solid	09/12/22 12:00	09/13/22 08:26	1200 - 3
890-2942-5	FS11	Solid	09/12/22 12:10	09/13/22 08:26	1210 - 4
890-2942-6	FS12	Solid	09/12/22 12:20	09/13/22 08:26	1220 - 3
890-2942-7	FS13	Solid	09/12/22 12:30	09/13/22 08:26	1230 - 4
890-2942-8	FS14	Solid	09/12/22 12:40	09/13/22 08:26	1240 - 3
890-2942-9	FS15	Solid	09/12/22 12:50	09/13/22 08:26	1250 - 4
890-2942-10	FS16	Solid	09/12/22 13:00	09/13/22 08:26	1300 - 2
890-2942-11	FS17	Solid	09/12/22 13:10	09/13/22 08:26	1310 - 3
890-2942-12	FS18	Solid	09/12/22 13:20	09/13/22 08:26	1320 - 4
890-2942-13	FS19	Solid	09/12/22 13:30	09/13/22 08:26	1330 - 4
890-2942-14	FS20	Solid	09/12/22 13:40	09/13/22 08:26	1340 - 3
890-2942-15	FS21	Solid	09/12/22 13:50	09/13/22 08:26	1350 - 3
890-2942-16	FS22	Solid	09/12/22 14:00	09/13/22 08:26	1400 - 3
890-2942-17	FS23	Solid	09/12/22 14:10	09/13/22 08:26	1410 - 3
890-2942-18	FS24	Solid	09/12/22 14:20	09/13/22 08:26	1420 - 3

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Xenco

Environment Testing

City, State ZIP:

Carlsbad, NM 88220 3122 National Parks HWY

City, State ZIP:

Carlsbad, NM 88220 5315 Buena Vista Dr.

Project Manager: Company Name: ddress:

Joseph Hernandez

Bill to: (if different)

Jim Raley

Company Name: Address:

WPX

Ensolum

Chain of Custody

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

Work Order No:

State of Project: Reporting: Level III PST/JST TRRP Level IV Deliverables: EDD ADaPT Other:	ST	www.xenco.com Page t of Work Order Comments
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Phone: 28	281-702-2329			Email:	Email: jhernandez@Ensolum.com, ilm.raley@dvn.com	Z@En	solum	com.	lim.ra	lley@	dvn.cc	B			-	Deliverables. EDD	ables	1 6		11	Ш,	ام							
Project Name: RD	RDX Federal 28 #011H	#011H		Turn	Turn Around							A	ANALYSIS		REQUEST	EST				1				Pre	serv	ative	Preservative Codes	des	
er.	03A1987032			✓ Routine	Rush	C P	Pres. Code			_	_	_	_		_								Nor	None: NO	U		JI We	DI Water: H ₂ O	20
Project Location: Ru	Rural Eddy, NM			Due Date:	5 Day TAT	7																	Co	Cool: Cool	0	7	MeOH: Me	⊹ Me	
	Gilbert Moreno			TAT starts the	TAT starts the day received by	by	_	_		-	_	L		_	L			Τ	T	+			HC	HCL: HC		-	HNO3: HN	I	
	1061174901			the lab, if rec	the lab, if received by 4:30pm	٠	rs	ł	4	_	_							=					H ₂ S	H ₂ S0 ₄ : H ₂	N	7	NaOH: Na	Na	4
SAMPLE RECEIPT	Temp Blank:		No No	Wet ice:	(Fes) No		ete	0)															H ₃ F	H ₃ PO ₄ : HP	₹				
Samples Received Intact:			Thermometer ID:	1	100 m			300.									Ī	=					Nat	NaHSO4: NABIS	NAB	S			
Cooler Custody Seals:	Yes No	刻	Correction Factor:	+	6.0-	Ш	_	PA: (=					Na ₂	Na ₂ S ₂ O ₃ : NaSO ₃	NaS	Ö			
Sample Custody Seals:	Yes No	N/A)T	Temperature Reading:	Reading:	3.1			5 (EI	_			890-	2942	890-2942 Chain of Custody	of Cus	tody							Zn	Zn Acetate+NaOH: Zn	te+Na	aOH:	Zn		
Total Containers:		_	orrected Te	Corrected Temperature:	6					3021		_	_	_	_			_	-	-			Nac	NaOH+Ascorbic Acid: SAPC	scorb	oic A	cid: S	APC	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth C	Grab/ #	# of	CHLOR	TPH (80	BTEX (Sar	nple	Cor	Sample Comments	ents	
FS07		s 9	9.12.22	9:00	2' C	Comp		×	×	×										-									
FS08		s 9	9.12.22	9:10	2' C	Comp		×	×	×		_	_							+									
FS09		S 9	9.12.22	10:00	2 ['] C	Comp		×	×	×	L	_	L	L	_	L				-			T		Inc	Incident ID	ē		
FS10		s 9	9.12.22	12:00	a C	Comp		×	×	×	_	_		L						-				n.	PP2	215	nAPP2215732821	321	
FS11		S 9	9.12.22	12:10	4' C	Comp	-,	×	×	×			_							-			Г						
FS12		s 9	9.12.22	12:20	3' C	Comp	_	×	×	×									\vdash	H									
FS13		S 9	9.12.22	12:30	4. C	Comp		×	×	×	-	_	_							+-									_
F314		G	9.12.22	12:40	3	Comp		X	×	X	$ \cdot $			Ц					П	Н									
FS15		S 9	9.12.22	12:50	4. C	Comp		×	×	×	_	_	_	_						\vdash			\vdash						
FS16		s 9	9.12.22	13:00	2' C	Comp	_	×	×	×	-	_	L							H									
Total 200.7 / 6010	200.8 / 6020:	20:	87	8RCRA 13PPM	PM Texas 11		Al Sb As		Ва Ве	в си	d Ca	Cr Co		Cu Fe	Pb N	Mg Mn Mo Ni	M	Z	K Se Ag	e A	S	SiO ₂ Na	a	Sr TI	TI Sn U	∠	V Zn		
Circle Method(s) and Metal(s) to be analyzed	Metal(s) to be	analyze	ed	TCLP / SI	TCLP / SPLP 6010: 8RCRA	8RCF		o As	ВаВ	e Cd	Sb As Ba Be Cd Cr Co Cu Pb Mn	S S	PB	11	Mo Ni Se Ag TI U	Se	Ą	<u>_</u>		I	9: 16	531	245	Hg: 1631 / 245.1 / 7470 / 747	470	174	171		
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 \$66,00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotia	ument and relinquis	hment of the cost o	samples cons of samples an plied to each	stitutes a valid dishall not ass	purchase order ume any respo	r from cli nsibility reach sa	ent con for any mple su	pany to losses c	Eurofir to Euro	ns Xenc nses inc ofins Xe	o, its aff urred by	liates a the cli not an	nd sub ent if su alyzed.	contractich loss	ctors. It assigns standard terms and conditions sees are due to circumstances beyond the control terms will be enforced unless previously negotiated.	ue to c	stand ircums forced	ard te	beyo previ	nd con	dition	s ol lated.							
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of service. Eurofins Xenco will be lia of Eurofins Xenco. A minimum charg

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Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020.2

eurofins

Phone:

281-702-2329 Carlsbad, NM 88220

Email: jhernandez@Ensolum.com, jim.raley@dvn.com

City, State ZIP:

Carlsbad, NM 88220 5315 Buena Vista Dr.

City, State ZIP \ddress: Company Name: Project Manager:

Ensolum

Company Name: Bill to: (if different)

WPX

Jim Raley

Joseph Hernandez

3122 National Parks HWY

> Xenco **Environment Testing**

Chain of Custody

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

Work Order No:

www.xenco.com Page 2 of 2
Work Order Comments
Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level III ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV☐
Deliverables: EDD

