

January 18, 2023

New Mexico Oil Conservation Division

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

Re: Remediation Work Plan

MCA Unit #145

Incident Number NAPP2229469315

Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared the following *Remediation Work Plan* (RWP) to document Site assessment and soil sampling activities completed to date and additional remediation activities proposed at the MCA 145 (Site), resulting from a flow line release of produced water into the surrounding pasture. The following RWP proposes excavation of waste-containing soil in the top 4 feet of non-oil and gas production areas.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit H, Section 27, Township 17 South, Range 32 East, in Lea County, New Mexico (32.805570° N, 103.748544° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On October 14, 2022, corrosion on an injection line ruptured, resulting in the release of 39.16 barrels (bbls) of crude oil and 254.24 bbls of produced water into the pasture. Approximately 21.16 bbls of crude oil and 238.84 bbls of produced water were recovered. Ensolum, on behalf of Maverick, reported the incident to the New Mexico Oil Conservation Division (NMOCD) on October 15, 2022. Maverick reported the spill to the NMOCD via a Release Notification Form C-141 (Form C-141) on October 21, 2022. The release was assigned Incident Number NAPP2229469315.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29.12) 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.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to grounwater data is New Mexico Office of the State Engineer (NMOSE) well RA-12721-POD5, located approximately 5,176 feet southwest of the Site. The groundwater well has a reported depth to

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Park Highway | Carlsbad, NM 88220 | ensolum.com

Maverick Natural Resources, LLC Remediation Work Plan MCA 145



groundwater of 124 feet bgs and a total depth of 130 feet bgs. Additional depth to water data, presented in the Closure Request for Incident Number NJXK1621825385 and approved by NMOCD on October 26, 2022, is utilized to confirm depth to water between 50 and 100 feet bgs. Two delineation borings, BH01 and BH04 were drilled via air rotary in March of 2020 to depths greater than 50 feet bgs, respectively. No groundwater was encountered while drilling and the borings were properly abandoned. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant waterocusse to the Site is a pond, located approximately 1,486 feet northwest 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 stie is greater than 1,000 feet to a freshwater well or spring and is not within a 100-years floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-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 of the pasture area per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between October 21 and 31, 2022, delineation activities were conducted at the Site to assess the vertical and lateral extent of waste-containing soil. Potholes PH01 through PH06 were advanced via track mounted backhoe within and around the release extent. The delineation potholes were advanced to a depth of approximately 18 feet bgs. Discrete delineation soil samples were collected from each pothole at depths ranging from 1-foot to 18 feet bgs. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C.

The delineation soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil

Maverick Natural Resources, LLC Remediation Work Plan MCA 145



samples delivered to the laboratory the same day they are collected may not have equilibrated to 6 degrees Celcius required for shipment and long term storage, but are considered to have been received in acceptable condition.

Laboratory analytical results for delineation soil samples PH01 through PH04 and PH06 indicated waste-containing soil not meeting the reclamation requirement is present within the top 4 feet of soil off pad. Delineation soil sample PH05, advanced outside the release extent, indicated COC concentrations were compliant with the Site Closure Criteria and reclamation requirement. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

Waste-containing soil has been detected in the top 4 feet of soil off pad as indicated by delineation soil samples PH01 through PH04 and PH06 to a total depth of 4 feet bgs. As a result, Maverick proposes excavation of waste-containing soil in the top 4 feet.

Maverick requests approval to complete the following remediation activities:

- Excavation of waste-containing soil, specifically soil containing concentrations of chloride in excess of 600 mg/kg, in the top 4 feet of soil in areas of non-oil and gas production facilities. Excavation will proceed laterally until sidewall samples indicated chloride concentrations are compliant with the reclamation requirements. Confirmation samples will be collected from the sidewalls of the final excavation extent.
- Sidewalls will be collected at a frequency of every 200 square feet. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. analyzed for BTEX, TPH, and chloride.
- Upon completion of excavation activities, if the final depth of the excavation is shallower than 4 feet bgs, discrete samples will be collected to confirm the reclamation requirement.
- An estimated 1,630 cubic yards of impacted soil will be excavated and disposed of at a licensed disposal facility.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture will be re-seeded with an approved BLM seed mixture.

Maverick will complete the excavation activities within 90 days of the date of approval of this RWP by the NMOCD. A report detailing remedial action will be submitted within 30 days of receipt of laboratory analytical results. Maverick believes the scope of work described above will meet requirements set forth in 19.15.29.13 NMAC and be protective of human health, the environment, and groundwater. As such, Maverick respectfully requests approval of this RWP from NMOCD.

Maverick Natural Resources, LLC Remediation Work Plan MCA 145



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

Sincerely, Ensolum, LLC

Kalei Jennings Senior Scientist Daniel R. Moir, PG Senior Managing Geologist

cc: Bryce Wagoner, Maverick Natural Resources, LLC

Bureau of Land Management

Appendices:

Figure 1 Site Location Map

Figure 2 Delineation Soil Sample Locations
Table 1 Soil Sample Analytical Results
Appendix A Referenced Well Records

Appendix B Photographic Log

Appendix C Lithologic / Soil Sampling Logs

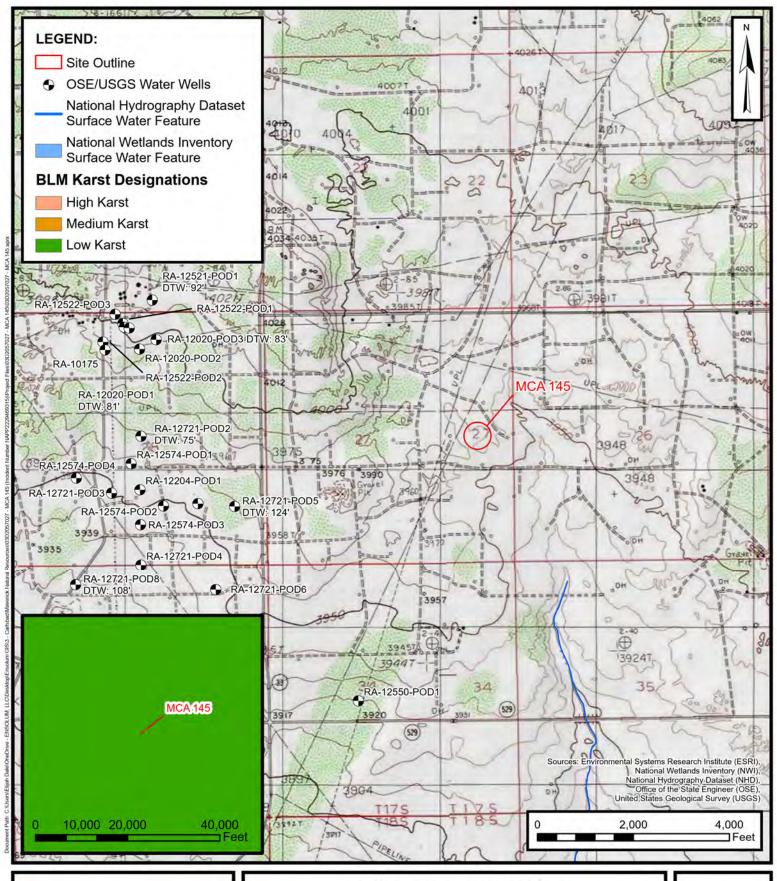
Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix E NMOCD Notifications

Appendix F Final C-141



FIGURES

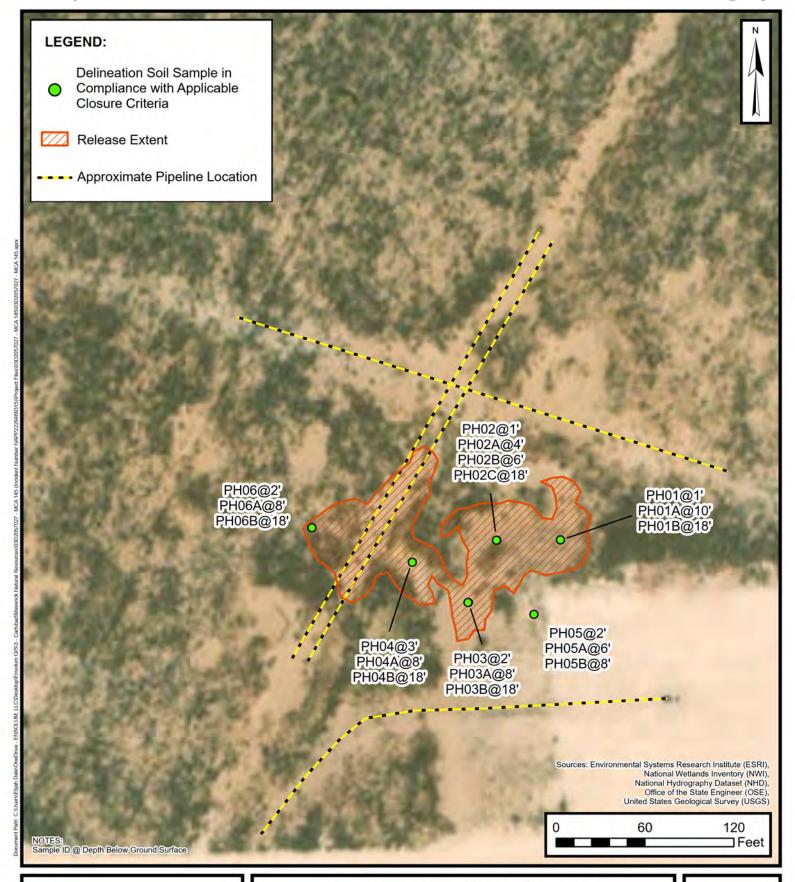




Site Receptor Map

Maverick Natural Resources, LLC MCA 145 NAPP2229469315 Unit H Sec 27 T17S R32E Lea County, New Mexico FIGURE 1

Released to Imaging: 2/9/2023 9:49:11 AM





Delineation Soil Samples

Maverick Natural Resources, LLC MCA 145 NAPP2229469315 Unit H Sec 27 T17S R32E Lea County, New Mexico FIGURE



TABLES



TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** MCA Unit 145 Maverick Natural Resources, LLC Lea County, New Mexico **TPH DRO Total BTEX TPH GRO TPH ORO GRO+DRO Total TPH** Chloride Sample Depth Benzene Date Designation (feet bgs) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) (mg/kg) NMOCD Table 1 Closure Criteria (NMAC 19.15.29) 10 50 NE NE NE 1,000 2,500 20,000 **Delineation Soil Samples** PH01 10/21/2022 1 < 0.00201 < 0.00402 <50.0 <50.0 <50.0 <50.0 <50.0 1.940* PH01A 10/21/2022 10 < 0.00201 < 0.00402 <49.9 <49.9 <49.9 <49.9 6,900 <49.9 PH01B 10/21/2022 18 < 0.00200 < 0.00399 <49.9 <49.9 <49.9 <49.9 <49.9 3.350 PH02 1 < 0.00198 < 0.00396 <50.0 <50.0 <50.0 <50.0 4,550* 10/21/2022 <50.0 PH02A 10/21/2022 4 < 0.00202 0.00627 <50.0 <50.0 <50.0 <50.0 <50.0 16,000 PH02B 10/24/2022 0.00269 0.0259 <49.9 <49.9 <49.9 <49.9 <49.9 7,610 6 PH02C 10/24/2022 18 < 0.00201 < 0.00402 <49.8 <49.8 <49.8 <49.8 <49.8 8,270 PH03 10/24/2022 2 < 0.00200 0.0115 <50.0 7,310* <50.0 < 50.0 < 50.0 <50.0 PH03A 10/24/2022 18 < 0.00202 < 0.00403 <49.8 <49.8 <49.8 <49.8 <49.8 4,440 PH03B 10/24/2022 8 0.00402 0.00402 <49.9 <49.9 <49.9 <49.9 <49.9 10,900 PH04 10/31/2022 3 0.00502 <49.8 12,300* < 0.00200 <49.8 <49.8 <49.8 <49.8 PH04A 10/31/2022 8 < 0.00201 < 0.00402 <49.9 <49.9 <49.9 <49.9 <49.9 7,510 PH04B 10/31/2022 18 < 0.00202 < 0.00404 <50.0 <50.0 <50.0 <50.0 <50.0 11.100 PH05 10/31/2022 2 <50.0 <50.0 < 0.00199 < 0.00398 <50.0 <50.0 <50.0 118 PH05A 10/31/2022 6 < 0.00199 < 0.00398 <50.0 <50.0 <50.0 <50.0 <50.0 23.5 PH05B 8 10/31/2022 < 0.00200 < 0.00399 <49.8 <49.8 <49.8 <49.8 <49.8 41.6 PH06 10/31/2022 2 < 0.00200 < 0.00401 <49.8 <49.8 <49.8 <49.8 <49.8 5,860* 8 0.0796