Project Name	RDX Federal 28 #011H	21 1	Turn	Turn Around					ANALYSIS R	SREQ	EQUEST			Preservati	Preservative Codes	
roject Number:	03A1987032		☑ Routine	Rush	Pres.									None: NO	DI Water: H ₂ O	
roject Location:	Rural Eddy, NM		Due Date:	5 Day TAT										Cool: Cool	MeOH: Me	
Sampler's Name:	Gilbert Moreno		TAT starts the	TAT starts the day received by	_					Г			H	HCL: HC	HNO ₃ : HN	
DC #	1061174901		the lab, if rec	the lab, if received by 4:30pm					_	T		İ		H ₂ S0 ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT	PT Temp Blank:	C Yes No	Wette:	Yes No	nete	.0)				_				H ₃ PO ₄ : HP		
Samples Received Intact:	ntact: Yes No	Thermopeder 10	- Carrie		ıran	300								NaHSO ₄ : NABIS		L
Cooler Custody Seals:	Yes No	N/A Correction Factor	Mackor:		Pa	PA:								Na ₂ S ₂ O ₃ : NaSO ₃		44
Sample Custody Seals:	Yes No-	M/A Temperat	Temperature Reading:			S (E								Zn Acetate+NaOH: Zn	H: Zn	of
Total Containers:		Corrected	Corrected Temperature:		<u></u>	IDE)15)	8021				_		NaOH+Ascorbic Acid: SAPC	Acid: SAPC	42
Sample Identification		Matrix Sampled	Time d Sampled	Depth Grab/	# of Cont	CHLOR	TPH (80	втех (Sample Comments	omments	Page
·FS17		S 9.12.22	13:10	3' Comp	7	×	×	×								
FS18		S 9.12.22	13:20	4' Comp	<u>0</u>	×	×	×								
FS19		S 9.12.22	13:30	4' Comp	7	×	×	×						Incide	Incident ID	
FS20		S 9.12.22	13:40	3' Comp	<u>0</u>	×	×	×						nAPP2215732821	5732821	
FS21		S 9.12.22	13:50	3' Comp	7	×	×	×								
FS22		S 9.12.22	14:00	3' Comp	-1	×	×	×					-			
FS23		S 9.12.22	14:10	3' Comp	<u>D</u>	×	×	×					-			
FS24		S 9.12.22	14:20	3' Comp	7	*	*	*		1						
		for	a						#	1						
		¢			-					11 1						
Total 200.7 / 6010 Fircle Method(s) and P	Total 200.7 / 6010 200.8 / 6020: Dircle Method(s) and Metal(s) to be analyzed): nalyzed	8RCRA 13PPM Texas 11 AI Sb As Ba Be B TCLP / SPLP 6010: 8RCRA Sb As Ba Be C	RA 13PPM Texas 11 AI	1 AI	Sb As Sb A	Ba E s Ba	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	r Co Cu Fe Cu Pb Mn I	Mo Pb	Mg Mn I Ni Se Ag	∃ & C X:	Se Ag :	Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn No Ni Se Ag Tl U Hg: 1631/245.1/7470/7471	7471	
													and anadisi			
otice: Signature of this f service. Eurofins Xenc f Eurofins Xenco. A min	oitide. Signature of this document and relinquishment of samples constitutes a valid purchase order from chein company to culomia xenco, will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the cilent first losses are due to incurrence beyond the control of samples and shall not assume any responsibility for any losses or expenses incurred by the cilent first losses are due to be control of samples control of sampl	nent or samples on enter or samples enter of samples ill be applied to ex	sonstitutes a valid s and shall not ass ach project and a c	purchase order in ume any responsi :harge of \$5 for ea	bility for a	any losse e submit	s or exp	nses incurred by the	e client if such le t analyzed. Thes	osses an	e due to circu will be enforce	mstances be	eyond the co	ntrol jotlated.		
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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2942-1 SDG Number: 03A1987032

Login Number: 2942 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2942-1 SDG Number: 03A1987032

List Source: Eurofins Midland

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2942

List Creation: 09/14/22 11:07 AM

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



ANALYTICAL REPORT

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

Laboratory Job ID: 890-2949-1

Laboratory Sample Delivery Group: 03A1987032 Client Project/Site: RDX FEDERAL 28 #011H

For:

eurofins 🔆

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Devon Team

JURAMER

Authorized for release by: 9/26/2022 3:28:29 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project

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results through

Have a Question?



Visit us at:

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4M

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

Client: Ensolum Laboratory Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

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Definitions/Glossary

Job ID: 890-2949-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Qualifiers

GC VOA

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit Contains No Free Liquid **CNF**

Duplicate Error Ratio (normalized absolute difference) DER

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDL Method Detection Limit ML Minimum Level (Dioxin)

MPN Most Probable Number MOI Method Quantitation Limit

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1

SDG: 03A1987032

Job ID: 890-2949-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2949-1

Receipt

The samples were received on 9/13/2022 3:26 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 7.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35197 and analytical batch 880-35328 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-34600 and analytical batch 880-34707 contained Gasoline Range Organics (GRO)-C6-C10 and OII Range Organics (Over C28-C36) 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34600 and analytical batch 880-34707 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34584 and analytical batch 880-34849 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH05 Lab Sample ID: 890-2949-1

Date Collected: 09/13/22 10:00 Matrix: Solid Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U F2 F1	0.00198		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
Toluene	<0.00198	U F1	0.00198		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
Ethylbenzene	<0.00198	U F2 F1	0.00198		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.00396		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
o-Xylene	<0.00198	U F2 F1	0.00198		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
Xylenes, Total	<0.00396	U F2 F1	0.00396		mg/Kg		09/22/22 15:32	09/24/22 15:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				09/22/22 15:32	09/24/22 15:41	1
1,4-Difluorobenzene (Surr)	82		70 - 130				09/22/22 15:32	09/24/22 15:41	1
Method: Total BTEX - Total BTE	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/22 15:33	1
wethod: 8015 NW - Diesei Range	e Organics (DR	O) (GC)							
_		O) (GC) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifier	RL 49.9	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 14:17	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range		Qualifier U		MDL		D	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Ran	Result <49.9 ge Organics (Di	Qualifier U		MDL	mg/Kg	<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics	Result <49.9 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9		mg/Kg			09/19/22 14:17	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U F1	49.9		mg/Kg		Prepared	09/19/22 14:17 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10		Qualifier U RO) (GC) Qualifier U F1	49.9 RL 49.9		mg/Kg Unit mg/Kg		Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/17/22 21:07	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	09/19/22 14:17 Analyzed 09/17/22 21:07 09/17/22 21:07	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9 49.9		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	09/19/22 14:17 Analyzed 09/17/22 21:07 09/17/22 21:07	Dil Face 1 1 1 Dil Face
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U RO) (GC) Qualifier U F1 U	49.9 RL 49.9 49.9 49.9 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared	09/19/22 14:17 Analyzed 09/17/22 21:07 09/17/22 21:07 09/17/22 21:07 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Randanalyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U RO) (GC) Qualifier U F1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/17/22 21:07 09/17/22 21:07 Analyzed 09/17/22 21:07	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U RO) (GC) Qualifier U F1 U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/17/22 21:07 09/17/22 21:07 Analyzed 09/17/22 21:07	Dil Fac 1 Dil Fac 1 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: BH05 Lab Sample ID: 890-2949-2

Date Collected: 09/13/22 10:10 Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				09/22/22 15:32	09/24/22 16:01	1

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Job ID: 890-2949-1

Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH05 Lab Sample ID: 890-2949-2

Date Collected: 09/13/22 10:10
Date Received: 09/13/22 15:26

Sample Depth: 1

Client: Ensolum

Method: 8021B - Volatile Organic Compou	unds (GC) (Continued)
---	-----------------------

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71		70 - 130	09/22/22 15:32	09/24/22 16:01	1

Method: Total	BTEX - Total	BTEX Calculati	on

Analyte	Result	Qualifier	RL	MDL	Unit	כ	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg		_	09/26/22 15:33	1

П				
ı	Method: 8015 NM	Diocal Rand	no Organice	(DRO) (GC)

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/19/22 14:17	1

Method: 8015B NM - Diese	I Range Organics (D	RO) (GC)
--------------------------	---------------------	----------

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/17/22 22:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/17/22 22:12	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/17/22 22:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	70 - 130	09/15/22 15:00	09/17/22 22:12	1
o-Terphenyl	96	70 - 130	09/15/22 15:00	09/17/22 22:12	1

Method: 300.0 -	Anions, Ion	Chromat	tograph	าу - 🤄	Soluble	Э
					_	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144	4.99	mg/Kg			09/19/22 11:56	1

Client Sample ID: BH06

Lab Sample ID: 890-2949-3

Date Collected: 09/13/22 10:20

Matrix: Solid

Date Collected: 09/13/22 10:20 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (Compounds)	GC))
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Michiga. 002 1D - Volatile Orga	ine compounds	(30)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				09/22/22 15:32	09/24/22 16:22	1
1,4-Difluorobenzene (Surr)	98		70 - 130				09/22/22 15:32	09/24/22 16:22	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg		_	09/26/22 15:33	1

	Method: 8015 NM - Diesel	Range Organics (DRO) (GC)
ı	Michiga. 00 to Min - Diese	i italige Organics (Dito	, (00)

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			09/19/22 14:17	1

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Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH06 Lab Sample ID: 890-2949-3 Matrix: Solid

Date Collected: 09/13/22 10:20 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 22:34	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 22:34	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 22:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				09/15/22 15:00	09/17/22 22:34	1
o-Terphenyl	118		70 - 130				09/15/22 15:00	09/17/22 22:34	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: BH06 Lab Sample ID: 890-2949-4 Matrix: Solid

Date Collected: 09/13/22 10:30 Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
o-Xylene	< 0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/22/22 15:32	09/24/22 16:43	1
1,4-Difluorobenzene (Surr)	90		70 - 130				09/22/22 15:32	09/24/22 16:43	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	11	0.00398		mg/Kg			09/26/22 15:33	1
·	~ 0.00390	U	0.00396		mg/kg			09/20/22 13.33	'
Method: 8015 NM - Diesel Range			0.00396		mg/Kg			09/20/22 10:03	'
• -	Organics (DR		0.00396 RL	MDL		D	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		·
Method: 8015 NM - Diesel Range Analyte	e Organics (DR) Result <50.0	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR Result <50.0	O) (GC) Qualifier	RL	MDL MDL	Unit mg/Kg	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	e Organics (DR Result <50.0	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg			Analyzed 09/19/22 14:17	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	e Organics (DR Result <50.0 ge Organics (DI Result	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 14:17 Analyzed	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <50.0 ge Organics (DI Result	Qualifier U RO) (GC) Qualifier U U	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 14:17 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/17/22 22:55 09/17/22 22:55	Dil Fac Dil Fac 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/17/22 22:55	Dil Fac Dil Fac 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/17/22 22:55 09/17/22 22:55	Dil Fac Dil Fac 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	e Organics (DR/Result <50.0 ge Organics (D/Result <50.0 <p>450.0 <50.0</p>	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/17/22 22:55 09/17/22 22:55	Dil Fac Dil Fac 1 1 1

Matrix: Solid

Job ID: 890-2949-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH06 Lab Sample ID: 890-2949-4