<49.9

<50.0

<49.9

<50.0

<49.9

<50.0

<49.9

<50.0

<49.9

<50.0

10,300

5,660

Notes:

bgs: below ground surface

NE: Not Established

PH06A

PH06B

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

10/31/2022

10/31/2022

18

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

0.00464

0.0942

0.0149

^{*} indicates sample was collected in area to be reclaimed after remediation is complete; the reclamation criteria applies to these samples



APPENDIX A

Referenced Well Records

Received by OCD: 1/18/2023 2:22:09 PM www Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag

NA

POD Number RA 12721 POD5 Q64 Q16 Q4 Sec Tws Rng 28 17S 32E X

3629961

Driller License: 1456

2.00

Driller Company:

WHITE DRILLING COMPANY

615650

Driller Name:

WHITE, JOHNNOWN.GENER

Plug Date:

Drill Start Date: Log File Date:

04/27/2020 05/18/2020 Drill Finish Date: PCW Rcv Date:

Depth Well:

04/28/2020

Source:

Shallow

Pump Type: Casing Size:

Pipe Discharge Size:

130 feet

Estimated Yield: Depth Water:

124 feet

Water Bearing Stratifications:

Top Bottom Description

121 Sandstone/Gravel/Conglomerate

121 Sandstone/Gravel/Conglomerate

130 Sandstone/Gravel/Conglomerate 125

Casing Perforations:

Bottom Top

90 130

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

109

10/17/22 2:40 PM

POINT OF DIVERSION SUMMARY



APPENDIX B

Photographic Log

ENSOLUM

Photographic Log

Maverick Natural Resources, LLC MCA Unit #145 NAPP2229469315





Photograph 1 Description: Initial release Northeast View

Date: Oct. 20, 2022 Photograph 2

Description: Initial release Northwest View

Date: Oct. 20, 2022



Photograph 3

Date: Oct. 31, 2022 Photograph 4

Oct. 31, 2022 Date:

Description: Pothole at depth of 18' bgs

Description: Backfilled potholes, post delineation

activities

View West



APPENDIX C

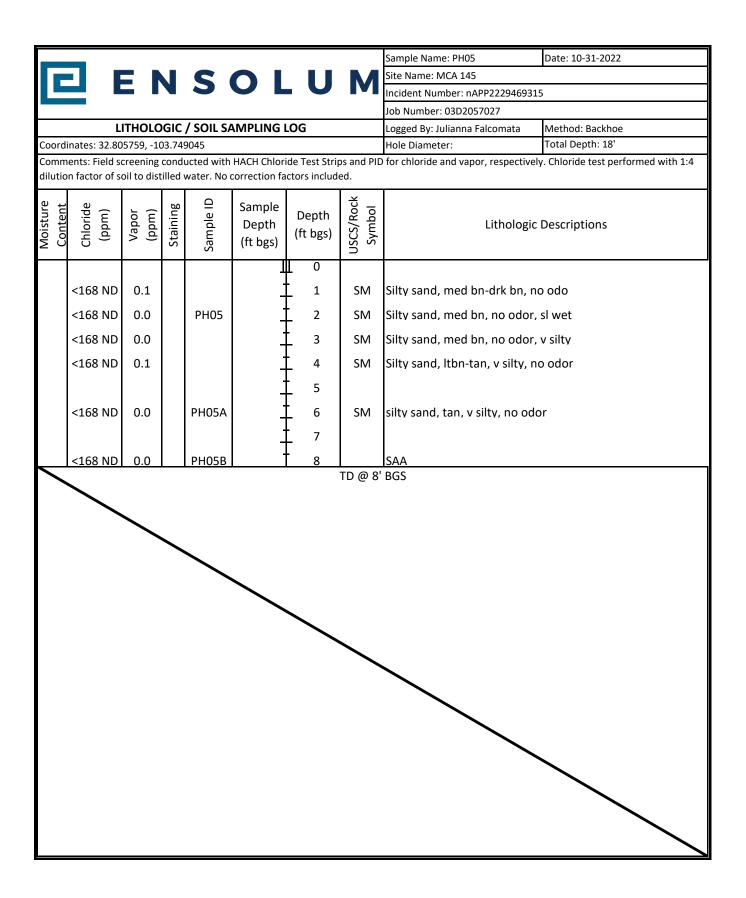
Lithologic/ Soil Sampling Logs

Г								Sample Name: BH03	Date: 10-21-2022		
	_							Sample Name: PH02 Site Name: MCA 145	Date: 10-21-2022		
	-		V	5	O L	. U	M	Incident Number: nAPP2229469315			
								Job Number: 03D2057027	55515		
	L	ITHOLO	GIC	/ SOIL SA	MPLING I	OG		Logged By: CS/ PV	Method: Trackhoe		
Coord	dinates: 32.80							Hole Diameter:	Total Depth: 18'		
Comn		creening	cond	lucted with		ride Test Stri	ips and PI		ctively. Chloride test performed with 1:4 dilution factor of		
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		Lithologic Descriptions		
						0					
	4,065	5.8		PH01	1 -	- 1	SP-SM	Poorly graded red/brown	sand, vpgraded, strong odor		
						_	5. 5.71	, , , , , , , , , , , , , , , , , , , ,			
	8,820.0	10.6			-	_ 2					
	9,520.0	29.9			_	3					
	16,592.0	35.5		PH01A	4 _	_ 4	SP-SM	Poorly graded light tan sa	and mixed with caliche		
					-	<u> </u>					
		40= 0		511045	_						
	14,067.0	187.0		PH01B	6 _	6	SP-SM	Poorly graded sand, tan,	vpgraded, strong odor, vfgn		
					_	7					
	14,067.0	24			<u>-</u>	8	SP-SM	Poorly graded sand w/sil	t, ltbn-tan, vpgraded, vfgn, silty, stong odor		
					-	9					
					_	_					
	9,520.0	10.1			_	_ 10	SP-SM	Poorly graded sand w/silt	t, Itbn, vfgn, vsilty, vpgraded, strong odor		
					<u>-</u>	11					
	7,946.0	5.1			-	12	SM	Silty sand, vsilty, Itbn, vfg	rn, vpgrading, stong odor		
					_	_			, , , , , , , , , , , , , , , , , , , ,		
					_	_ 13					
	8,596.0	5.3			_	14	SM	Silty sand w/gravel, tan, v	vfgn, vpgraded, sl odor		
					_	15					
	10,858.0	6.5			-	1 6	SM	Silty sand, Itbn-red, vfgn,	vpgraded, sliodor		
					_		• • • • • • • • • • • • • • • • • • • •	, , , , , , , , , , , , , , , , , , , ,			
					_	_ 17 -					
	4,452.0	1.6	<u> </u>	PH01C	18	18			t/gravel, ltbn-red, vfgn, vpgraded, v strong odor		
							Т	D @ 18' BGS			

								T .	<u> </u>	
8	_		_					Sample Name: PH02	Date: 10-24-2022	
	-		V	5	O L	_ U	M	Site Name: MCA 145		
								Incident Number: nAPP2229469315		
				/ 6011 64				Job Number: 03D2057027	1	
L .					MPLING	LOG		Logged By: Julianna Falcomata	Method: Backhoe	
	inates: 32.80				LIACH Chla	ida Task Chui	ing and DI	Hole Diameter:	Total Depth: 18' ely. Chloride test performed with 1:4 dilution factor of	
	distilled wat	_				nue rest str	ips and Pi	D for chiloride and vapor, respective	ery. Chiloride test performed with 1.4 dilution factor of	
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Litt	hologic Descriptions	
					_	0				
	6,776	24.2		PH02	1	_ 1	SP-SM	Poorly graded red/brown sai	nd, vpgraded, strong odor	
	2,200.0	4.3				- - 2				
					_	_				
	6,776.0	6.4			_	3				
	2,151.0	45.5		PH02A	4	_ 4	SP-SM	Poorly graded light tan sand	mixed with caliche	
					-	_ 5				
					_	_				
	12,986.4	1.8		PH02B	6 _	6	SP-SM	Poorly graded sand, tan, vpg	raded, strong odor, vfgn	
					_	7				
	10,281.6	9.9			-	- 8	SP-SM	Poorly graded sand w/silt. Ith	bn-tan, vpgraded, vfgn, silty, stong odor	
					_	_		, , , , , , , , , , , , , , , , , , ,	,,,,,	
					_	_ 9				
	5,964.0	7.8			_	10	SP-SM	Poorly graded sand w/silt, ltl	bn, vfgn, vsilty, vpgraded, strong odor	
					_	11				
	9,520.0	4			-	12	SM	Silty sand, vsilty, ltbn, vfgrn,	yngrading stong odor	
	3,320.0	"			_	_	Sivi	Sitty Sand, vality, itali, vigiti,	vpgrading, storig odor	
					_	_ 13				
	9,520.0	1.3			_	14	SM	Silty sand w/gravel, tan, vfgn	n, vpgraded, sl odor	
					-	15				
	6,988.8	0.4			_	_ 	SM	Silty sand, ltbn-red, vfgn, vpg	graded cloder	
	0,588.8	0.4			_	_ 16 -	SIVI	Jointy Sariu, Itbil-18u, Vigil, VD	çı aucu, Si UUUI	
					-	17				
	8,820.0	0.2		PH02C	18	18	SP-SM	Poorly graded sand w/silt/gr	avel, Itbn-red, vfgn, vpgraded, v strong odor	
							Т	D @ 18' BGS		
			_							
									_	

								Sample Name: PH03	Date: 10-24-2022
	7 .						B. 4	Site Name: MCA 145	
			A	3	O L	. U	V	Incident Number: nAPP222946931	15
								Job Number: 03D2057027	
	L	THOLO	GIC	/ SOIL SA	AMPLING I	.OG		Logged By: Julianna Falcomata	Method: Trackhoe
Coord	inates: 32.80	5584, -1	03.74	8786				Hole Diameter:	Total Depth: 18'
	nents: Field so of soil to dis	_					ps and PII	D for chloride and vapor, respective	ely. Chloride test performed with 1:4 dilution
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Litholo	ogic Descriptions
					1	0			
	6,686	1.2				_ 1	SP	Silty sand, It- med bn, vfgn, v	vpgraded, strong odor
	4,429.6	2.5		PH03	2	2	SP-SM	Poorly graded sand w/ silt, li	tbn, vfgn, vpgraded, strong odor
	11,468.8	11.9				3	SP-SM	Poorly graded sand w/ silt, l	tbn-tan, vfgrn, vpgrading, strong odor
	16,818.4	12.5			_	4	SP-SM	Poorly graded sand w/ silt, t	an, vfgn, vpgrading, strong odor
					-	5			
	12,482.4	13.0			-	- _ 6 - 7	SP-SM	Poorly graded sand w/ silt, t	an, vfgn, vpgraded, stong odor
	17,953.6	12.6		РН03В	8	8	SM	Silty sand, tan, vfgn, vpgrade	ed, strong odor
	12,482.4	8.9				_ 9 _ 10	SM	Silty sand, tan, vfgn, vpgrade	ed, strong odor
	12,482.4	1.4			- - -	_ 11 _ 12	SM	silty sand, tan-sl ylwsh, vfgn	, vpgraded, strong odor
	11,468.8	1.3			- -	_ 13 - 14 - 15	SM	Silty sand, tan w/ grnsh tint,	vfgn, vpgraded, sl odor
	11,468.8	0.2			-	_ 13 _ 16 _ 17	SM	Silty sand, tan-ltbn-brnsh re	d, vfgn, vpgraded, sl odor
	4,429.6	0		PH03A	18	18		Silty sand, Itbn-brnshrd, vfgr	n, vpgraded, sl odor
				_		_	10 @	9 18' BGS	