Date Collected: 09/13/22 10:30 Matrix: Solid Date Received: 09/13/22 15:26

Sample Depth: 1

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	MDL U	Unit D	Prepared	Analyzed	Dil Fac
Chloride	1940	49.5	n	mg/Kg		09/19/22 13:30	10

Client Sample ID: BH07 Lab Sample ID: 890-2949-5

Date Collected: 09/13/22 10:40 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:03	
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:03	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:03	•
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 17:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:03	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 17:03	,
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				09/22/22 15:32	09/24/22 17:03	1
1,4-Difluorobenzene (Surr)	86		70 - 130				09/22/22 15:32	09/24/22 17:03	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 15:33	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 14:17	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 23:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 23:17	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/17/22 23:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				09/15/22 15:00	09/17/22 23:17	1
o-Terphenyl	129		70 - 130				09/15/22 15:00	09/17/22 23:17	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	1940		49.6		mg/Kg			09/19/22 13:38	10

Matrix: Solid

Lab Sample ID: 890-2949-6

Client: Ensolum

Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH07

Date Collected: 09/13/22 10:50 Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
Ethylbenzene	< 0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 17:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/22/22 15:32	09/24/22 17:24	1
1,4-Difluorobenzene (Surr)	86		70 - 130				09/22/22 15:32	09/24/22 17:24	1
Method: Total BTEX - Total BTEX	X Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/26/22 15:33	1
Analyte Total TPH	<49.9	Qualifier U	49.9	MDL	mg/Kg	D	Prepared	Analyzed	Dil Fac
-	V 4 3.3	U	+3.3					00/10/22 1/1-17	1
					mg/rtg			09/19/22 14:17	1
Method: 8015B NM - Diesel Rang	• •								·
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• •	Qualifier	RL 49.9	MDL		<u>D</u>	Prepared 09/15/22 15:00		Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL	Unit	<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 <49.9	Qualifier U	49.9	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00	Analyzed 09/17/22 23:39 09/17/22 23:39	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U	49.9	MDL	Unit mg/Kg	<u> </u>	09/15/22 15:00	Analyzed 09/17/22 23:39	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U U U	49.9 49.9 49.9 Limits	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared	Analyzed 09/17/22 23:39 09/17/22 23:39	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9	Qualifier U U U	49.9 49.9 49.9	MDL	Unit mg/Kg mg/Kg	<u> </u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00	Analyzed 09/17/22 23:39 09/17/22 23:39 09/17/22 23:39	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U U U	49.9 49.9 49.9 Limits	MDL	Unit mg/Kg mg/Kg	<u> </u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared	Analyzed 09/17/22 23:39 09/17/22 23:39 09/17/22 23:39 Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier Soluble	49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	Analyzed 09/17/22 23:39 09/17/22 23:39 09/17/22 23:39 Analyzed 09/17/22 23:39	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	49.9 49.9 49.9 Limits 70 - 130	MDL	Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	Analyzed 09/17/22 23:39 09/17/22 23:39 09/17/22 23:39 Analyzed 09/17/22 23:39	Dil Fac

Client Sample ID: BH08 Lab Sample ID: 890-2949-7

Date Collected: 09/13/22 11:00 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/22 15:32	09/24/22 17:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				09/22/22 15:32	09/24/22 17:45	1

Released to Imaging: 2/21/2023 9:04:04 AM

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Matrix: Solid

Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH08 Lab Sample ID: 890-2949-7 Matrix: Solid

Date Collected: 09/13/22 11:00 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Method: 8021B - V	Inlatile Organic	Compounds	(GC)	(Continued)	
WELLIOU. OUZ ID - V	voiatile Organic	Compounds	GCI	(Continueu)	

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82	70 - 130	09/22/22 15:32	09/24/22 17:45	

Method: Total	RTFX - Total	I RTFX Ca	lculation

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	ma/Ka			09/26/22 15:33	1

ı		
ı	Method: 8015 NM - Diesel Range Organics (DRO)	(CC)
ı	Method. 0013 NM - Diesel Kange Organics (DRO)	(00)

Analyte	Result Qua	lifier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/19/22 14:17	1

Method: 8015B NM - Diese	I Range Organics (D	RO) (GC)
--------------------------	---------------------	----------

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 00:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 00:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 00:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzea	DII Fac
1-Chlorooctane	100	70 - 130	09/15/22 15:00	09/18/22 00:00	1
o-Terphenyl	103	70 - 130	09/15/22 15:00	09/18/22 00:00	1
_					

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	1310		123		mg/Kg			09/19/22 13:55	10

Client Sample ID: BH08 Lab Sample ID: 890-2949-8

Date Collected: 09/13/22 11:10 Date Received: 09/13/22 15:26

Sample Depth: 1

Mothod: 9021D	Volatila Organia	Compounds (GC)
I WIELIIOU. OUZ ID '	- voiatile Organic	Compounds (GC)

moniou coziz rolanic organi	p ,	()							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				09/22/22 15:32	09/24/22 18:05	1
1,4-Difluorobenzene (Surr)	78		70 - 130				09/22/22 15:32	09/24/22 18:05	1

Method: Tota	I RTFX -	Total BTFX	Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg		_	09/26/22 15:33	1

Analyte	Result	Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/19/22 14:17	1

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Matrix: Solid

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH08 Lab Sample ID: 890-2949-8

Date Collected: 09/13/22 11:10 Matrix: Solid Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 00:21	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 00:21	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				09/15/22 15:00	09/18/22 00:21	1
o-Terphenyl	119		70 - 130				09/15/22 15:00	09/18/22 00:21	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	668	F1	50.1	•	mg/Kg			09/19/22 14:04	10

Client Sample ID: BH09 Lab Sample ID: 890-2949-9 Matrix: Solid

Date Collected: 09/13/22 11:20 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
Toluene	< 0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
Ethylbenzene	< 0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
o-Xylene	< 0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130				09/22/22 15:32	09/24/22 18:26	1
1,4-Difluorobenzene (Surr)	83		70 - 130				09/22/22 15:32	09/24/22 18:26	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
-									
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 15:33	1
• -			0.00402		mg/Kg			09/26/22 15:33	1
Total BTEX Method: 8015 NM - Diesel Range Analyte	Organics (DR		0.00402 RL	MDL		D	Prepared	09/26/22 15:33 Analyzed	1 Dil Fac
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier		MDL		<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Organics (DR Result <49.8	O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Organics (DR Result <49.8	O) (GC) Qualifier	RL		Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR Result <49.8	Qualifier U RO) (GC) Qualifier	RL49.8		Unit mg/Kg			Analyzed 09/19/22 14:17	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Organics (DR/Result <49.8	Qualifier U RO) (GC) Qualifier	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 14:17 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Organics (DR/Result <49.8	Qualifier U RO) (GC) Qualifier U Qualifier U	RL		Unit mg/Kg		Prepared	Analyzed 09/19/22 14:17 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result <49.8 e Organics (D/Result <49.8) <p>449.8</p>	Qualifier U RO) (GC) Qualifier U Qualifier U	RL 49.8 RL 49.8 49.8		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/18/22 00:42 09/18/22 00:42	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Organics (DR/Result <49.8 e Organics (D/Result <49.8)	Qualifier U RO) (GC) Qualifier U Qualifier U	RL 49.8		Unit mg/Kg Unit mg/Kg		Prepared 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/18/22 00:42	Dil Fac Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Organics (DR/Result <49.8 e Organics (D/Result <49.8) <p>449.8</p>	Qualifier U RO) (GC) Qualifier U U U U	RL 49.8 RL 49.8 49.8		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/18/22 00:42 09/18/22 00:42	Dil Fac Dil Fac 1 1 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Organics (DR/Result	Qualifier U RO) (GC) Qualifier U U U U	RL 49.8 RL 49.8 49.8 49.8		Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	Analyzed 09/19/22 14:17 Analyzed 09/18/22 00:42 09/18/22 00:42	Dil Fac Dil Fac 1

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9/26/2022

Job ID: 890-2949-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH09 Lab Sample ID: 890-2949-9 Matrix: Solid

Date Collected: 09/13/22 11:20 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chron	natography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1390		50.1		mg/Kg			09/19/22 14:29	10

Client Sample ID: BH09 Lab Sample ID: 890-2949-10 Matrix: Solid

Date Collected: 09/13/22 11:30 Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/22/22 15:32	09/24/22 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				09/22/22 15:32	09/24/22 18:46	1
1,4-Difluorobenzene (Surr)	84		70 - 130				09/22/22 15:32	09/24/22 18:46	1
Method: Total BTEX - Total BTEX	(Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/26/22 15:33	1
Method: 8015 NM - Diesel Range	•	, , ,							
Analyte		Qualifier	RL	MDL		<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 14:17	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 01:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 01:03	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 01:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				09/15/22 15:00	09/18/22 01:03	1
o-Terphenyl	95		70 - 130				09/15/22 15:00	09/18/22 01:03	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH10 Lab Sample ID: 890-2949-11