								Commis News - DUO4	D-t-: 10 21 2022
	_	_						Sample Name: PH04 Site Name: MCA 145	Date: 10-31-2022
	-	= [V	5	O L	. U	M	Incident Number: nAPP222946931	-
			_		_			Job Number: 03D2057027	
		ITHOLO	GIC	/ sou s/	AMPLING	106			
Coord	inates: 32.80				AIVIPLIIVG	100		Logged By: Julianna Falcomata Hole Diameter:	Method: Backhoe Total Depth: 18'
					HACH Chlori	do Tost Strir	oc and DID	for chloride and vapor, respectively	· ·
	on factor of so							Tor Chioride and Vapor, respectively	. Chioride test performed with 1.4
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologid	c Descriptions
					1	0			
	4,653.6	2.8			_	_ 1	SP-SM	Poorly graded sand w/silt, m	ned bn-tan, vsilty, strong odor
	5,499.2	10.4			-	_ 2	SM	Silty sand w/gravel, tan-ltbn-	-med bn, strong odor
	19,790.4	19.5		PH04	3	_ 3	SP-SM	Poorly graded sand w/silt, ltl	bn-tan, v strong odor
	14,067.4	65.4			_	_ 4	SP-SM	Poorly graded sand w/silt, ta	n, v strong odor
					-	<u> </u>			
	12,986.4	18.9			-	6	SP-SM	Poorly graded sand w/silt, ta	ın, v strong odor
					_	7			
	14,067.2	23.5		PH04A	8	8	SP-SM	Poorly graded sand w/silt, ta	n-ltbn, v stong odor
	12,006.4	6.8			-	9 10	SP-SM	Poorly graded sand w/silt, ltl	bn-med bn, v stong odor, sl wet
					-	11			
	12,006.4	24.8			-	12	SP	Poorly graded sand w/gravel	l, tan-ltbn, strong odor
	6 462 4	2.2			-	_ 13	CD C14		
	6,462.4	3.2			-	_ 14 _ 15	SP-SM	Poorly graded sand w/silt, sl	grn tint-tan, strong odor
	8,164.8	2.8			-	16	SP-SM	Poorly graded sand w/silt, ltl	bn-tan, strong odor
					-	17			
	12,006.4	1.2		PH04B	18	18		Poorly graded sand w/gravel	l, redish bn, strong odor
	<u> </u>						TD @ 1	8' BGS	
								_	



								Sample Name: PH06	Date: 10-31-2022	
					O L			Site Name: MCA 145		
			A	3	UL	. U	V	Incident Number: nAPP2229469315		
								Job Number: 03D2057027		
	L	ITHOLO	GIC	/ SOIL SA	MPLING I	LOG		Logged By: Julianna Falcomata	Method: Backhoe	
Coordi	nates: 32.80	5719, -10	03.74	9163				Hole Diameter:	Total Depth: 18'	
	ents: Field so n factor of so							for chloride and vapor, respective	ly. Chloride test performed with 1:4	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologid	c Descriptions	
					1	0				
	2,128.0	0.5			_	1	SM	Silty sand, med bn-drk bn, sl	l odor	
	5,499.2	2.7		PH06	2	2	SM	Silty sand, med bn-redsh bn	. sl odor	
	5,499.2	2.0				3	SM	Silty sand, med bn-redshbn,		
					_					
	8,820.0	3.0			=	4	SM	Silty sand, med bn, v silty, sl	odor	
					_	5				
	8,154.8	2.3			_	6	SM	Silty sand, med bn-sl drk bn,	, v silty, sl odor	
					-	7				
	14,067.0	55.6		PH06A	8	8	SP-SM	Poorly graded sand w/grave	el tan-lthn vistrong odor	
	11,007.0	33.0					3. 3.	Toony graded sails w/grave	in, tall itall, v strong odor	
					_	9				
	12,986.4	36.1			_	10	SP-SM	Poorly graded sand w/grave	el, tan-ltbn, v strong odor	
					_	11				
	7,560.0	2.1			-	12	SM	Silty sand, tan-grnsh tint, v s	strong odor	
					-	13				
	8,164.8	1.9			-	14	CVA	Cilty cand grach by tan wei	lty victrong oder	
	0,104.0	1.5			_	Γ	SM	Silty sand, grnsh bn-tan, v si	ity, v Strong oddi	
					-	15				
	8,820.0	3.3			-	16	SP-SM	Poorly graded sand w/grave	el, tan-grnsh tint, v strong odor	
					-	17				
	6,988.8	3.0		PH06B	18	18	SM	Silty sand, redsh bn-grnsh ta	an, strong odor	
					-		TD @ 18			
			_							
								_		



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3275-1 Client Project/Site: MCA 145

For: Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

CRAMER

Authorized for release by: 10/26/2022 4:47:42 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum

Laboratory Job ID: 890-3275-1

Project/Site: MCA 145

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	
Lab Chronicle	16
Certification Summary	18
Method Summary	19
Sample Summary	20
Chain of Custody	21
Receipt Chacklists	22

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Definitions/Glossary

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Qualifiers

GC VOA

 Qualifier
 Qualifier Description

 S1+
 Surrogate recovery exceeds control limits, high biased.

 U
 Indicates the analyte was analyzed for but not detected.

GC Semi VOA

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this repo	ort.
Abbicviation	These commonly asea appreviations may or may not be present in this rep	Oit.

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

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

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Case Narrative

Client: Ensolum

Job ID: 890-3275-1

Project/Site: MCA 145

Job ID: 890-3275-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3275-1

Receipt

The samples were received on 10/24/2022~3:50~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 $7.0^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02A (890-3275-1), PH02B (890-3275-2), PH03A (890-3275-3), PH03B (890-3275-4) and PH03C (890-3275-5).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-37872/1-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-37865 and analytical batch 880-37905 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.

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Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Client Sample ID: PH02A Lab Sample ID: 890-3275-1

Date Collected: 10/24/22 09:15

Date Received: 10/24/22 15:50

Matrix: Solid

Sample Depth: 6

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00269		0.00200	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
Toluene	0.00820		0.00200	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
Ethylbenzene	0.00284		0.00200	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
m-Xylene & p-Xylene	0.00754		0.00401	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
o-Xylene	0.00459		0.00200	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
Xylenes, Total	0.0121		0.00401	mg/Kg		10/26/22 08:00	10/26/22 12:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			10/26/22 08:00	10/26/22 12:14	1
1,4-Difluorobenzene (Surr)	114		70 - 130			10/26/22 08:00	10/26/22 12:14	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0259		0.00401	mg/Kg			10/26/22 17:42	1
Method: SW846 8015 NM - Diese	ol Banga Organ	ics (DBO) ((30)					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9		49.9	mg/Kg	<u>-</u>		10/26/22 15:33	1
-				99				
Method: SW846 8015B NM - Die	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/26/22 08:35	10/26/22 12:55	1
<u>.</u>	40.0	11						
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		10/26/22 08:35	10/26/22 12:55	1
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9 <49.9		49.9 49.9	mg/Kg mg/Kg		10/26/22 08:35	10/26/22 12:55 10/26/22 12:55	
C10-C28)		U		0 0				1
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9	0 0		10/26/22 08:35	10/26/22 12:55	1 Dil Fac
C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 %Recovery	U	49.9	0 0		10/26/22 08:35 Prepared	10/26/22 12:55 Analyzed	Dil Fac
C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.9 %Recovery 84 99	U Qualifier	49.9 Limits 70 - 130 70 - 130	0 0		10/26/22 08:35 Prepared 10/26/22 08:35	10/26/22 12:55 Analyzed 10/26/22 12:55	1 Dil Fac
C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 **Recovery 84 99 s, lon Chromato	U Qualifier	49.9 Limits 70 - 130 70 - 130	0 0	D	10/26/22 08:35 Prepared 10/26/22 08:35	10/26/22 12:55 Analyzed 10/26/22 12:55	1 Dil Fac

Client Sample ID: PH02B

Date Collected: 10/24/22 10:15

Lab Sample ID: 890-3275-2

Matrix: Solid

Date Received: 10/24/22 15:50

Sample Depth: 18

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/26/22 10:34	10/26/22 12:34	
Toluene	<0.00201	U	0.00201	mg/Kg		10/26/22 10:34	10/26/22 12:34	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/26/22 10:34	10/26/22 12:34	•
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/26/22 10:34	10/26/22 12:34	
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/26/22 10:34	10/26/22 12:34	•
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/26/22 10:34	10/26/22 12:34	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	109		70 - 130			10/26/22 10:34	10/26/22 12:34	

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Matrix: Solid

Lab Sample ID: 890-3275-2

Job ID: 890-3275-1

Client: Ensolum Project/Site: MCA 145

Client Sample ID: PH02B

Date Collected: 10/24/22 10:15 Date Received: 10/24/22 15:50

Sample Depth: 18

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	97	70 - 130	10/26/22 10:34	10/26/22 12:34	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/26/22 16:22	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/26/22 15:33	1

	Mothod: SW046 904ED NM Diocol Dan	go Organico (DBO) (CC)	v
ı	Method: SW846 8015B NM - Diesel Ran	ge Organics (DRO) (GC)	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		10/26/22 08:35	10/26/22 13:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		10/26/22 08:35	10/26/22 13:16	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		10/26/22 08:35	10/26/22 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77	70 - 130	10/26/22 08:35	10/26/22 13:16	1
o-Terphenyl	88	70 - 130	10/26/22 08:35	10/26/22 13:16	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8270		50.2	mg/Kg			10/26/22 12:19	10

Client Sample ID: PH03A Lab Sample ID: 890-3275-3

Date Collected: 10/24/22 12:15 Date Received: 10/24/22 15:50

Sample Depth: 2

Mothodi	CIMOAC GOOAD	Valatile Or	ganic Compour	de (CC)
i wethod:	5W846 8U21B	- volatile Ur	danic Compour	ias (GC)

organic comp	Julius (Ju	,					
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
0.00703		0.00200	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
0.00245		0.00200	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
<0.00400	U	0.00400	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
0.00203		0.00200	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
<0.00400	U	0.00400	mg/Kg		10/26/22 10:34	10/26/22 12:55	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
116		70 - 130			10/26/22 10:34	10/26/22 12:55	1
	Result <0.00200 0.00703 0.00245 <0.00400 0.00203 <0.00400 %Recovery	Result Qualifier	<0.00200	Result Qualifier RL Unit <0.00200	Result Qualifier RL Unit D <0.00200	Result Qualifier RL Unit D Prepared <0.00200	Result Qualifier RL Unit D Prepared Analyzed <0.00200

4-Bromofluorobenzene (Surr)	116	70 - 130	10/26/22 10:34	10/26/22 12:55	1
1,4-Difluorobenzene (Surr)	96	70 - 130	10/26/22 10:34	10/26/22 12:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0115		0.00400	mg/Kg			10/26/22 16:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/26/22 15:33	1

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Matrix: Solid

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Lab Sample ID: 890-3275-3

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Client Sample ID: PH03A

Sample Depth: 2

Date Collected: 10/24/22 12:15	Matrix: Solid
Date Received: 10/24/22 15:50	
Orange In Deputition 0	

Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/26/22 08:35	10/26/22 13:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/26/22 08:35	10/26/22 13:38	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/26/22 08:35	10/26/22 13:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			10/26/22 08:35	10/26/22 13:38	1
o-Terphenyl	97		70 - 130			10/26/22 08:35	10/26/22 13:38	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7310		99.6	mg/Kg			10/26/22 12:24	20

Lab Sample ID: 890-3275-4 Client Sample ID: PH03B Date Collected: 10/24/22 13:38 Matrix: Solid

Date Received: 10/24/22 15:50

Sample Depth: 18

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/26/22 10:34	10/26/22 13:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			10/26/22 10:34	10/26/22 13:15	1
1,4-Difluorobenzene (Surr)	97		70 - 130			10/26/22 10:34	10/26/22 13:15	1
Method: TAL SOP Total BTEX - T	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
							40/00/00 40 00	
Total BTEX	<0.00403	U	0.00403	mg/Kg			10/26/22 16:22	1
Total BTEX - Method: SW846 8015 NM - Diese				mg/Kg			10/26/22 16:22	1
- -	el Range Organ			mg/Kg Unit	D	Prepared	10/26/22 16:22 Analyzed	
Thethod: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte	Range Organ Result <49.8	ics (DRO) (Qualifier	GC) RL 49.8	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <49.8 sel Range Organ	ics (DRO) (Qualifier	GC) RL 49.8	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <49.8 sel Range Organ	Qualifier Unics (DRO) Qualifier	GC) RL 49.8	Unit mg/Kg			Analyzed 10/26/22 15:33	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <49.8 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U U	GC) RL 49.8 (GC) RL	Unit mg/Kg		Prepared	Analyzed 10/26/22 15:33 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <49.8 sel Range Orga Result <49.8	cics (DRO) (Qualifier U nics (DRO) Qualifier U	GC) RL 49.8 (GC) RL 49.8	Unit mg/Kg Unit mg/Kg		Prepared 10/26/22 08:35	Analyzed 10/26/22 15:33 Analyzed 10/26/22 13:59	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result 49.8 sel Range Orga Result 49.8 49.8	cics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.8 (GC) RL 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35	Analyzed 10/26/22 15:33 Analyzed 10/26/22 13:59 10/26/22 13:59	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result 49.8 sel Range Orga Result 49.8 49.8 49.8	cics (DRO) (Qualifier U nics (DRO) Qualifier U U	GC) RL 49.8 (GC) RL 49.8 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35 10/26/22 08:35	Analyzed 10/26/22 15:33 Analyzed 10/26/22 13:59 10/26/22 13:59	Dil Fac Dil Fac 1 Dil Fac 1 1 Dil Fac 1

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Client Sample Results

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Client Sample ID: PH03B Lab Sample ID: 890-3275-4

Date Collected: 10/24/22 13:38 Matrix: Solid

Date Received: 10/24/22 15:50

Sample Depth: 18

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	4440		49.6	mg/Kg			10/26/22 12:29	10

Client Sample ID: PH03C Lab Sample ID: 890-3275-5

Date Collected: 10/24/22 12:45 Date Received: 10/24/22 15:50

Sample Depth: 8

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00402		0.00199	mg/Kg		10/26/22 10:34	10/26/22 13:36	
Toluene	< 0.00199	U	0.00199	mg/Kg		10/26/22 10:34	10/26/22 13:36	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		10/26/22 10:34	10/26/22 13:36	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/26/22 10:34	10/26/22 13:36	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/26/22 10:34	10/26/22 13:36	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/26/22 10:34	10/26/22 13:36	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	95		70 - 130			10/26/22 10:34	10/26/22 13:36	
1,4-Difluorobenzene (Surr)	101		70 - 130			10/26/22 10:34	10/26/22 13:36	
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.00402		0.00398	mg/Kg			10/26/22 16:22	
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) (Qualifier	GC)	Unit	D	Prepared	Analyzed	Dil Fa
	•	Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/26/22 15:33	
Analyte	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9 sel Range Orga	Qualifier U	RL 49.9		<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	mg/Kg			10/26/22 15:33	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC)	mg/Kg		Prepared	10/26/22 15:33 Analyzed	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 10/26/22 08:35	10/26/22 15:33 Analyzed 10/26/22 14:21	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35	10/26/22 15:33 Analyzed 10/26/22 14:21 10/26/22 14:21	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35	Analyzed 10/26/22 14:21 10/26/22 14:21 10/26/22 14:21	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35 10/26/22 08:35 Prepared	Analyzed 10/26/22 14:21 10/26/22 14:21 10/26/22 14:21 Analyzed	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35 10/26/22 08:35 Prepared 10/26/22 08:35	Analyzed 10/26/22 14:21 10/26/22 14:21 10/26/22 14:21 Analyzed 10/26/22 14:21	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Diese 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 nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/26/22 08:35 10/26/22 08:35 10/26/22 08:35 Prepared 10/26/22 08:35	Analyzed 10/26/22 14:21 10/26/22 14:21 10/26/22 14:21 Analyzed 10/26/22 14:21	Dil Fac

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Matrix: Solid

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Surrogate Summary

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

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)	
390-3275-1	PH02A	118	114	
890-3275-1 MS	PH02A	95	100	
890-3275-1 MSD	PH02A	95	94	
890-3275-2	PH02B	109	97	
890-3275-3	PH03A	116	96	
890-3275-4	PH03B	95	97	
890-3275-5	PH03C	95	101	
LCS 880-37872/1-A	Lab Control Sample	138 S1+	115	
LCSD 880-37872/2-A	Lab Control Sample Dup	88	98	
MB 880-37872/5-A	Method Blank	111	104	

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)	
390-3271-A-4-C MS	Matrix Spike	77	81	
390-3271-A-4-D MSD	Matrix Spike Duplicate	78	82	
390-3275-1	PH02A	84	99	
390-3275-2	PH02B	77	88	
390-3275-3	PH03A	83	97	
390-3275-4	PH03B	81	95	
390-3275-5	PH03C	84	97	
CS 880-37854/2-A	Lab Control Sample	90	109	
_CSD 880-37854/3-A	Lab Control Sample Dup	109	126	
MB 880-37854/1-A	Method Blank	98	123	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Released to Imaging: 2/9/2023 9:49:11 AM

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-37872/5-A

Analysis Batch: 37852

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 37872

	IVID	INID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/26/22 08:00	10/26/22 11:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/26/22 08:00	10/26/22 11:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/26/22 08:00	10/26/22 11:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/26/22 08:00	10/26/22 11:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/26/22 08:00	10/26/22 11:45	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		10/26/22 08:00	10/26/22 11:45	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	10/26/22 08:00	10/26/22 11:45	1
1,4-Difluorobenzene (Surr)	104		70 - 130	10/26/22 08:00	10/26/22 11:45	1

Lab Sample ID: LCS 880-37872/1-A

Matrix: Solid

Analysis Batch: 37852

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 37872

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1010 mg/Kg 101 70 - 130 Toluene 0.100 0.1058 mg/Kg 106 70 - 130 0.100 0.09017 Ethylbenzene mg/Kg 90 70 - 130 90 m-Xylene & p-Xylene 0.200 0.1792 70 - 130 mg/Kg 0.100 0.1103 70 - 130 o-Xylene mg/Kg 110

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: LCSD 880-37872/2-A

Matrix: Solid

Analysis Batch: 37852

Prep Type: Total/NA

Prep Batch: 37872

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1018		mg/Kg		102	70 - 130	1	35
Toluene	0.100	0.1069		mg/Kg		107	70 - 130	1	35
Ethylbenzene	0.100	0.09693		mg/Kg		97	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1973		mg/Kg		99	70 - 130	10	35
o-Xylene	0.100	0.1038		mg/Kg		104	70 - 130	6	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1.4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-3275-1 MS

Matrix: Solid

Analysis Batch: 37852

Client Sample ID: PH02A Prep Type: Total/NA

Prep Batch: 37872

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.00269		0.0998	0.09014		mg/Kg		88	70 - 130	
Toluene	0.00820		0.0998	0.09699		mg/Kg		89	70 - 130	

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Page 10 of 23

Client Sample ID: PH02A

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

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

Lab Sample ID: 890-3275-1 MS **Matrix: Solid**

Analysis Batch: 37852									Prep	Batch: 37	872
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	0.00284		0.0998	0.08880		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene	0.00754		0.200	0.1824		mg/Kg		88	70 - 130		
o-Xylene	0.00459		0.0998	0.09723		mg/Kg		93	70 - 130		

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 89

Matrix: Solid

Analysis Batch: 3

390-3275-1 MSD				Client Sample ID: F	PH02A
				Prep Type: To	tal/NA
37852				Prep Batch:	37872
	Comple Comple	Cnika	MCD MCD	9/ Boo	DDD

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.00269		0.0990	0.09489		mg/Kg		93	70 - 130	5	35
Toluene	0.00820		0.0990	0.09955		mg/Kg		92	70 - 130	3	35
Ethylbenzene	0.00284		0.0990	0.09259		mg/Kg		91	70 - 130	4	35
m-Xylene & p-Xylene	0.00754		0.198	0.1897		mg/Kg		92	70 - 130	4	35
o-Xylene	0.00459		0.0990	0.1018		mg/Kg		98	70 - 130	5	35

MSD MSD

Surrogate	%Recovery Qu	ıalifier Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	94	70 - 130

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

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Lab Sample ID: MB 880-37854/1-A	A

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b Sample ID: MB 880-37854/1-A	Client Sample ID: Method Blank
trix: Solid	Prep Type: Total/NA
alysis Batch: 37857	Prep Batch: 37854
MR MR	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg	_	10/26/22 08:35	10/26/22 09:08	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/26/22 08:35	10/26/22 09:08	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/26/22 08:35	10/26/22 09:08	1

MB MB Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed 70 - 130 10/26/22 08:35 10/26/22 09:08 1-Chlorooctane 98

123 70 - 130 10/26/22 08:35 10/26/22 09:08 o-Terphenyl

Lab Sample ID: LCS 880-37854/2-A

Matrix: Solid Analysis Batch: 37857

Analysis Batch: 37857							Prep	Batch: 37854
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	975.8		mg/Kg		98	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	840.0		mg/Kg		84	70 - 130	

C10-C28)

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Job ID: 890-3275-1

Project/Site: MCA 145

Client: Ensolum

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

LCS LCS

Lab Sample ID: LCS 880-37854/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 37857

Prep Type: Total/NA

Prep Batch: 37854

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 90 70 - 130 o-Terphenyl 109 70 - 130

Lab Sample ID: LCSD 880-37854/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 37857

Prep Type: Total/NA Prep Batch: 37854

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 800.4 80 70 - 13020 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 939.0 94 mg/Kg 70 - 13011 20 C10-C28)

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	126		70 - 130

Lab Sample ID: 890-3271-A-4-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 37857

Prep Type: Total/NA

Prep Batch: 37854

Sample Sample MS MS Spike Analyte Added Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.8 U 998 1099 mg/Kg 108 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 998 932.0 mg/Kg 92 70 - 130 C10-C28)

	MS MS				
Surrogate	%Recovery Qualifier	Limits			
1-Chlorooctane	77	70 - 130			
o-Terphenyl	81	70 - 130			

Lab Sample ID: 890-3271-A-4-D MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 37857

Matrix: Solid

Prep Type: Total/NA

Prep Batch: 37854

MSD MSD RPD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics U 998 1173 20 <49.8 mg/Kg 115 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U 998 942.1 mg/Kg 93 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 78 70 - 130 82 70 - 130 o-Terphenyl

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Prep Type: Soluble

QC Sample Results

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37865/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 37905

_	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/26/22 11:50	1

Lab Sample ID: LCS 880-37865/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37905

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	256.7	-	mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-37865/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37905

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit Limits **RPD** Limit Chloride 250 256.3 103 90 - 110 mg/Kg

Lab Sample ID: 890-3275-1 MS Client Sample ID: PH02A **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 37905

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	7610	F1	4990	15290	F1	mg/Kg	_	154	90 - 110	

Lab Sample ID: 890-3275-1 MSD Client Sample ID: PH02A

Matrix: Solid

Analysis Batch: 37905

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	7610	F1	4990	15290	F1	mg/Kg		154	90 - 110	0	20

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Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: MCA 145

Job ID: 890-3275-1

GC VOA

Analysis Batch: 37852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	8021B	37872
890-3275-2	PH02B	Total/NA	Solid	8021B	37872
890-3275-3	PH03A	Total/NA	Solid	8021B	37872
890-3275-4	PH03B	Total/NA	Solid	8021B	37872
890-3275-5	PH03C	Total/NA	Solid	8021B	37872
MB 880-37872/5-A	Method Blank	Total/NA	Solid	8021B	37872
LCS 880-37872/1-A	Lab Control Sample	Total/NA	Solid	8021B	37872
LCSD 880-37872/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37872
890-3275-1 MS	PH02A	Total/NA	Solid	8021B	37872
890-3275-1 MSD	PH02A	Total/NA	Solid	8021B	37872

Prep Batch: 37872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	5035	<u> </u>
890-3275-2	PH02B	Total/NA	Solid	5035	
890-3275-3	PH03A	Total/NA	Solid	5035	
890-3275-4	PH03B	Total/NA	Solid	5035	
890-3275-5	PH03C	Total/NA	Solid	5035	
MB 880-37872/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37872/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37872/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3275-1 MS	PH02A	Total/NA	Solid	5035	
890-3275-1 MSD	PH02A	Total/NA	Solid	5035	

Analysis Batch: 37946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	Total BTEX	
890-3275-2	PH02B	Total/NA	Solid	Total BTEX	
890-3275-3	PH03A	Total/NA	Solid	Total BTEX	
890-3275-4	PH03B	Total/NA	Solid	Total BTEX	
890-3275-5	PH03C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 37854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	8015NM Prep	
890-3275-2	PH02B	Total/NA	Solid	8015NM Prep	
890-3275-3	PH03A	Total/NA	Solid	8015NM Prep	
890-3275-4	PH03B	Total/NA	Solid	8015NM Prep	
890-3275-5	PH03C	Total/NA	Solid	8015NM Prep	
MB 880-37854/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-37854/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-37854/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3271-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3271-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 37857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	8015B NM	37854
890-3275-2	PH02B	Total/NA	Solid	8015B NM	37854

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QC Association Summary

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

GC Semi VOA (Continued)

Analysis Batch: 37857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-3	PH03A	Total/NA	Solid	8015B NM	37854
890-3275-4	PH03B	Total/NA	Solid	8015B NM	37854
890-3275-5	PH03C	Total/NA	Solid	8015B NM	37854
MB 880-37854/1-A	Method Blank	Total/NA	Solid	8015B NM	37854
LCS 880-37854/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37854
LCSD 880-37854/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37854
890-3271-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	37854
890-3271-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37854

Analysis Batch: 37938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Total/NA	Solid	8015 NM	_
890-3275-2	PH02B	Total/NA	Solid	8015 NM	
890-3275-3	PH03A	Total/NA	Solid	8015 NM	
890-3275-4	PH03B	Total/NA	Solid	8015 NM	
890-3275-5	PH03C	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Soluble	Solid	DI Leach	
890-3275-2	PH02B	Soluble	Solid	DI Leach	
890-3275-3	PH03A	Soluble	Solid	DI Leach	
890-3275-4	PH03B	Soluble	Solid	DI Leach	
890-3275-5	PH03C	Soluble	Solid	DI Leach	
MB 880-37865/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37865/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37865/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3275-1 MS	PH02A	Soluble	Solid	DI Leach	
890-3275-1 MSD	PH02A	Soluble	Solid	DI Leach	