Date Collected: 09/13/22 11:40 Matrix: Solid Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:10	
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:10	
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:10	
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 20:10	
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:10	
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 20:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	93		70 - 130				09/22/22 15:32	09/24/22 20:10	
1,4-Difluorobenzene (Surr)	87		70 - 130				09/22/22 15:32	09/24/22 20:10	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 15:33	
Total TPH	<50.0	U	50.0		mg/Kg			09/19/22 14:17	
Mothod: 8015B NM - Diocal Pane	no Organice (D	PO) (GC)							
			RI	MDI	Unit	n	Prepared	Analyzed	Dil Fa
Analyte	Result	Qualifier	RL	MDL		<u>D</u>	Prepared 09/15/22 15:00	Analyzed	
Analyte Gasoline Range Organics		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared 09/15/22 15:00	Analyzed 09/18/22 01:46	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U		MDL		<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U	50.0	MDL	mg/Kg	<u>D</u>	09/15/22 15:00	09/18/22 01:46	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0	Qualifier U U U	50.0	MDL	mg/Kg	<u> </u>	09/15/22 15:00 09/15/22 15:00	09/18/22 01:46 09/18/22 01:46	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	MDL	mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00	09/18/22 01:46 09/18/22 01:46 09/18/22 01:46	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0 <50.0 <50.0 <50.0 < 50.0	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	MDL	mg/Kg	<u> </u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared	09/18/22 01:46 09/18/22 01:46 09/18/22 01:46 Analyzed	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	MDL	mg/Kg	<u>D</u>	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/18/22 01:46 09/18/22 01:46 09/18/22 01:46 Analyzed 09/18/22 01:46	Dil Fa
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	MDL	mg/Kg mg/Kg mg/Kg	D	09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/18/22 01:46 09/18/22 01:46 09/18/22 01:46 Analyzed 09/18/22 01:46	Dil Fa

Client Sample ID: BH10 Lab Sample ID: 890-2949-12

Date Collected: 09/13/22 11:50 Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/22/22 15:32	09/24/22 20:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				09/22/22 15:32	09/24/22 20:31	

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Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-2949-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: BH10 Lab Sample ID: 890-2949-12

Date Collected: 09/13/22 11:50 Matrix: Solid
Date Received: 09/13/22 15:26

Sample Depth: 1

Method: 8021B - Volatile Organic Con	noounds (GC)	(Continued)
motifical collision of gains con	ipodiido (OO)	(Continuou,

Surrogate	%Recovery Qualif	ier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	78	70 - 130	09/22/22 15:32	09/24/22 20:31	1

Method: Total	BTEX - Total	BTEX Calculati	on

Analyte	Result Qualifier		MDL Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398 U	0.00398	ma/Ka			09/26/22 15:33	1

Method: 8015 NM - Diesel Range Organics	(DPO) (GC)

Analyte	•	•	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH			<49.9	U	49.9		ma/Ka			09/19/22 14:17	1	

Method: 8015B	NM - Diesel	Range Ord	ranice i	(DRO)	(GC)
Method. ou isb	IAIN - DIESEI	Kange Org	Janico I	DICO	(00)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:07	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	0	09/15/22 15:00	09/18/22 02:07	1
o-Terphenyl	116		70 - 130	0	09/15/22 15:00	09/18/22 02:07	1

Method: 300.0 - Anions,	lon Chromatogra _l	ohy - Soluble

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3	4.99		mg/Kg			09/19/22 15:11	1

Client Sample ID: BH11

Date Collected: 09/13/22 12:00

Lab Sample ID: 890-2949-13

Matrix: Solid

Date Collected: 09/13/22 12:00 Date Received: 09/13/22 15:26

Sample Depth: 0.5

motification collis	o oompoundo (()							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/22/22 15:32	09/24/22 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/22/22 15:32	09/24/22 20:51	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/22/22 15:32	09/24/22 20:51	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	KL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/26/22 15:33	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/19/22 14:17	1

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3

4

8

10

12

13

Matrix: Solid

Lab Sample ID: 890-2949-13

Client Sample Results

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH11

Date Collected: 09/13/22 12:00 Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 02:28	1
(GRO)-C6-C10									
Diesel Range Organics (Over	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 02:28	1
C10-C28)									
Oll Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 15:00	09/18/22 02:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				09/15/22 15:00	09/18/22 02:28	1
o-Terphenyl	125		70 - 130				09/15/22 15:00	09/18/22 02:28	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	19.3		5.00		mg/Kg			09/19/22 17:32	

Client Sample ID: BH11 Lab Sample ID: 890-2949-14 Date Collected: 09/13/22 12:10 Matrix: Solid

Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/22/22 15:32	09/24/22 21:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/22/22 15:32	09/24/22 21:12	1
1,4-Difluorobenzene (Surr)	81		70 - 130				09/22/22 15:32	09/24/22 21:12	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/26/22 15:33	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/19/22 14:17	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:49	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/15/22 15:00	09/18/22 02:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130				09/15/22 15:00	09/18/22 02:49	1
o-Terphenyl	126		70 - 130				09/15/22 15:00	09/18/22 02:49	1

Job ID: 890-2949-1

Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Client Sample ID: BH11 Lab Sample ID: 890-2949-14 Date Collected: 09/13/22 12:10 Date Received: 09/13/22 15:26

Matrix: Solid

Sample Depth: 1

Method: 300.0 - Anions, Ion Chromat	ography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.1		5.00		mg/Kg			09/19/22 17:40	1

Client Sample ID: BH12 Lab Sample ID: 890-2949-15

Date Collected: 09/13/22 12:20 Matrix: Solid

Date Received: 09/13/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202		mg/Kg		09/25/22 12:23	09/26/22 13:02	
Toluene	<0.00202	U	0.00202		mg/Kg		09/25/22 12:23	09/26/22 13:02	
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/25/22 12:23	09/26/22 13:02	
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/25/22 12:23	09/26/22 13:02	
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/25/22 12:23	09/26/22 13:02	
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/25/22 12:23	09/26/22 13:02	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	105		70 - 130				09/25/22 12:23	09/26/22 13:02	
1,4-Difluorobenzene (Surr)	106		70 - 130				09/25/22 12:23	09/26/22 13:02	
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/26/22 15:33	
Method: 8015 NM - Diesel Range	•					_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.8	U	49.8		mg/Kg			09/19/22 14:17	
Method: 8015B NM - Diesel Rang	•								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/15/22 15:00	09/18/22 03:10	•
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/15/22 15:00	09/18/22 03:10	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/15/22 15:00	09/18/22 03:10	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1-Chlorooctane	123		70 - 130				09/15/22 15:00	09/18/22 03:10	
o-Terphenyl	126		70 - 130				09/15/22 15:00	09/18/22 03:10	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample Results

 Client: Ensolum
 Job ID: 890-2949-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Client Sample ID: BH12 Lab Sample ID: 890-2949-16

Date Collected: 09/13/22 12:30 Matrix: Solid
Date Received: 09/13/22 15:26

Sample Depth: 1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/22/22 15:32	09/24/22 21:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				09/22/22 15:32	09/24/22 21:53	1
1,4-Difluorobenzene (Surr)	83		70 - 130				09/22/22 15:32	09/24/22 21:53	1
Method: Total BTEX - Total BTEX	Calculation								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/26/22 15:33	1
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)							
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	MDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
		Qualifier	RL	MDL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/19/22 14:17	Dil Fac
Analyte	Result <50.0	Qualifier U		MDL		<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result <50.0 ge Organics (D)	Qualifier U				<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0 ge Organics (D)	Qualifier U RO) (GC) Qualifier	50.0		mg/Kg		<u> </u>	09/19/22 14:17	1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 Ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U	50.0		mg/Kg		Prepared	09/19/22 14:17 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 ge Organics (Di Result <50.0	Qualifier U RO) (GC) Qualifier U	50.0 RL 50.0		mg/Kg Unit mg/Kg		Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/18/22 03:31	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	09/19/22 14:17 Analyzed 09/18/22 03:31 09/18/22 03:31	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0 50.0		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00	09/19/22 14:17 Analyzed 09/18/22 03:31 09/18/22 03:31	1 Dil Fac 1 1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0 50.0 Limits		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared	09/19/22 14:17 Analyzed 09/18/22 03:31 09/18/22 03:31 09/18/22 03:31 Analyzed	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	Qualifier U RO) (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130		mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/18/22 03:31 09/18/22 03:31 09/18/22 03:31 Analyzed 09/18/22 03:31	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U RO) (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	MDL	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 15:00 09/15/22 15:00 09/15/22 15:00 Prepared 09/15/22 15:00	09/19/22 14:17 Analyzed 09/18/22 03:31 09/18/22 03:31 09/18/22 03:31 Analyzed 09/18/22 03:31	Dil Fac 1 1 Dil Fac Dil Fac

Surrogate Summary

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2949-1	BH05	99	82	·
890-2949-1 MS	BH05	117	107	
890-2949-1 MSD	BH05	89	83	
890-2949-2	BH05	106	71	
890-2949-3	BH06	118	98	
890-2949-4	BH06	115	90	
890-2949-5	BH07	93	86	
890-2949-6	BH07	115	86	
890-2949-7	BH08	85	82	
890-2949-8	BH08	101	78	
890-2949-9	BH09	89	83	
890-2949-10	BH09	91	84	
890-2949-11	BH10	93	87	
890-2949-12	BH10	102	78	
890-2949-13	BH11	115	95	
890-2949-14	BH11	113	81	
890-2949-15	BH12	105	106	
890-2949-16	BH12	93	83	
890-2953-A-53-D MS	Matrix Spike	87	109	
890-2953-A-53-E MSD	Matrix Spike Duplicate	90	111	
LCS 880-35197/1-A	Lab Control Sample	117	106	
LCS 880-35335/1-A	Lab Control Sample	81	106	
LCSD 880-35197/2-A	Lab Control Sample Dup	105	104	
LCSD 880-35335/2-A	Lab Control Sample Dup	82	110	
MB 880-35197/5-A	Method Blank	96	91	
	Method Blank	104	114	

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)	
90-2949-1	BH05	91	94	
90-2949-1 MS	BH05	78	73	
90-2949-1 MSD	BH05	85	81	
390-2949-2	BH05	93	96	
390-2949-3	BH06	114	118	
390-2949-4	BH06	92	94	
90-2949-5	BH07	126	129	
90-2949-6	BH07	104	107	
90-2949-7	BH08	100	103	
390-2949-8	BH08	115	119	
390-2949-9	BH09	110	112	
390-2949-10	BH09	94	95	
390-2949-11	BH10	97	100	