Analysis Batch: 37905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3275-1	PH02A	Soluble	Solid	300.0	37865
890-3275-2	PH02B	Soluble	Solid	300.0	37865
890-3275-3	PH03A	Soluble	Solid	300.0	37865
890-3275-4	PH03B	Soluble	Solid	300.0	37865
890-3275-5	PH03C	Soluble	Solid	300.0	37865
MB 880-37865/1-A	Method Blank	Soluble	Solid	300.0	37865
LCS 880-37865/2-A	Lab Control Sample	Soluble	Solid	300.0	37865
LCSD 880-37865/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37865
890-3275-1 MS	PH02A	Soluble	Solid	300.0	37865
890-3275-1 MSD	PH02A	Soluble	Solid	300.0	37865

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Job ID: 890-3275-1

Project/Site: MCA 145

Client: Ensolum

Client Sample ID: PH02A

Date Collected: 10/24/22 09:15 Date Received: 10/24/22 15:50

Lab Sample ID: 890-3275-1

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			4.99 g	5 mL	37872	10/26/22 08:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37852	10/26/22 12:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37946	10/26/22 17:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37938	10/26/22 15:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 12:55	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37865	10/26/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	37905	10/26/22 12:05	CH	EET MID

Client Sample ID: PH02B Lab Sample ID: 890-3275-2

Date Collected: 10/24/22 10:15 Date Received: 10/24/22 15:50

Matrix: Solid

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 37872 Total/NA 4.97 g 5 mL 10/26/22 10:34 MNR EET MID Total/NA 8021B 5 mL 10/26/22 12:34 **EET MID** Analysis 1 5 mL 37852 MNR Total/NA Total BTEX 37946 10/26/22 16:22 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 37938 10/26/22 15:33 SM **EET MID** Total/NA 37854 Prep 8015NM Prep 10.04 g 10 mL 10/26/22 08:35 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 37857 10/26/22 13:16 SM **EET MID** Soluble 37865 Leach DI Leach 4.98 g 50 mL 10/26/22 10:38 SMC **EET MID** Soluble Analysis 300.0 10 50 mL 50 mL 37905 10/26/22 12:19 СН **EET MID**

Client Sample ID: PH03A Lab Sample ID: 890-3275-3 Date Collected: 10/24/22 12:15

Date Received: 10/24/22 15:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	37872	10/26/22 10:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37852	10/26/22 12:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37946	10/26/22 16:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			37938	10/26/22 15:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 13:38	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37865	10/26/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	37905	10/26/22 12:24	CH	EET MID

Client Sample ID: PH03B Lab Sample ID: 890-3275-4 Date Collected: 10/24/22 13:38 **Matrix: Solid**

Date Received: 10/24/22 15:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	37872	10/26/22 10:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37852	10/26/22 13:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37946	10/26/22 16:22	SM	EET MID

Eurofins Carlsbad

Page 16 of 23

Matrix: Solid

Job ID: 890-3275-1

Project/Site: MCA 145

Client: Ensolum

Client Sample ID: PH03B

Lab Sample ID: 890-3275-4 Date Collected: 10/24/22 13:38

Matrix: Solid

Date Received: 10/24/22 15:50

	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			37938	10/26/22 15:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 13:59	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	37865	10/26/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	37905	10/26/22 12:29	CH	EET MID

Lab Sample ID: 890-3275-5 **Client Sample ID: PH03C**

Date Collected: 10/24/22 12:45 Matrix: Solid

Date Received: 10/24/22 15:50

	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	37872	10/26/22 10:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37852	10/26/22 13:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37946	10/26/22 16:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			37938	10/26/22 15:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37854	10/26/22 08:35	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37857	10/26/22 14:21	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37865	10/26/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	37905	10/26/22 12:34	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: 890-3275-1

Project/Site: MCA 145

Laboratory: Eurofins Midland

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

Authority	F	Program	Identification Number	Expiration Date
Texas	N	NELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of		out the laboratory is not certifie	ed by the governing authority. This list ma	ay include analytes for
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH	

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Method Summary

Client: Ensolum Job ID: 890-3275-1

Project/Site: MCA 145

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: MCA 145 Job ID: 890-3275-1

390-3275-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3275-1	PH02A	Solid	10/24/22 09:15	10/24/22 15:50	6
890-3275-2	PH02B	Solid	10/24/22 10:15	10/24/22 15:50	18
890-3275-3	PH03A	Solid	10/24/22 12:15	10/24/22 15:50	2
890-3275-4	PH03B	Solid	10/24/22 13:38	10/24/22 15:50	18
890-3275-5	PH03C	Solid	10/24/22 12:45	10/24/22 15:50	8

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Revised Date 08/25/2020 Rev 2020.

Date/Time

Chain of Custody

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

Environment Testing

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Work Order No:

Charles Company Name Company N	Project Manager:	nale ronnas	S)	Bill to: (if different)	0			Work Orc	Work Order Comments	
Size of Project		solum, LLC	(ھ	Company Name:				UST/PST	Brownfields	C Superfund
AMANYSIS REQUEST: Carcing Carc		Nocth	rhsHux	Address:			2	State of Project:		
\$11 - [683, 32.03 Final P) P(M) MOP U.S. MANY SEQUEST Deliverables: EDD ADaT Other Annubes: MOP U.S. More: NO Ideation Annubes: More: NO Ideation Annual Ann		Msbed . NN	1 8877B	City, State ZIP:	(RP Level IV
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LE RECEIPT Temp Blank: Color Wet Let: Color No Wet Let: Color	t Location: er's Name:	÷13	Z &	e day received by					Cool: Cool	MeOH: Me HNO 3: HN
Ves No MVA Correction Factor:	AMPLE RECEIPT		-	Ye No	ters				H,PO4: HP	Don't Look
Yes No MAA Correction Factor. — O . 2 A . 3 A	mples Received Intact:		Ę -	. 6	eme.				NaHSO 4: NABI	SI
Yes No Ned Temperature Reading: 3 · 3 2 fication Matrix Sampled	ooler Custody Seals:	A/A	Correction Factor:	1	169	70	890-327	5 Chain of Custody	Na ₂ S ₂ O ₃ :NaSC	۰۰۰
Corrected Temperature: 7.0 Confected Temperature: 7.0 Confected Time Depth Grab/ # of Confected Temperature: 3.02442 D915 K C1 V V V V V V V V V	mple Custody Seals:	A.	Temperature Reading:			1			Zn Acetate+Na	₃OH: Zn
ample Identification Matrix Date Date Depth Comp Cont Part Comp Cont Part Comp Cont Cont Cont Cont Cont Cont Cont Cont	tal Containers:		Corrected Temperature:			X			NaOH+Ascorbi	ic Acid: SAPC
18 S 102412 0915 6 128 12 12 12 12 12 12 1	Sample Identification	Matrix		Grab/ Comp	is is	1VV 1			Sample (Comments
1.8 S 10-2412 1015 18" S 10-2412 1215 2" S 10-2412 1358 18" C 5 10-2412 1245 8"	HD7.	S			1	\ \ \ \				
1215 2' (1245 8' 245 8'	H02.8	-	-		/ _A	1/1				
	H03 A	2		2,7	<u> </u>	/	<i>b</i>			
	103 D	2	-	28 E	\ \ \	\ \ \				

FEUROFINS Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated Eurofins. 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 kosses or expenses incurred by the clent if such losses are due to circumstances beyond the control

Received by: (Signature) Relinquished by: (Signature) 55C 16.24.22 Date/Time yv: (Signature) Relinquished by: (Signature)

Page 21 of 23

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3275-1

SDG Number:

10/26/2022

Login Number: 3275 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3275-1

SDG Number:

List Source: Eurofins Midland Login Number: 3275 List Number: 2

List Creation: 10/26/22 10:29 AM

Creator: Rodriguez, Leticia

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

Eurofins Carlsbad Page 23 of 23

10/26/2022

<6mm (1/4").

Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3339-1

Laboratory Sample Delivery Group: 03D2057027

Client Project/Site: MCA145

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

JURAMER

Authorized for release by 11/3/2022 12:38:27 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

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<u>.</u>

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

Laboratory Job ID: 890-3339-1 Project/Site: MCA145 SDG: 03D2057027

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	13
QC Sample Results	14
QC Association Summary	18
Lab Chronicle	21
Certification Summary	24
Method Summary	25
Sample Summary	26
Chain of Custody	27
Receipt Checklists	28

Definitions/Glossary

Job ID: 890-3339-1 Client: Ensolum Project/Site: MCA145 SDG: 03D2057027

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

LCS and/or LCSD is outside acceptance limits, low biased.

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

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

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
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Job ID: 890-3339-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3339-1

Receipt

The samples were received on 10/31/2022 3:54 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 3.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH04A (890-3339-1), PH04B (890-3339-2), PH04C (890-3339-3), PH05A (890-3339-4), PH05B (890-3339-5), PH05C (890-3339-6), PH06A (890-3339-7), PH06B (890-3339-8) and PH06C (890-3339-9).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-21004-A-1-B), (880-21004-A-1-C MS) and (880-21004-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: LCS biased low. Since only an acceptable LCS or LCSD is required per the method, the data has been qualified and reported.(LCS 880-38447/2-A)

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38447 and analytical batch 880-38456 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 880-38445 and analytical batch 880-38533 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.

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Lab Sample ID: 890-3339-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH04A

Date Collected: 10/31/22 09:45 Date Received: 10/31/22 15:54

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
Toluene	0.00502		0.00200	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 11:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			11/02/22 10:00	11/02/22 11:48	1
1,4-Difluorobenzene (Surr)	97		70 - 130			11/02/22 10:00	11/02/22 11:48	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00502		0.00399	mg/Kg			11/02/22 14:29	1
Analyte	Result	Qualifier						
, j. co		Qualifici	RL	Unit	D	Prepared	Analyzed	Dil Fac
	<49.8		49.8	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/03/22 13:10	
Total TPH	<49.8	U	49.8		<u>D</u>	Prepared		
	<49.8	U	49.8		<u>D</u> 	Prepared Prepared		1
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	<49.8	unics (DRO) Qualifier	49.8 (GC)	mg/Kg			11/03/22 13:10	1 Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.8 sel Range Orga Result	Unics (DRO) Qualifier U*-	49.8 (GC)	mg/Kg		Prepared	11/03/22 13:10 Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	<49.8 sel Range Orga Result <49.8	unics (DRO) Qualifier U *-	49.8 (GC) RL 49.8	mg/Kg Unit mg/Kg		Prepared 11/02/22 08:49	11/03/22 13:10 Analyzed 11/02/22 13:59	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8 sel Range Orga Result <49.8 <49.8	Qualifier U *- U	49.8 (GC) RL 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/02/22 08:49 11/02/22 08:49	Analyzed 11/02/22 13:59 11/02/22 13:59	1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.8 sel Range Orga Result <49.8 <49.8 <49.8	Qualifier U *- U	49.8 (GC) RL 49.8 49.8 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49	Analyzed 11/02/22 13:59 11/02/22 13:59 11/02/22 13:59	Dil Face 1 1 1 1 Dil Face
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.8 sel Range Orga Result <49.8 <49.8 <49.8 %Recovery	Qualifier U *- U	49.8 (GC) RL 49.8 49.8 49.8 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared	Analyzed 11/02/22 13:59 11/02/22 13:59 11/02/22 13:59 Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.8 sel Range Orga Result <49.8 <49.8 <49.8 %Recovery 72 72	Unics (DRO) Qualifier U*- U*- U Qualifier	49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared 11/02/22 08:49	Analyzed 11/02/22 13:59 11/02/22 13:59 11/02/22 13:59 Analyzed 11/02/22 13:59	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.8 sel Range Orga Result <49.8 <49.8 <49.8 %Recovery 72 72 72 s, Ion Chromato	Unics (DRO) Qualifier U*- U*- U Qualifier	49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared 11/02/22 08:49	Analyzed 11/02/22 13:59 11/02/22 13:59 11/02/22 13:59 Analyzed 11/02/22 13:59	

Client Sample ID: PH04B

Date Collected: 10/31/22 10:00 Date Received: 10/31/22 15:54

Sample Depth: 8'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/02/22 10:00	11/02/22 12:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/02/22 10:00	11/02/22 12:09	1

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Lab Sample ID: 890-3339-2

Matrix: Solid

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Lab Sample ID: 890-3339-2

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH04B

Date Collected: 10/31/22 10:00 Date Received: 10/31/22 15:54

Sample Depth: 8'

Method: SW846 8021B - Volatile	Organic Compounds	(GC)	(Continued)
mother of the court of the country	organic compounds	1/	(Continuou)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99	70 - 130	11/02/22 10:00	11/02/22 12:09	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	ma/Ka			11/02/22 14:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/03/22 13:10	1

Method: SW846 8015B N	MM - Diesel Range	Organics ((DRO)	(GC)	١
Michiga. Offoro ou lob i	titi - Diesei italige	Organics i	DILO	(00)	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *-	49.9	mg/Kg		11/02/22 08:49	11/02/22 14:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9	mg/Kg		11/02/22 08:49	11/02/22 14:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/02/22 08:49	11/02/22 14:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82	70 - 130	11/02/22 08:49	11/02/22 14:21	1
o-Terphenyl	80	70 - 130	11/02/22 08:49	11/02/22 14:21	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7510		49.8	mg/Kg			11/02/22 15:20	10

Client Sample ID: PH04C

Date Collected: 10/31/22 10:50

Lab Sample ID: 890-3339-3

Matrix: Solid

Date Collected: 10/31/22 10:50 Date Received: 10/31/22 15:54

Sample Depth: 18'

Mothodi	CIMOAC GOOAD	Valatile Or	ganic Compour	de (CC)
i wethod:	5W846 8U21B	- volatile Ur	danic Compour	ias (GC)

Welliou. Stroto ouz ID - Volati	le Organic Comp	ounus (OC)	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/02/22 10:00	11/02/22 12:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			11/02/22 10:00	11/02/22 12:29	1
1 4-Difluorobenzene (Surr)	101		70 130			11/02/22 10:00	11/02/22 12:29	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00404	U	0.00404	ma/Ka			11/02/22 14:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 13:10	1

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Lab Sample ID: 890-3339-3

Client: Ensolum Job ID: 890-3339-1 Project/Site: MCA145 SDG: 03D2057027

Client Sample ID: PH04C

Date Collected: 10/31/22 10:50 Date Received: 10/31/22 15:54

Sample Depth: 18'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 14:43	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 14:43	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			11/02/22 08:49	11/02/22 14:43	1
o-Terphenyl	77		70 - 130			11/02/22 08:49	11/02/22 14:43	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: PH05A Lab Sample ID: 890-3339-4 Date Collected: 10/31/22 12:25 Matrix: Solid

Date Received: 10/31/22 15:54

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 12:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			11/02/22 10:00	11/02/22 12:50	1
1,4-Difluorobenzene (Surr)	97		70 - 130			11/02/22 10:00	11/02/22 12:50	1
Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/02/22 14:29	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 13:10	1
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:04	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			11/02/22 08:49	11/02/22 15:04	

Job ID: 890-3339-1

Matrix: Solid

Lab Sample ID: 890-3339-4

Client: Ensolum Project/Site: MCA145 SDG: 03D2057027

Client Sample ID: PH05A

Date Collected: 10/31/22 12:25 Date Received: 10/31/22 15:54

Sample Depth: 2'

Method: MCAWW 300.0 - Anions,	on Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	118		4.97	mg/Kg			11/02/22 15:30	1

Client Sample ID: PH05B Lab Sample ID: 890-3339-5 Matrix: Solid

Date Collected: 10/31/22 12:45 Date Received: 10/31/22 15:54

Sample Depth: 6'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 13:10	
Toluene	< 0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 13:10	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 13:10	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 13:10	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 13:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 13:10	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			11/02/22 10:00	11/02/22 13:10	1
1,4-Difluorobenzene (Surr)	90		70 - 130			11/02/22 10:00	11/02/22 13:10	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/02/22 14:29	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 13:10	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:26	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 15:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			11/02/22 08:49	11/02/22 15:26	1
o-Terphenyl	74		70 - 130			11/02/22 08:49	11/02/22 15:26	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	23.5		5.00	mg/Kg			11/02/22 15:35	1

Released to Imaging: 2/9/2023 9:49:11 AM

Lab Sample ID: 890-3339-6

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH05C

Date Collected: 10/31/22 12:50 Date Received: 10/31/22 15:54

Sample Depth: 8'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/02/22 10:00	11/02/22 13:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			11/02/22 10:00	11/02/22 13:31	1
1,4-Difluorobenzene (Surr)	98		70 - 130			11/02/22 10:00	11/02/22 13:31	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/02/22 14:29	1
Method: SW846 8015 NM - Diese Analyte	•		•	Unit	D	Propared	Analyzad	Dil Eac
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) ((GC)	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	•	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 11/03/22 13:10	
Analyte Total TPH	Result <49.8	Qualifier U	RL 49.8		<u>D</u>	Prepared		
Analyte	Result <49.8 sel Range Organia	Qualifier U	RL 49.8		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics	Result <49.8 sel Range Organia	Qualifier Unics (DRO) Qualifier	RL 49.8	mg/Kg	_ =	<u> </u>	11/03/22 13:10	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.8 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U *-	RL 49.8 (GC)	mg/Kg	_ =	Prepared	11/03/22 13:10 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.8 sel Range Orga Result <49.8	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.8 (GC) RL 49.8	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49	11/03/22 13:10 Analyzed 11/02/22 15:48	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.8 sel Range Orga Result <49.8 <49.8	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.8 (GC) RL 49.8 49.8	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49 11/02/22 08:49	11/03/22 13:10 Analyzed 11/02/22 15:48 11/02/22 15:48	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.8	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.8 (GC) RL 49.8 49.8	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49	Analyzed 11/02/22 15:48 11/02/22 15:48	Dil Face
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.8	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.8 (GC) RL 49.8 49.8 49.8 Limits	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared	Analyzed 11/02/22 15:48 11/02/22 15:48 11/02/22 15:48 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.8	Qualifier U nics (DRO) Qualifier U*- U*- U Qualifier	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared 11/02/22 08:49	Analyzed 11/02/22 15:48 11/02/22 15:48 11/02/22 15:48 Analyzed 11/02/22 15:48	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die 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 <49.8	Qualifier U nics (DRO) Qualifier U*- U*- U Qualifier	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg	_ =	Prepared 11/02/22 08:49 11/02/22 08:49 11/02/22 08:49 Prepared 11/02/22 08:49	Analyzed 11/02/22 15:48 11/02/22 15:48 11/02/22 15:48 Analyzed 11/02/22 15:48	Dil Face Dil Face 1 Dil Face

Client Sample ID: PH06A Lab Sample ID: 890-3339-7

Date Collected: 10/31/22 13:15 Date Received: 10/31/22 15:54

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/02/22 10:00	11/02/22 13:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/02/22 10:00	11/02/22 13:51	1

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Matrix: Solid

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11/2/2022

Lab Sample ID: 890-3339-7

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH06A

Date Collected: 10/31/22 13:15 Date Received: 10/31/22 15:54

Sample Depth: 2'

Method: SW846 8021B	 Volatile Organic 	Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100	70 - 130	11/02/22 10:00	11/02/22 13:51	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			11/02/22 14:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/03/22 13:10	1

Method: SW846 8015B	NM - Diesel Rand	ge Organics	(DRO)	(GC)
Michiga. Offord out ob	INN - Dieser Rang	ge Organics	(DIXO)	(00)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		11/02/22 08:49	11/02/22 16:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8	mg/Kg		11/02/22 08:49	11/02/22 16:10	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/02/22 08:49	11/02/22 16:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89	70 - 130	11/02/22 08:49	11/02/22 16:10	1
o-Terphenyl	87	70 - 130	11/02/22 08:49	11/02/22 16:10	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5860	49.8	mg/Kg		_	11/02/22 15:55	10

Client Sample ID: PH06B

Date Collected: 10/31/22 13:25

Lab Sample ID: 890-3339-8

Matrix: Solid

Date Collected: 10/31/22 13:25 Date Received: 10/31/22 15:54

Sample Depth: 8'

Method: SW846	ROSTR Vols	tilo Organic	Compounde /	CCI
I WELLIOU. SYVON	1 002 ID - VUIA	lile Oruanic	CUIIIDUUIIUS I	901

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0796		0.00199	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
Toluene	0.0146		0.00199	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/02/22 10:00	11/02/22 14:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			11/02/22 10:00	11/02/22 14:12	1
1,4-Difluorobenzene (Surr)	107		70 - 130			11/02/22 10:00	11/02/22 14:12	1

Mothod: TAI	SOP Total RTFY	Total RTFX Calculation

Analyte		Qualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0942	0.00398	mg/Kg			11/02/22 14:43	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC	Method:	: SW846 8015 N	M - Diesel R	ange Ord	ianics (DRO)	(GC
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/03/22 13:10	1

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Lab Sample ID: 890-3339-8

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH06B

Date Collected: 10/31/22 13:25 Date Received: 10/31/22 15:54

Sample Depth: 8'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *-	49.9	mg/Kg		11/02/22 08:49	11/02/22 16:32	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U *-	49.9	mg/Kg		11/02/22 08:49	11/02/22 16:32	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/02/22 08:49	11/02/22 16:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			11/02/22 08:49	11/02/22 16:32	1
o-Terphenyl	76		70 - 130			11/02/22 08:49	11/02/22 16:32	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - S	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: PH06C

Date Collected: 10/31/22 13:50

Lab Sample ID: 890-3339-9

Matrix: Solid

Date Collected: 10/31/22 13:50 Date Received: 10/31/22 15:54

Date Received: 10/01/22 10:

Sample Depth: 18'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00464		0.00199	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
Toluene	0.00352		0.00199	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
m-Xylene & p-Xylene	0.00403		0.00398	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
o-Xylene	0.00271		0.00199	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
Xylenes, Total	0.00674		0.00398	mg/Kg		11/02/22 11:00	11/02/22 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			11/02/22 11:00	11/02/22 14:32	1
1,4-Difluorobenzene (Surr)	115		70 - 130			11/02/22 11:00	11/02/22 14:32	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0149		0.00398	mg/Kg			11/02/22 15:00	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/03/22 13:10	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 16:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0	mg/Kg		11/02/22 08:49	11/02/22 16:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 16:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			11/02/22 08:49	11/02/22 16:54	1

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Client Sample Results

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

Client Sample ID: PH06C Lab Sample ID: 890-3339-9

Date Collected: 10/31/22 13:50

Date Received: 10/31/22 15:54

Matrix: Solid

Sample Depth: 18'

Method: MCAWW 300.0 - Anions, I	on Chromatography - Sol	luble					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5660	49.5	mg/Kg			11/02/22 16:05	10

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Surrogate Summary

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

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)	
890-3319-A-1-F MS	Matrix Spike	94	106	
890-3319-A-1-G MSD	Matrix Spike Duplicate	99	108	
890-3339-1	PH04A	100	97	
890-3339-2	PH04B	101	99	
890-3339-3	PH04C	103	101	
890-3339-4	PH05A	97	97	
890-3339-5	PH05B	96	90	
890-3339-6	PH05C	98	98	
890-3339-7	PH06A	101	100	
890-3339-8	PH06B	100	107	
890-3339-9	PH06C	116	115	
LCS 880-38415/1-A	Lab Control Sample	91	105	
LCSD 880-38415/2-A	Lab Control Sample Dup	93	110	
MB 880-38415/5-A	Method Blank	85	94	
Surrogate Legend				

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)	
880-21004-A-1-C MS	Matrix Spike	78	65 S1-	
880-21004-A-1-D MSD	Matrix Spike Duplicate	69 S1-	56 S1-	
890-3339-1	PH04A	72	72	
890-3339-2	PH04B	82	80	
890-3339-3	PH04C	76	77	
890-3339-4	PH05A	87	83	
890-3339-5	PH05B	73	74	
890-3339-6	PH05C	74	73	
890-3339-7	PH06A	89	87	
890-3339-8	PH06B	74	76	
890-3339-9	PH06C	75	74	
LCS 880-38447/2-A	Lab Control Sample	75	75	
LCSD 880-38447/3-A	Lab Control Sample Dup	84	85	
MB 880-38447/1-A	Method Blank	75	75	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3339-1 Project/Site: MCA145 SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38415/5-A

Matrix: Solid Analysis Batch: 38442 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38415

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/22 15:07	11/02/22 10:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 15:07	11/02/22 10:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 15:07	11/02/22 10:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/22 15:07	11/02/22 10:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 15:07	11/02/22 10:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/22 15:07	11/02/22 10:53	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85	70 - 130	11/01/22 15:07	11/02/22 10:53	1
1,4-Difluorobenzene (Surr)	94	70 - 130	11/01/22 15:07	11/02/22 10:53	1

Lab Sample ID: LCS 880-38415/1-A

Matrix: Solid

Analysis Batch: 38442

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38415

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1004		mg/Kg		100	70 - 130	
Toluene	0.100	0.08754		mg/Kg		88	70 - 130	
Ethylbenzene	0.100	0.08210		mg/Kg		82	70 - 130	
m-Xylene & p-Xylene	0.200	0.1676		mg/Kg		84	70 - 130	
o-Xylene	0.100	0.08632		mg/Kg		86	70 - 130	

LCS LCS

Surrogate	%Recovery Qual	lifier Limits
4-Bromofluorobenzene (Surr)	91	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: LCSD 880-38415/2-A