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Prep Type: Total/NA

Surrogate Summary

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2949-12	BH10	111	116	
890-2949-13	BH11	121	125	
890-2949-14	BH11	122	126	
890-2949-15	BH12	123	126	
890-2949-16	BH12	121	122	
LCS 880-34600/2-A	Lab Control Sample	100	104	
LCSD 880-34600/3-A	Lab Control Sample Dup	99	102	
MB 880-34600/1-A	Method Blank	119	125	
Surrogate Legend				

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2949-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35197/5-A

Matrix: Solid

Analyte Benzene

Toluene

o-Xylene

Ethylbenzene

Xylenes, Total

m-Xylene & p-Xylene

Analysis Batch: 35328

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35197

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 15:19	1
<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 15:19	1
<0.00200	U	0.00200		mg/Kg		09/22/22 15:32	09/24/22 15:19	1
<0.00400	U	0.00400		mg/Kg		09/22/22 15:32	09/24/22 15:19	1

mg/Kg

mg/Kg

MB MB

<0.00200 U

<0.00400 U

Surrogate	%Recovery Q	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96	70 - 130	09/22/22 15:32	09/24/22 15:19	1
1,4-Difluorobenzene (Surr)	91	70 - 130	09/22/22 15:32	09/24/22 15:19	1

0.00200

0.00400

Lab Sample ID: LCS 880-35197/1-A

Matrix: Solid

Analysis Batch: 35328

Client Sample ID: Lab Control Sample

09/22/22 15:32 09/24/22 15:19

09/22/22 15:32 09/24/22 15:19

Prep Type: Total/NA

Prep Batch: 35197

	Бріке	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08242		mg/Kg		82	70 - 130	
Toluene	0.100	0.07705		mg/Kg		77	70 - 130	
Ethylbenzene	0.100	0.08171		mg/Kg		82	70 - 130	
m-Xylene & p-Xylene	0.200	0.1683		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.09663		mg/Kg		97	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-35197/2-A

Matrix: Solid

Analysis Batch: 35328

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 35197

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.07974		mg/Kg		80	70 - 130	3	35	
Toluene	0.100	0.07317		mg/Kg		73	70 - 130	5	35	
Ethylbenzene	0.100	0.07553		mg/Kg		76	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.1539		mg/Kg		77	70 - 130	9	35	
o-Xylene	0.100	0.08789		mg/Kg		88	70 - 130	9	35	

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: 890-2949-1 MS

Matrix: Solid

Analysis Batch: 35328

Client Sample ID: BH05 Prep Type: Total/NA

Prep Batch: 35197

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U F2 F1	0.0990	0.06775	F1	mg/Kg		68	70 - 130	
Toluene	<0.00198	U F1	0.0990	0.06032	F1	mg/Kg		61	70 - 130	

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Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1 SDG: 03A1987032

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

Lab Sample ID: 890-2949-1 MS

Matrix: Solid

Analysis Batch: 35328

Client Sample ID: BH05 **Prep Type: Total/NA**

Prep Batch: 35197

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00198	U F2 F1	0.0990	0.06275	F1	mg/Kg		63	70 - 130	
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.198	0.1277	F1	mg/Kg		65	70 - 130	
o-Xylene	<0.00198	U F2 F1	0.0990	0.07392		mg/Kg		75	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

Client Sample ID: BH05

Analysis Batch: 35328

Matrix: Solid

Lab Sample ID: 890-2949-1 MSD

Prep Type: Total/NA Prep Batch: 35197

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U F2 F1	0.101	0.03199	F2 F1	mg/Kg		32	70 - 130	72	35
Toluene	<0.00198	U F1	0.101	0.04472	F1	mg/Kg		44	70 - 130	30	35
Ethylbenzene	<0.00198	U F2 F1	0.101	0.04344	F2 F1	mg/Kg		43	70 - 130	36	35
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.201	0.08232	F2 F1	mg/Kg		41	70 - 130	43	35
o-Xylene	<0.00198	U F2 F1	0.101	0.04732	F2 F1	mg/Kg		47	70 - 130	44	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	83	70 - 130

Lab Sample ID: MB 880-35335/5-A

Matrix: Solid

Analysis Batch: 35348

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

Prep Batch: 35335

MB	MB
1410	IVID

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/25/22 12:23	09/26/22 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/25/22 12:23	09/26/22 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/25/22 12:23	09/26/22 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/25/22 12:23	09/26/22 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/25/22 12:23	09/26/22 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/25/22 12:23	09/26/22 11:52	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/25/22 12:23	09/26/22 11:52	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/25/22 12:23	09/26/22 11:52	1

Lab Sample ID: LCS 880-35335/1-A

Matrix: Solid

Analysis Batch: 35348

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

Prep Batch: 35335

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1061		mg/Kg		106	70 - 130
Toluene	0.100	0.08108		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08013		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1640		mg/Kg		82	70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-2949-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

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

Lab Sample ID: LCS 880-35335/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Prep Batch: 35335 Analysis Batch: 35348

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
o-Xylene	 0.100	0.08017		mg/Kg		80	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-35335/2-A **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Matrix: Solid Analysis Batch: 35348

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1107		mg/Kg		111	70 - 130	4	35
Toluene	0.100	0.08514		mg/Kg		85	70 - 130	5	35
Ethylbenzene	0.100	0.08106		mg/Kg		81	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1650		mg/Kg		83	70 - 130	1	35
o-Xylene	0.100	0.08115		mg/Kg		81	70 - 130	1	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-2953-A-53-D MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35348

_	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00198	U	0.0998	0.09826		mg/Kg		98	70 - 130
Toluene	<0.00198	U	0.0998	0.07700		mg/Kg		77	70 - 130
Ethylbenzene	<0.00198	U	0.0998	0.07393		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	< 0.00396	U	0.200	0.1519		mg/Kg		76	70 - 130
o-Xylene	< 0.00198	U	0.0998	0.07740		mg/Kg		77	70 - 130

	MS MS	
Surrogate	%Recovery Qualifi	ier Limits
4-Bromofluorobenzene (Surr)	87	70 - 130
1 4-Difluorohenzene (Surr)	109	70 130

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 890-2953-A-53-E MSD Prep Type: Total/NA

Matrix: Solid Analysis Ratch: 35348

Analysis Batch: 35348									Prep	Batch:	35335
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00198	U	0.101	0.1007		mg/Kg		100	70 - 130	2	35
Toluene	<0.00198	U	0.101	0.08148		mg/Kg		80	70 - 130	6	35
Ethylbenzene	<0.00198	U	0.101	0.07809		mg/Kg		77	70 - 130	5	35
m-Xylene & p-Xylene	<0.00396	U	0.202	0.1613		mg/Kg		79	70 - 130	6	35
o-Xylene	<0.00198	U	0.101	0.08219		mg/Kg		81	70 - 130	6	35

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Prep Batch: 35335

Prep Batch: 35335

Job ID: 890-2949-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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

Lab Sample ID: 890-2953-A-53-E MSD

Matrix: Solid

Analysis Batch: 35348

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35335

MSD MSD

Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 90 70 - 130 1,4-Difluorobenzene (Surr) 111 70 - 130

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

Lab Sample ID: MB 880-34600/1-A

Matrix: Solid

Analysis Batch: 34707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34600

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 09/15/22 15:00 09/17/22 20:03 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/15/22 15:00 09/17/22 20:03 C10-C28) 50.0 09/15/22 15:00 09/17/22 20:03 Oll Range Organics (Over C28-C36) <50.0 U mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	09/15/22 15:00	09/17/22 20:03	1
o-Terphenyl	125		70 - 130	09/15/22 15:00	09/17/22 20:03	1

Lab Sample ID: LCS 880-34600/2-A

Matrix: Solid

Analysis Batch: 34707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34600

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	827.8		mg/Kg		83	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	927.5		mg/Kg		93	70 - 130	
C10-C28)								

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	100	70 - 130
o-Terphenyl	104	70 - 130

Lab Sample ID: LCSD 880-34600/3-A

Matrix: Solid

Analysis Batch: 34707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34600

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	883.3		mg/Kg		88	70 - 130	6	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	921.9		mg/Kg		92	70 - 130	1	20
C10 C20\									

C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenvl	102		70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-2949-1 SDG: 03A1987032 Project/Site: RDX FEDERAL 28 #011H

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

Lab Sample ID: 890-2949-1 MS

Matrix: Solid

Analysis Batch: 34707

Client Sa	mple	ID:	вн	05
Prep	Type:	To	tal/N	۱A
_				

Prep Batch: 34600

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F1	996	494.2	F1	mg/Kg		48	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	996	758.4		mg/Kg		76	70 - 130	
C10-C28)										

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	73		70 - 130

Lab Sample ID: 890-2949-1 MSD **Client Sample ID: BH05**

Matrix: Solid

Analysis Batch: 34707

Prep Type: Total/NA	
D-1-1-1-04000	

Prep Batch: 34600

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	999	549.9	F1	mg/Kg		53	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	844.1		mg/Kg		84	70 - 130	11	20

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 85 70 - 130 o-Terphenyl 81 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34584/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34849

MB MB

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/19/22 10:49	1

Lab Sample ID: LCS 880-34584/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34849

	Spike	LCS LCS				%Rec	
Analyte	Added	Result Qual		D	%Rec	Limits	
Chloride	250	253.5	ma/Ka		101	90 - 110	