Matrix: Solid

Analysis Batch: 38442

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38415

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1038 mg/Kg 104 70 - 130 3 35 Toluene 0.100 0.08958 mg/Kg 90 70 - 130 2 35 Ethylbenzene 0.100 0.08377 mg/Kg 84 70 - 130 35 m-Xylene & p-Xylene 0.200 0.1698 mg/Kg 85 70 - 130 35 0.100 0.08507 85 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1.4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 890-3319-A-1-F MS

Matrix: Solid

Analysis Batch: 38442

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

Prep Batch: 38415

MS MS Sample Sample Spike Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits <0.00202 U 0.0998 0.09552 96 Benzene mg/Kg 70 - 130 Toluene <0.00202 U 0.0998 0.08259 mg/Kg 82 70 - 130

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Prep Batch: 38415

QC Sample Results

Job ID: 890-3339-1 Client: Ensolum Project/Site: MCA145 SDG: 03D2057027

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

Lab Sample ID: 890-3319-A-1-F MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 38442

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Ethylbenzene <0.00202 U 0.0998 0.07590 76 70 - 130 mg/Kg m-Xylene & p-Xylene < 0.00403 0.200 0.1548 mg/Kg 78 70 - 130 0.07740 <0.00202 U 0.0998 78 70 - 130 o-Xylene mg/Kg

MS MS

Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 94 1,4-Difluorobenzene (Surr) 106 70 - 130

Lab Sample ID: 890-3319-A-1-G MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 38442

Prep Batch: 38415 Sample Sample Spike MSD MSD RPD Result Qualifier Added %Rec RPD Limit Analyte Result Qualifier Limits Unit Benzene <0.00202 U 0.0990 0.09441 mg/Kg 95 70 - 130 35 Toluene <0.00202 0.0990 0.07862 mg/Kg 79 70 - 130 5 35 Ethylbenzene <0.00202 0.0990 0.07386 75 70 - 130 35 U mg/Kg 3 35 m-Xylene & p-Xylene <0.00403 U 0.198 0.1485 mg/Kg 75 70 - 130 <0.00202 U 0.0990 0.07377 75 70 - 130 o-Xylene mg/Kg 5

MSD MSD

Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 99 1,4-Difluorobenzene (Surr) 108 70 - 130

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

Lab Sample ID: MB 880-38447/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38456

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 09:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 09:58	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/02/22 08:49	11/02/22 09:58	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	11/02/22 08:49	11/02/22 09:58	1
o-Terphenyl	75		70 - 130	11/02/22 08:49	11/02/22 09:58	1

Lab Sample ID: LCS 880-38447/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 38456							Prep I	Batch: 38447
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	661.5	*-	mg/Kg		66	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	663.7	*-	mg/Kg		66	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Prep Batch: 38447

Job ID: 890-3339-1

SDG: 03D2057027

Client: Ensolum Project/Site: MCA145

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

Lab Sample ID: LCS 880-38447/2-A

Matrix: Solid

Analysis Batch: 38456

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38447

urrogate	%Recovery	Qualifier

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	75		70 - 130

LCS LCS

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38447

Lab Sample ID: LCSD 880-38447/3-A

Matrix: Solid

Analysis Batch: 38456

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	717.0		mg/Kg		72	70 - 130	8	20
Diesel Range Organics (Over	1000	732.8		mg/Kg		73	70 - 130	10	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: 880-21004-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 38456

Prep Type: Total/NA Prep Batch: 38447 Spike MS MS

Prep Batch: 38447

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *- F1	997	738.2		mg/Kg		74	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U *- F1	997	730.4		mg/Kg		73	70 - 130	

	MS	MS			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	78		70 - 130		
o-Terphenyl	65	S1-	70 - 130		

Lab Sample ID: 880-21004-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38456

Spike MSD MSD RPD Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics <50.0 U *- F1 999 685.3 F1 69 20 mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U*-F1 999 631.8 F1 mg/Kg 63 70 - 130 20

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	56	S1-	70 - 130

Job ID: 890-3339-1

SDG: 03D2057027

Prep Type: Soluble

Client Sample ID: PH04A

Prep Type: Soluble

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38445/1-A

Matrix: Solid

Analysis Batch: 38533

Client: Ensolum

Project/Site: MCA145

MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/02/22 14:50

Lab Sample ID: LCS 880-38445/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38533

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 257.8 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38445/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38533

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 257.2 103 mg/Kg 90 - 110

Lab Sample ID: 890-3339-1 MS Client Sample ID: PH04A **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38533

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 12300 5000 Chloride 18240 F1 119 90 - 110 mg/Kg

Lab Sample ID: 890-3339-1 MSD

Matrix: Solid

Analysis Batch: 38533

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 12300 F1 5000 18050 F1 mg/Kg 115 90 - 110 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

GC VOA

Prep Batch: 38415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	5035	
890-3339-2	PH04B	Total/NA	Solid	5035	
890-3339-3	PH04C	Total/NA	Solid	5035	
890-3339-4	PH05A	Total/NA	Solid	5035	
890-3339-5	PH05B	Total/NA	Solid	5035	
890-3339-6	PH05C	Total/NA	Solid	5035	
890-3339-7	PH06A	Total/NA	Solid	5035	
890-3339-8	PH06B	Total/NA	Solid	5035	
890-3339-9	PH06C	Total/NA	Solid	5035	
MB 880-38415/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38415/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38415/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3319-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-3319-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	8021B	38415
890-3339-2	PH04B	Total/NA	Solid	8021B	38415
890-3339-3	PH04C	Total/NA	Solid	8021B	38415
890-3339-4	PH05A	Total/NA	Solid	8021B	38415
890-3339-5	PH05B	Total/NA	Solid	8021B	38415
890-3339-6	PH05C	Total/NA	Solid	8021B	38415
890-3339-7	PH06A	Total/NA	Solid	8021B	38415
890-3339-8	PH06B	Total/NA	Solid	8021B	38415
890-3339-9	PH06C	Total/NA	Solid	8021B	38415
MB 880-38415/5-A	Method Blank	Total/NA	Solid	8021B	38415
LCS 880-38415/1-A	Lab Control Sample	Total/NA	Solid	8021B	38415
LCSD 880-38415/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38415
890-3319-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	38415
890-3319-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38415

Analysis Batch: 38518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	Total BTEX	
890-3339-2	PH04B	Total/NA	Solid	Total BTEX	
890-3339-3	PH04C	Total/NA	Solid	Total BTEX	
890-3339-4	PH05A	Total/NA	Solid	Total BTEX	
890-3339-5	PH05B	Total/NA	Solid	Total BTEX	
890-3339-6	PH05C	Total/NA	Solid	Total BTEX	
890-3339-7	PH06A	Total/NA	Solid	Total BTEX	
890-3339-8	PH06B	Total/NA	Solid	Total BTEX	
890-3339-9	PH06C	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 38447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	8015NM Prep	
890-3339-2	PH04B	Total/NA	Solid	8015NM Prep	
890-3339-3	PH04C	Total/NA	Solid	8015NM Prep	

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Page 18 of 29

QC Association Summary

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

GC Semi VOA (Continued)

Prep Batch: 38447 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-4	PH05A	Total/NA	Solid	8015NM Prep	
890-3339-5	PH05B	Total/NA	Solid	8015NM Prep	
890-3339-6	PH05C	Total/NA	Solid	8015NM Prep	
890-3339-7	PH06A	Total/NA	Solid	8015NM Prep	
890-3339-8	PH06B	Total/NA	Solid	8015NM Prep	
890-3339-9	PH06C	Total/NA	Solid	8015NM Prep	
MB 880-38447/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38447/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38447/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21004-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21004-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	8015B NM	38447
890-3339-2	PH04B	Total/NA	Solid	8015B NM	38447
890-3339-3	PH04C	Total/NA	Solid	8015B NM	38447
890-3339-4	PH05A	Total/NA	Solid	8015B NM	38447
890-3339-5	PH05B	Total/NA	Solid	8015B NM	38447
890-3339-6	PH05C	Total/NA	Solid	8015B NM	38447
890-3339-7	PH06A	Total/NA	Solid	8015B NM	38447
890-3339-8	PH06B	Total/NA	Solid	8015B NM	38447
890-3339-9	PH06C	Total/NA	Solid	8015B NM	38447
MB 880-38447/1-A	Method Blank	Total/NA	Solid	8015B NM	38447
LCS 880-38447/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38447
LCSD 880-38447/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38447
880-21004-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38447
880-21004-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38447

Analysis Batch: 38633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Total/NA	Solid	8015 NM	
890-3339-2	PH04B	Total/NA	Solid	8015 NM	
890-3339-3	PH04C	Total/NA	Solid	8015 NM	
890-3339-4	PH05A	Total/NA	Solid	8015 NM	
890-3339-5	PH05B	Total/NA	Solid	8015 NM	
390-3339-6	PH05C	Total/NA	Solid	8015 NM	
390-3339-7	PH06A	Total/NA	Solid	8015 NM	
890-3339-8	PH06B	Total/NA	Solid	8015 NM	
890-3339-9	PH06C	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Soluble	Solid	DI Leach	
890-3339-2	PH04B	Soluble	Solid	DI Leach	
890-3339-3	PH04C	Soluble	Solid	DI Leach	
890-3339-4	PH05A	Soluble	Solid	DI Leach	
890-3339-5	PH05B	Soluble	Solid	DI Leach	
890-3339-6	PH05C	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

HPLC/IC (Continued)

Leach Batch: 38445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-7	PH06A	Soluble	Solid	DI Leach	
890-3339-8	PH06B	Soluble	Solid	DI Leach	
890-3339-9	PH06C	Soluble	Solid	DI Leach	
MB 880-38445/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38445/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38445/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3339-1 MS	PH04A	Soluble	Solid	DI Leach	
890-3339-1 MSD	PH04A	Soluble	Solid	DI Leach	

Analysis Batch: 38533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3339-1	PH04A	Soluble	Solid	300.0	38445
890-3339-2	PH04B	Soluble	Solid	300.0	38445
890-3339-3	PH04C	Soluble	Solid	300.0	38445
890-3339-4	PH05A	Soluble	Solid	300.0	38445
890-3339-5	PH05B	Soluble	Solid	300.0	38445
890-3339-6	PH05C	Soluble	Solid	300.0	38445
890-3339-7	PH06A	Soluble	Solid	300.0	38445
890-3339-8	PH06B	Soluble	Solid	300.0	38445
890-3339-9	PH06C	Soluble	Solid	300.0	38445
MB 880-38445/1-A	Method Blank	Soluble	Solid	300.0	38445
LCS 880-38445/2-A	Lab Control Sample	Soluble	Solid	300.0	38445
LCSD 880-38445/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38445
890-3339-1 MS	PH04A	Soluble	Solid	300.0	38445
890-3339-1 MSD	PH04A	Soluble	Solid	300.0	38445

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Job ID: 890-3339-1 SDG: 03D2057027

Project/Site: MCA145 Client Sample ID: PH04A

Client: Ensolum

Lab Sample ID: 890-3339-1

Date Collected: 10/31/22 09:45 Date Received: 10/31/22 15:54 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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 11:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 13:59	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		20			38533	11/02/22 15:05	CH	EET MID

Lab Sample ID: 890-3339-2

Lab Sample ID: 890-3339-3

Matrix: Solid

Matrix: Solid

Date Collected: 10/31/22 10:00 Date Received: 10/31/22 15:54

Client Sample ID: PH04B

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 12:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 14:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		10			38533	11/02/22 15:20	CH	EET MID

Client Sample ID: PH04C

Date Collected: 10/31/22 10:50 Date Received: 10/31/22 15:54

_	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 12:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 14:43	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		20			38533	11/02/22 15:25	CH	EET MID

Client Sample ID: PH05A Lab Sample ID: 890-3339-4 Date Collected: 10/31/22 12:25 **Matrix: Solid**

Date Received: 10/31/22 15:54

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 12:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID

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Page 21 of 29

Client: Ensolum Job ID: 890-3339-1 Project/Site: MCA145 SDG: 03D2057027

Client Sample ID: PH05A

Lab Sample ID: 890-3339-4

Date Collected: 10/31/22 12:25 Date Received: 10/31/22 15:54 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			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 15:04	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38445	11/02/22 08:07	CH	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 15:30	CH	EET MID

Lab Sample ID: 890-3339-5

Matrix: Solid

Date Collected: 10/31/22 12:45 Date Received: 10/31/22 15:54

Client Sample ID: PH05B

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 13:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 15:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 15:35	CH	EET MID

Client Sample ID: PH05C Lab Sample ID: 890-3339-6 Date Collected: 10/31/22 12:50

Matrix: Solid

Date Received: 10/31/22 15:54

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 13:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 15:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38445	11/02/22 08:07	CH	EET MID
Soluble	Analysis	300.0		1			38533	11/02/22 15:50	CH	EET MID