Lab Sample ID: LCSD 880-34584/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34849

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 251.2 100 90 - 110 20 mg/Kg

QC Sample Results

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2949-8 MS Client Sample ID: BH08 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34849

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	668	F1	2510	3291		mg/Kg		105	90 - 110		-

Lab Sample ID: 890-2949-8 MSD **Client Sample ID: BH08 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34849

Sample Sample Spike MSD MSD %Rec RPD RPD Limit Result Qualifier Added Result Qualifier Limits Analyte Unit %Rec 2510 Chloride 668 F1 3585 F1 mg/Kg 116 90 - 110 9

 Client: Ensolum
 Job ID: 890-2949-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

GC VOA

Prep Batch: 35197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Total/NA	Solid	5035	
890-2949-2	BH05	Total/NA	Solid	5035	
890-2949-3	BH06	Total/NA	Solid	5035	
890-2949-4	BH06	Total/NA	Solid	5035	
890-2949-5	BH07	Total/NA	Solid	5035	
890-2949-6	BH07	Total/NA	Solid	5035	
890-2949-7	BH08	Total/NA	Solid	5035	
890-2949-8	BH08	Total/NA	Solid	5035	
890-2949-9	BH09	Total/NA	Solid	5035	
890-2949-10	BH09	Total/NA	Solid	5035	
890-2949-11	BH10	Total/NA	Solid	5035	
890-2949-12	BH10	Total/NA	Solid	5035	
890-2949-13	BH11	Total/NA	Solid	5035	
890-2949-14	BH11	Total/NA	Solid	5035	
890-2949-16	BH12	Total/NA	Solid	5035	
MB 880-35197/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35197/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35197/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2949-1 MS	BH05	Total/NA	Solid	5035	
890-2949-1 MSD	BH05	Total/NA	Solid	5035	

Analysis Batch: 35328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Total/NA	Solid	8021B	35197
890-2949-2	BH05	Total/NA	Solid	8021B	35197
890-2949-3	BH06	Total/NA	Solid	8021B	35197
890-2949-4	BH06	Total/NA	Solid	8021B	35197
890-2949-5	BH07	Total/NA	Solid	8021B	35197
890-2949-6	BH07	Total/NA	Solid	8021B	35197
890-2949-7	BH08	Total/NA	Solid	8021B	35197
890-2949-8	BH08	Total/NA	Solid	8021B	35197
890-2949-9	BH09	Total/NA	Solid	8021B	35197
890-2949-10	BH09	Total/NA	Solid	8021B	35197
890-2949-11	BH10	Total/NA	Solid	8021B	35197
890-2949-12	BH10	Total/NA	Solid	8021B	35197
890-2949-13	BH11	Total/NA	Solid	8021B	35197
890-2949-14	BH11	Total/NA	Solid	8021B	35197
890-2949-16	BH12	Total/NA	Solid	8021B	35197
MB 880-35197/5-A	Method Blank	Total/NA	Solid	8021B	35197
LCS 880-35197/1-A	Lab Control Sample	Total/NA	Solid	8021B	35197
LCSD 880-35197/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35197
890-2949-1 MS	BH05	Total/NA	Solid	8021B	35197
890-2949-1 MSD	BH05	Total/NA	Solid	8021B	35197

Prep Batch: 35335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-15	BH12	Total/NA	Solid	5035	
MB 880-35335/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35335/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35335/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2953-A-53-D MS	Matrix Spike	Total/NA	Solid	5035	

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Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1 SDG: 03A1987032

GC VOA (Continued)

Prep Batch: 35335 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2953-A-53-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 35348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-15	BH12	Total/NA	Solid	8021B	35335
MB 880-35335/5-A	Method Blank	Total/NA	Solid	8021B	35335
LCS 880-35335/1-A	Lab Control Sample	Total/NA	Solid	8021B	35335
LCSD 880-35335/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35335
890-2953-A-53-D MS	Matrix Spike	Total/NA	Solid	8021B	35335
890-2953-A-53-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35335

Analysis Batch: 35424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Total/NA	Solid	Total BTEX	
890-2949-2	BH05	Total/NA	Solid	Total BTEX	
890-2949-3	BH06	Total/NA	Solid	Total BTEX	
890-2949-4	BH06	Total/NA	Solid	Total BTEX	
890-2949-5	BH07	Total/NA	Solid	Total BTEX	
890-2949-6	BH07	Total/NA	Solid	Total BTEX	
890-2949-7	BH08	Total/NA	Solid	Total BTEX	
890-2949-8	BH08	Total/NA	Solid	Total BTEX	
890-2949-9	BH09	Total/NA	Solid	Total BTEX	
890-2949-10	BH09	Total/NA	Solid	Total BTEX	
890-2949-11	BH10	Total/NA	Solid	Total BTEX	
890-2949-12	BH10	Total/NA	Solid	Total BTEX	
890-2949-13	BH11	Total/NA	Solid	Total BTEX	
890-2949-14	BH11	Total/NA	Solid	Total BTEX	
890-2949-15	BH12	Total/NA	Solid	Total BTEX	
890-2949-16	BH12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2949-1	BH05	Total/NA	Solid	8015NM Prep	
890-2949-2	BH05	Total/NA	Solid	8015NM Prep	
890-2949-3	BH06	Total/NA	Solid	8015NM Prep	
890-2949-4	BH06	Total/NA	Solid	8015NM Prep	
890-2949-5	BH07	Total/NA	Solid	8015NM Prep	
890-2949-6	BH07	Total/NA	Solid	8015NM Prep	
890-2949-7	BH08	Total/NA	Solid	8015NM Prep	
390-2949-8	BH08	Total/NA	Solid	8015NM Prep	
890-2949-9	BH09	Total/NA	Solid	8015NM Prep	
890-2949-10	BH09	Total/NA	Solid	8015NM Prep	
390-2949-11	BH10	Total/NA	Solid	8015NM Prep	
390-2949-12	BH10	Total/NA	Solid	8015NM Prep	
390-2949-13	BH11	Total/NA	Solid	8015NM Prep	
890-2949-14	BH11	Total/NA	Solid	8015NM Prep	
390-2949-15	BH12	Total/NA	Solid	8015NM Prep	
890-2949-16	BH12	Total/NA	Solid	8015NM Prep	
MB 880-34600/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

GC Semi VOA (Continued)

Prep Batch: 34600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-34600/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34600/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2949-1 MS	BH05	Total/NA	Solid	8015NM Prep	
890-2949-1 MSD	BH05	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Total/NA	Solid	8015B NM	34600
890-2949-2	BH05	Total/NA	Solid	8015B NM	34600
390-2949-3	BH06	Total/NA	Solid	8015B NM	34600
390-2949-4	BH06	Total/NA	Solid	8015B NM	34600
390-2949-5	BH07	Total/NA	Solid	8015B NM	34600
390-2949-6	BH07	Total/NA	Solid	8015B NM	34600
390-2949-7	BH08	Total/NA	Solid	8015B NM	34600
390-2949-8	BH08	Total/NA	Solid	8015B NM	34600
90-2949-9	BH09	Total/NA	Solid	8015B NM	34600
90-2949-10	BH09	Total/NA	Solid	8015B NM	34600
90-2949-11	BH10	Total/NA	Solid	8015B NM	34600
90-2949-12	BH10	Total/NA	Solid	8015B NM	34600
390-2949-13	BH11	Total/NA	Solid	8015B NM	34600
390-2949-14	BH11	Total/NA	Solid	8015B NM	34600
90-2949-15	BH12	Total/NA	Solid	8015B NM	34600
90-2949-16	BH12	Total/NA	Solid	8015B NM	34600
MB 880-34600/1-A	Method Blank	Total/NA	Solid	8015B NM	34600
.CS 880-34600/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34600
.CSD 880-34600/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34600
90-2949-1 MS	BH05	Total/NA	Solid	8015B NM	34600
890-2949-1 MSD	BH05	Total/NA	Solid	8015B NM	34600

Analysis Batch: 34845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2949-1	BH05	Total/NA	Solid	8015 NM	
890-2949-2	BH05	Total/NA	Solid	8015 NM	
890-2949-3	BH06	Total/NA	Solid	8015 NM	
890-2949-4	BH06	Total/NA	Solid	8015 NM	
890-2949-5	BH07	Total/NA	Solid	8015 NM	
890-2949-6	BH07	Total/NA	Solid	8015 NM	
890-2949-7	BH08	Total/NA	Solid	8015 NM	
890-2949-8	BH08	Total/NA	Solid	8015 NM	
890-2949-9	ВН09	Total/NA	Solid	8015 NM	
890-2949-10	BH09	Total/NA	Solid	8015 NM	
890-2949-11	BH10	Total/NA	Solid	8015 NM	
890-2949-12	BH10	Total/NA	Solid	8015 NM	
890-2949-13	BH11	Total/NA	Solid	8015 NM	
890-2949-14	BH11	Total/NA	Solid	8015 NM	
890-2949-15	BH12	Total/NA	Solid	8015 NM	
890-2949-16	BH12	Total/NA	Solid	8015 NM	

Client: Ensolum Job ID: 890-2949-1 Project/Site: RDX FEDERAL 28 #011H SDG: 03A1987032

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Leach Batch: 34584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Soluble	Solid	DI Leach	_
890-2949-2	BH05	Soluble	Solid	DI Leach	
890-2949-3	BH06	Soluble	Solid	DI Leach	
890-2949-4	BH06	Soluble	Solid	DI Leach	
890-2949-5	BH07	Soluble	Solid	DI Leach	
890-2949-6	BH07	Soluble	Solid	DI Leach	
890-2949-7	BH08	Soluble	Solid	DI Leach	
890-2949-8	BH08	Soluble	Solid	DI Leach	
890-2949-9	BH09	Soluble	Solid	DI Leach	
890-2949-10	BH09	Soluble	Solid	DI Leach	
890-2949-11	BH10	Soluble	Solid	DI Leach	
890-2949-12	BH10	Soluble	Solid	DI Leach	
890-2949-13	BH11	Soluble	Solid	DI Leach	
890-2949-14	BH11	Soluble	Solid	DI Leach	
890-2949-15	BH12	Soluble	Solid	DI Leach	
890-2949-16	BH12	Soluble	Solid	DI Leach	
MB 880-34584/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34584/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2949-8 MS	BH08	Soluble	Solid	DI Leach	
890-2949-8 MSD	BH08	Soluble	Solid	DI Leach	

Analysis Batch: 34849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2949-1	BH05	Soluble	Solid	300.0	34584
890-2949-2	BH05	Soluble	Solid	300.0	34584
390-2949-3	BH06	Soluble	Solid	300.0	34584
390-2949-4	BH06	Soluble	Solid	300.0	34584
390-2949-5	BH07	Soluble	Solid	300.0	34584
390-2949-6	BH07	Soluble	Solid	300.0	34584
390-2949-7	BH08	Soluble	Solid	300.0	34584
390-2949-8	BH08	Soluble	Solid	300.0	34584
90-2949-9	BH09	Soluble	Solid	300.0	34584
90-2949-10	BH09	Soluble	Solid	300.0	34584
390-2949-11	BH10	Soluble	Solid	300.0	34584
90-2949-12	BH10	Soluble	Solid	300.0	34584
90-2949-13	BH11	Soluble	Solid	300.0	34584
390-2949-14	BH11	Soluble	Solid	300.0	34584
90-2949-15	BH12	Soluble	Solid	300.0	34584
390-2949-16	BH12	Soluble	Solid	300.0	34584
/IB 880-34584/1-A	Method Blank	Soluble	Solid	300.0	34584
CS 880-34584/2-A	Lab Control Sample	Soluble	Solid	300.0	34584
CSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34584
890-2949-8 MS	BH08	Soluble	Solid	300.0	34584
390-2949-8 MSD	BH08	Soluble	Solid	300.0	34584

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1 SDG: 03A1987032

Lab Sample ID: 890-2949-1

Client Sample ID: BH05 Date Collected: 09/13/22 10:00

Matrix: Solid

Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 15:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 21:07	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 11:49	CH	EET MID

Client Sample ID: BH05 Lab Sample ID: 890-2949-2 Matrix: Solid

Date Collected: 09/13/22 10:10 Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 16:01	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 22:12	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 11:56	CH	EET MID

Client Sample ID: BH06 Lab Sample ID: 890-2949-3

Date Collected: 09/13/22 10:20 **Matrix: Solid** Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 16:22	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 22:34	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 13:21	CH	EET MID

Client Sample ID: BH06 Lab Sample ID: 890-2949-4

Date Collected: 09/13/22 10:30 **Matrix: Solid** Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 16:43	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1

SDG: 03A1987032

Client Sample ID: BH06

Date Collected: 09/13/22 10:30 Date Received: 09/13/22 15:26 Lab Sample ID: 890-2949-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 22:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 13:30	CH	EET MID

Client Sample ID: BH07 Lab Sample ID: 890-2949-5 **Matrix: Solid**

Date Collected: 09/13/22 10:40 Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 17:03	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 23:17	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 13:38	CH	EET MID

Client Sample ID: BH07 Lab Sample ID: 890-2949-6

Date Collected: 09/13/22 10:50 Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 17:24	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/17/22 23:39	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 13:47	CH	EET MID

Lab Sample ID: 890-2949-7 **Client Sample ID: BH08**

Date Collected: 09/13/22 11:00 Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 17:45	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.01 g 1 uL	10 mL 1 uL	34600 34707	09/15/22 15:00 09/18/22 00:00	DM SM	EET MID EET MID

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Matrix: Solid

Matrix: Solid

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1 SDG: 03A1987032

Client Sample ID: BH08

Date Collected: 09/13/22 11:00 Date Received: 09/13/22 15:26 Lab Sample ID: 890-2949-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			2.03 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 13:55	CH	EET MID

Client Sample ID: BH08 Lab Sample ID: 890-2949-8

Date Collected: 09/13/22 11:10 Date Received: 09/13/22 15:26 **Matrix: Solid**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 18:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 00:21	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 14:04	CH	EET MID

Client Sample ID: BH09 Lab Sample ID: 890-2949-9

Date Collected: 09/13/22 11:20

Matrix: Solid

Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 18:26	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 00:42	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 14:29	CH	EET MID

Client Sample ID: BH09 Lab Sample ID: 890-2949-10 Date Collected: 09/13/22 11:30 **Matrix: Solid**

Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 18:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 01:03	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	34849	09/19/22 14:37	CH	EET MID

Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

Client Sample ID: BH10

Client: Ensolum

Lab Sample ID: 890-2949-11 Date Collected: 09/13/22 11:40

Matrix: Solid

Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 20:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 01:46	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 15:03	CH	EET MID

Client Sample ID: BH10 Lab Sample ID: 890-2949-12

Date Collected: 09/13/22 11:50 Matrix: Solid

Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 20:31	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 02:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 15:11	CH	EET MID

Client Sample ID: BH11 Lab Sample ID: 890-2949-13 Date Collected: 09/13/22 12:00 **Matrix: Solid**

Date Received: 09/13/22 15:26

	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	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 20:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 02:28	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 17:32	CH	EET MID

Client Sample ID: BH11 Lab Sample ID: 890-2949-14 Date Collected: 09/13/22 12:10 **Matrix: Solid**

Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 21:12	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID

Eurofins Carlsbad

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Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1

SDG: 03A1987032

Client Sample ID: BH11 Lab Sample ID: 890-2949-14

Matrix: Solid

Date Collected: 09/13/22 12:10 Date Received: 09/13/22 15:26

	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			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 02:49	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 17:40	CH	EET MID

Client Sample ID: BH12 Lab Sample ID: 890-2949-15

Date Collected: 09/13/22 12:20 **Matrix: Solid** Date Received: 09/13/22 15:26

Batch Batch Dil Initial Final Batch Prepared Prep Type Method Amount Amount Number or Analyzed Type Run Factor Analyst Lab 5035 Total/NA Prep 4.95 g 5 mL 35335 09/25/22 12:23 MR **EET MID** Total/NA Analysis 8021B 5 mL 5 mL 35348 09/26/22 13:02 MR EET MID 1 Total/NA Total BTEX 35424 **EET MID** Analysis 1 09/26/22 15:33 SM Total/NA Analysis 8015 NM 34845 09/19/22 14:17 SM EET MID 1 Total/NA Prep 8015NM Prep 10.04 g 10 mL 34600 09/15/22 15:00 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 34707 09/18/22 03:10 SM **EET MID** 1 uL Soluble Leach DI Leach 5.04 g 50 mL 34584 09/15/22 11:21 SMC EET MID Soluble Analysis 300.0 1 50 mL 50 mL 34849 09/19/22 17:49 СН **EET MID**

Client Sample ID: BH12 Lab Sample ID: 890-2949-16

Date Collected: 09/13/22 12:30 **Matrix: Solid** Date Received: 09/13/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	35197	09/22/22 15:32	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35328	09/24/22 21:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35424	09/26/22 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			34845	09/19/22 14:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34600	09/15/22 15:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34707	09/18/22 03:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 17:57	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2949-1

 Project/Site: RDX FEDERAL 28 #011H
 SDG: 03A1987032

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, but	t the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for y
the agency does not of	• •	it the laboratory is not certiling	ed by the governing additionty. This list the	ay iliciude allalytes for t
,	• •	Matrix	Analyte	ay include analytes for v
the agency does not of	fer certification.	,	, , ,	ay include analytes for v

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Method Summary

Job ID: 890-2949-1 Client: Ensolum Project/Site: RDX FEDERAL 28 #011H

SDG: 03A1987032

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

Sample Summary

Client: Ensolum

Project/Site: RDX FEDERAL 28 #011H

Job ID: 890-2949-1

SDG: 03A1987032

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2949-1	BH05	Solid	09/13/22 10:00	09/13/22 15:26	0.5
890-2949-2	BH05	Solid	09/13/22 10:10	09/13/22 15:26	1
890-2949-3	BH06	Solid	09/13/22 10:20	09/13/22 15:26	0.5
890-2949-4	BH06	Solid	09/13/22 10:30	09/13/22 15:26	1
890-2949-5	BH07	Solid	09/13/22 10:40	09/13/22 15:26	0.5
890-2949-6	BH07	Solid	09/13/22 10:50	09/13/22 15:26	1
890-2949-7	BH08	Solid	09/13/22 11:00	09/13/22 15:26	0.5
890-2949-8	BH08	Solid	09/13/22 11:10	09/13/22 15:26	1
890-2949-9	BH09	Solid	09/13/22 11:20	09/13/22 15:26	0.5
890-2949-10	BH09	Solid	09/13/22 11:30	09/13/22 15:26	1
890-2949-11	BH10	Solid	09/13/22 11:40	09/13/22 15:26	0.5
890-2949-12	BH10	Solid	09/13/22 11:50	09/13/22 15:26	1
890-2949-13	BH11	Solid	09/13/22 12:00	09/13/22 15:26	0.5
890-2949-14	BH11	Solid	09/13/22 12:10	09/13/22 15:26	1
890-2949-15	BH12	Solid	09/13/22 12:20	09/13/22 15:26	0.5
890-2949-16	BH12	Solid	09/13/22 12:30	09/13/22 15:26	1

City, State ZIP:

Carlsbad, NM 88220

City, State ZIP:

Carlsbad, NM 88220 5315 Buena Vista Dr Company Name: Bill to: (if different)

Jim Raley WPX

Address:

3122 National Parks HWY

ddress:

Company Name: Project Manager:

Ensolum

Joseph Hernandez

Chain of Custody

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

Work Order No:	der No:
3X.WWW	www.xenco.com Page 1 of 2
Wor	Work Order Comments
Program: UST/PST PR	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:	
Reporting: Level II Leve	Reporting: Level II Level III PST/UST TRRP Level IV
Deliverables: EDD	ADaPT ☐ Other:

Phone: 281-702-2329	Emai	Email: jhernandez@Ensolum.com, jim.raley@dvn.com	nsolur	n.com	lim.r	aley@dvn.com	Deliverables: EDD [ADAT [Cuiei:	
Project Name: RDX Federal 28 #011H	Tur	Turn Around				ANALYSIS	SIS REQUEST	Preservative Codes	
Y	☑ Routine	☐ Rush	Code					None: NO DI Water: H ₂ O	
Project Location: Rural Eddy, NM	Due Date:	5 Day TAT						Cool: Cool MeOH: Me	
	TAT starts t	TAT starts the day received by					-		
CC #: 1061174901	the lab, if re	the lab, if received by 4:30pm	rs					H ₂ S0 ₄ : H ₂ NaOH: Na	
SAMPLE RECEIPT Temp Blank: (Ye	Yes) No Wet Ice:	(Yes) No	nete	.0)				H₃PO₄: HP	
Samples Received Intact: Yes No The	Thermometer ID:	FOOMS	ran	300				NaHSO₄: NABIS	
Yes No NA	Correction Factor:	、 ひ 、 ひ	Pa	PA:			_	Na ₂ S ₂ O ₃ : NaSO ₃	
Yes No WA	Temperature Reading:	7.0		S (El		890-2949 Chain of	all of Costoay	Zn Acetate+NaOH: Zn	
	Corrected Temperature:	7.0		IDE	15)	3021 		NaOH+Ascorbic Acid: SAPC	
Sample Identification Matrix Sa	Date Time Sampled Sampled	Depth Grab/	# of Cont	CHLOR	TPH (80	BTEX (Sample Comments	Pac
BH05 S 9.1	9.13.22 10:00	0.5' Grab/		×	×	×			
BH05 S 9.1	9.13.22 10:10	1' Grab/		×	×	×			
BH06 S 9.1	9.13.22 10:20	0.5' Grab/	1	×	×	×		Incident ID	
S	9.13.22 10:30	1' Grab/	-1	×	×	×		nAPP2215732821	
BH07 S 9.1	9.13.22 10:40	0.5' Grab/	_	×	×	×			
BH07 S 9.1	9.13.22 10:50	1' Grab/		×	×	×			
BH08 S 9.1	9.13.22 11:00	0.5' Grab/	-	×	×	×			
BH08 S 9.1	9.13.22 11:10	1' Grab/	_	×	×	×			
BH09 S 9.1	9.13.22 11:20	0.5' Grab/	_	×	×	×			
BH09 S 9.1	9.13.22 11:30	1' Grab/	_	×	×	×			
Total 200.7 / 6010 200.8 / 6020:	8RCRA 13PPM	PPM Texas 11	≥	Sb As	Ba	Be B Cd Ca Cr Co Cu	Cu Fe Pb Mg Mn Mo Ni K Se Ag	Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed	TCLP /	TCLP / SPLP 6010: 8RCRA	11	Sb As	Ва	Be Cd Cr Co Cu Pb N	Mn Mo Ni Se Ag Ti U H	Hg: 1631 / 245.1 / 7470 / 7471	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control	emples constitutes a vali	d purchase order from	client c	ompany ny losse	to Euro	lins Xenco, its affiliates and subc enses incurred by the client if su	ontractors. It assigns standard terms and con ch losses are due to circumstances beyond the	nditions re 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 Euronins Xenco, but not analyzed. These terms will be enriced unless previously insurance of \$5 for each sample submitted to Euronins Xenco, but not analyzed.	led to each project and a	charge of \$5 for each	sample	submitt	ed to E	rolins Xenco, but not analyzed. I	nese terms will be enforced unless previously	y negonated.	
Relinquished by: (Signature)	Received by; (Signature)	ature)		Date/Time	Time	Relinquished by: (Signature)	(Signature) Received by: (Signature)	: (Signature) Date/Time	
(Contholing)	000		.0	60 SI.	3	150%			
3	V					4			

Revised Date: 08/25/2020 Rev. 2020 2

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2949-1 SDG Number: 03A1987032

Login Number: 2949 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2949-1 SDG Number: 03A1987032

List Source: Eurofins Midland

Login Number: 2949 List Number: 2

List Creation: 09/15/22 10:32 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").



APPENDIX G

Email Correspondence

From: Hamlet, Robert, EMNRD

To: Raley, Jim

Cc: Devon-Team; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD; Harimon, Jocelyn, EMNRD

Subject: Extension Approval - WPX Energy -- RDX 28-11 -- nAPP2215732821

Date: Wednesday, August 10, 2022 3:14:24 PM

Attachments: <u>image003.png</u>

[**EXTERNAL EMAIL**]

RE: Incident #NAPP2215732821

Jim,

Your request for an extension to **November 22nd, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/



From: Raley, Jim < <u>Jim.Raley@dvn.com</u>>
Sent: Wednesday, August 10, 2022 8:22 AM

To: Harimon, Jocelyn, EMNRD < Jocelyn. Harimon@state.nm.us>

Cc: Bratcher, Mike, EMNRD < <u>mike.bratcher@state.nm.us</u>>; 'Devon-Team' < <u>Devon-</u>

Team@ensolum.com>

Subject: [EXTERNAL] Extension Request - WPX Energy -- RDX 28-11 -- nAPP2215732821

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

Jocelyn,

WPX Energy Permian, LLC (WPX) is requesting an extension to the current deadline for a closure report or remediation work plan required in 19.15.29.12.B.(1) NMAC at the RDX Federal 28 #011.

A release of crude oil and produced water was discovered on May 26, 2022 and was assigned Incident Number nAPP2215732821. Site assessment activities have been completed. Due to the

release impacting areas off pad, a Sundry Request was submitted on June 7, 2022, and the Bureau of Land Management (BLM) required a traditional arch survey to be performed and requested to not begin remediation activities until the survey was completed and reviewed. Currently, the site is still being surveyed due to the extent of the release. Following final approval to proceed from the BLM, WPX will continue soil sampling characterization and/or remediation at the Site.

To provide enough time for remediation work and the completion of a closure report or remediation work plan, WPX requests an extension of the deadline to **November 22, 2022.**

RDX FEDERAL 28 #011 30-015-42109 nAPP2215732821

Jim Raley | Environmental Professional - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | iim.raley@dvn.com



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From: <u>Joseph Hernandez</u>

To: ocd.enviro@state.nm.us; "CFO Spill, BLM NM"

Cc: Raley, Jim; Devon-Team

Subject: WPX Site Sampling Activity Update (9/6-9/9/22) **Date:** Friday, September 2, 2022 5:06:00 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between September 6 through September 9, 2022:

Site: RDX Federal 28 #011H

API: 30-015-42109

Incident Number: nAPP2215732821

Site: RDX 21-43 API: 30-015-40997

Incident Number: NAB1730640185

Site: Saragossa 16 State 2

API: 30-015-31584

Incident Number: pAB1625253965

Site: Brushy Gathering Facility
Incident Number: nAB1805133508

Site: UCBH WW 3 API: 30-015-24451

Incident Numbers: nAB1702454101

Site: RDX Federal 21 #044

API: 30-015-41193

Incident Number: nAPP2115533694



Joseph S. Hernandez Senior Geologist 281-702-2329 Ensolum, LLC From: <u>Joseph Hernandez</u>

 To:
 ocd.enviro@state.nm.us; "CFO Spill, BLM NM"

 Cc:
 Devon-Team; Raley, Jim; Anderson, Lacee

 Subject:
 WPX Site Sampling Activity Update (9/12-9/16/22)

Date: Friday, September 9, 2022 4:13:00 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png

Good afternoon,

WPX anticipates conducting confirmation soil sampling activities at the following sites between September 12 through September 16, 2022:

Site: RDX Federal 28 #011H

API: 30-015-42109

Incident Number: nAPP2215732821

Site: RDX 21-43 API: 30-015-40997

Incident Number: NAB1730640185

Site: UCBH WW 3 API: 30-015-24451

Incident Numbers: nAB1702454101

Site: RDX Federal 21 #044

API: 30-015-41193

Incident Number: nAPP2115533694

Site: EP USA 3 API: 30-015-24249

Incident Number: nAB1622531873

Site: Yates Federal #001 API: 30-015-24602

Incident Number: NRM2011138650



Joseph S. Hernandez Senior Geologist 281-702-2329 Ensolum, LLC in f

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

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

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

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

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

CONDITIONS

Action 161506

CONDITIONS

Operator:	OGRID:
WPX Energy Permian, LLC	246289
Devon Energy - Regulatory	Action Number:
Oklahoma City, OK 73102	161506
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created		Condition Date
rham	We have received your closure report and final C-141 for Incident #NAPP2215732821 RDX FEDERAL 28 #011, thank you. This closure is approved.	2/21/2023