Client Sample ID: PH06A Lab Sample ID: 890-3339-7

Date Collected: 10/31/22 13:15 Date Received: 10/31/22 15:54

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 13:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.04 g 1 uL	10 mL 1 uL	38447 38456	11/02/22 08:49 11/02/22 16:10	DM SM	EET MID EET MID

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Matrix: Solid

Job ID: 890-3339-1

Client: Ensolum Project/Site: MCA145 SDG: 03D2057027

Client Sample ID: PH06A

Date Collected: 10/31/22 13:15 Date Received: 10/31/22 15:54 Lab Sample ID: 890-3339-7

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			5.02 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		10			38533	11/02/22 15:55	CH	EET MID

Client Sample ID: PH06B Lab Sample ID: 890-3339-8 **Matrix: Solid**

Date Collected: 10/31/22 13:25 Date Received: 10/31/22 15:54

	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	38415	11/02/22 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 14:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 14:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 16:32	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		20			38533	11/02/22 16:00	CH	EET MID

Client Sample ID: PH06C Lab Sample ID: 890-3339-9

Date Collected: 10/31/22 13:50

Date Received: 10/31/22 15:54

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	38415	11/02/22 11:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38442	11/02/22 14:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38518	11/02/22 15:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			38633	11/03/22 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38447	11/02/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38456	11/02/22 16:54	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38445	11/02/22 08:07	СН	EET MID
Soluble	Analysis	300.0		10			38533	11/02/22 16:05	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: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

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, 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	, , ,	

Method Summary

 Client: Ensolum
 Job ID: 890-3339-1

 Project/Site: MCA145
 SDG: 03D2057027

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: MCA145

SDG: 03D2057027

Job ID: 890-3339-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3339-1	PH04A	Solid	10/31/22 09:45	10/31/22 15:54	3'
890-3339-2	PH04B	Solid	10/31/22 10:00	10/31/22 15:54	8'
890-3339-3	PH04C	Solid	10/31/22 10:50	10/31/22 15:54	18'
890-3339-4	PH05A	Solid	10/31/22 12:25	10/31/22 15:54	2'
890-3339-5	PH05B	Solid	10/31/22 12:45	10/31/22 15:54	6'
890-3339-6	PH05C	Solid	10/31/22 12:50	10/31/22 15:54	8'
890-3339-7	PH06A	Solid	10/31/22 13:15	10/31/22 15:54	2'
890-3339-8	PH06B	Solid	10/31/22 13:25	10/31/22 15:54	8'
890-3339-9	PH06C	Solid	10/31/22 13:50	10/31/22 15:54	18'

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Chain of Custody

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Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	e	Received by: (Signature)	Rec	y: (Signature)	Relinquished by: (Signature)
	otlated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	urofins Xenco, its affiliates and senses incurred by the client if o Eurofins Xenco, but not anal	ter from client company to E onsibility for any losses or ext for each sample submitted to	stitutes a valid purchase orders any responsitions any responsitions are strained as the strain as t	ment of samples con ne cost of samples and will be applied to each	xcument and relinquish will be liable only for th num charge of \$85.00 v	e: Signature of this di vice. Eurofins Xenco rofins Xenco. A minir
7471	Ni K Se Ag SiO ₂ Na Sr Tl Sn U V Zn Hg: 1631 / 245.1 / 7470 / 7471	3 Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Al Sb As Ba Be B Cd LRA Sb As Ba Be Cd (13PPM Texas 11 Al Sb As Ba Be ETCLP/SPLP6010: 8RCRA Sb As Ba Be	8RCRA 13PPM d TCLP/SPLP	200.8 / 6020: tal(s) to be analyze	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 rcle Method(s) ar
			4	18. 6	D-31-72 1550	U		PHOLOC
			1/1/1/1	8' 6 1	0-31-22 1325	50103		P#068
			1 1/1 1/1	2' 6 1	1315			PHD6 A
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			V V	6. 6. 1	10-31-22 1245			9405 B
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			V V V	8, 9	0342 1000			2H048
			V/ V/ Y	(V)	05H2 0945	S		HPOHC
Sample Comments	Sarr		1	Depth Comp Cont	Date Time Sampled Sampled	Matrix Sar	ntification	Sample Identification
NaOH+Ascorbic Acid: SAPC	NaOH+As	890-3339 Chain of Custouy	P T よ	3.8	Corrected Temperature:	Con		Total Containers:
Zn Acetate+NaOH: Zn	Zn Acetat		IH X	3,6	Temperature Reading:	N/A	ls: Yes No	Sample Custody Seals:
: NaSO 3	Na ₂ S ₂ O ₃ : NaSO ₃			0.0	Correction Factor:	*	s: Yes No	Cooler Custody Seals:
NABIS	NaHSO ₄: NABIS			TAM-DD7	Thermometer ID:	No	tact:	Samples Received Intact:
IP	H ₃ PO ₄ : HP		neter	No (See	No Wet Ice:	Temp Blank:		SAMPLE RECEIPT
NaOH: Na	H ₂ 50 ₄ :H ₂		-		the lab, if rec			PO #:
NH: ONH	HCL: HC			day received by	*	no Fale	An ilan	Sampler's Name:
MeOH: Me	Cool: Cool			24 hr.	Due Date:	50582-105.11867	32.60%	Project Location:
O DI Water: H ₂ O	None: NO		e v	Rush Code	Routine	2057027	S CO	Project Number:
Preservative Codes	Pres	ANALYSIS REQUEST	(Turn Around	Turn	な	Mea ins	Project Name:
Other:	EDD ADaPT	Deliverables:	nas a) enso	Wenn	S Email:	83-250	317-16	Phone:
TRRP Level IV	Reporting: Level III Level III PST/UST TRRP	Reporting		City, State ZIP:	JAS236 (and, NM	Carlsbac	City, State ZIP:
]	roject:	State of Project:		Address:	Y75 Husy	Jati Pour	3122 N	Address:
] RRC Superfund	UST/PST PRPB Brownfields	Program:		Company Name:	(%	11. M	Ensolum	Company Name:
	Work Order Comments		a.a.	Bill to: (if different)	5	DUMPA	Malei	Project Manager:
of	www.xenco.com Page	, NM (575) 988-3199	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	Hobbs, NA				
		, TX (806) 794-1296	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	EL Paso, T)		Xenco		
	Work Order No:	nio, TX (210) 509-3334	Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334	Midland, TX	Environment Testing	Environme		

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3339-1 SDG Number: 03D2057027

Login Number: 3339 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3339-1

SDG Number: 03D2057027

Login Number: 3339 **List Source: Eurofins Midland** List Number: 2 List Creation: 11/02/22 01:09 PM

Creator: Teel, Brianna

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

<6mm (1/4").



Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3396-1

Laboratory Sample Delivery Group: 03D2057027

Client Project/Site: MCA 145

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/9/2022 4:48:17 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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

Client: Ensolum
Project/Site: MCA 145
Laboratory Job ID: 890-3396-1
SDG: 03D2057027

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	21

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Definitions/Glossary

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

037027

Qualifiers

GC VOA
Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

H Sample was prepped or analyzed beyond the specified holding time

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

H Sample was prepped or analyzed beyond the specified holding time

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit

CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

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Case Narrative

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

Job ID: 890-3396-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3396-1

Receipt

The samples were received on 11/4/2022 1:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3396-1), PH01 (890-3396-2) and PH01 (890-3396-3).

The following samples were received outside of holding time for TPH and BTEX: PH01 (890-3396-1), PH01 (890-3396-2) and PH01 (890-3396-3).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-38877 and analytical batch 880-38808 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The following samples were received outside of holding time: PH01 (890-3396-1), PH01 (890-3396-2) and PH01 (890-3396-3).

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 following samples were received outside of holding time: PH01 (890-3396-1), PH01 (890-3396-2) and PH01 (890-3396-3).

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.

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Lab Sample ID: 890-3396-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

Client Sample ID: PH01

Date Collected: 10/21/22 10:30 Date Received: 11/04/22 13:10

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
Toluene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
Ethylbenzene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
m-Xylene & p-Xylene	<0.00402	UH	0.00402	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
o-Xylene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
Xylenes, Total	<0.00402	UH	0.00402	mg/Kg		11/07/22 12:36	11/08/22 03:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/07/22 12:36	11/08/22 03:55	1
1,4-Difluorobenzene (Surr)	89		70 - 130			11/07/22 12:36	11/08/22 03:55	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/08/22 13:53	1
			GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH			•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/08/22 11:48	
	<50.0	U	50.0		<u>D</u>	Prepared		
Total TPH	<50.0	U	50.0		<u>D</u> 	Prepared Prepared		1
Total TPH Method: SW846 8015B NM - Dies	<50.0 sel Range Orga Result	nics (DRO) Qualifier	RL 50.0	mg/Kg	<u> </u>	<u> </u>	11/08/22 11:48	1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	<50.0 sel Range Orga Result	Unics (DRO) Qualifier UH	RL 50.0 (GC)	mg/Kg	<u> </u>	Prepared	11/08/22 11:48 Analyzed	1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 sel Range Orga Result <50.0	nics (DRO) Qualifier UH	(GC) RL 50.0	mg/Kg Unit mg/Kg	<u> </u>	Prepared 11/07/22 09:04	11/08/22 11:48 Analyzed 11/07/22 17:56	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 sel Range Orga Result <50.0 <50.0	nics (DRO) Qualifier UH	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 11/07/22 09:04 11/07/22 09:04	11/08/22 11:48 Analyzed 11/07/22 17:56 11/07/22 17:56	1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 sel Range Orga Result <50.0 <50.0 <50.0	Onics (DRO) Qualifier UH UH	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 11/07/22 09:04 11/07/22 09:04 11/07/22 09:04	Analyzed 11/07/22 17:56 11/07/22 17:56	1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0 sel Range Orga Result <50.0 <50.0 <50.0 %Recovery	Onics (DRO) Qualifier UH UH	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 11/07/22 09:04 11/07/22 09:04 11/07/22 09:04 Prepared	Analyzed 11/07/22 17:56 11/07/22 17:56 11/07/22 17:56 Analyzed	Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 sel Range Orga Result <50.0 <50.0 <50.0 %Recovery 91 88	Onics (DRO) Qualifier UH UH UH Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 11/07/22 09:04 11/07/22 09:04 11/07/22 09:04 Prepared 11/07/22 09:04	Analyzed 11/07/22 17:56 11/07/22 17:56 Analyzed 11/07/22 17:56	1 Dil Fac 1 1 1 1 Dil Fac
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 sel Range Orga Result <50.0 <50.0 <50.0 %Recovery 91 88 s, Ion Chromato	Onics (DRO) Qualifier UH UH UH Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	<u> </u>	Prepared 11/07/22 09:04 11/07/22 09:04 11/07/22 09:04 Prepared 11/07/22 09:04	Analyzed 11/07/22 17:56 11/07/22 17:56 Analyzed 11/07/22 17:56	Dil Fac 1 Dil Fac 1 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: PH01

Date Collected: 10/21/22 10:35

Lab Sample ID: 890-3396-2

Matrix: Solid

Date Received: 11/04/22 13:10

Sample Depth: 10

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
Toluene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
Ethylbenzene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
m-Xylene & p-Xylene	<0.00402	UH	0.00402	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
o-Xylene	<0.00201	UH	0.00201	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
Xylenes, Total	<0.00402	UH	0.00402	mg/Kg		11/07/22 12:36	11/08/22 04:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			11/07/22 12:36	11/08/22 04:15	

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Lab Sample ID: 890-3396-2

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

Client Sample ID: PH01

Date Collected: 10/21/22 10:35 Date Received: 11/04/22 13:10

Sample Depth: 10

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88	70 - 130	11/07/22 12:36	11/08/22 04:15	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			11/08/22 13:53	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			11/08/22 11:48	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:18	1
Diesel Range Organics (Over C10-C28)	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:18	1
OII Range Organics (Over C28-C36)	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115	70 - 130	11/07/22 09:04	11/07/22 18:18	1
o-Terphenyl	111	70 - 130	11/07/22 09:04	11/07/22 18:18	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6900	50.1	mg/Kg		_	11/09/22 15:37	10

Client Sample ID: PH01

Date Collected: 10/21/22 10:40

Lab Sample ID: 890-3396-3

Matrix: Solid

Date Collected: 10/21/22 10:40 Date Received: 11/04/22 13:10

Sample Depth: 18

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

			,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	UH	0.00200	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
Toluene	<0.00200	UH	0.00200	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
Ethylbenzene	<0.00200	UH	0.00200	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
m-Xylene & p-Xylene	<0.00399	UH	0.00399	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
o-Xylene	<0.00200	UH	0.00200	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
Xylenes, Total	<0.00399	UH	0.00399	mg/Kg		11/07/22 12:36	11/08/22 04:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			11/07/22 12:36	11/08/22 04:36	1
1,4-Difluorobenzene (Surr)	84		70 - 130			11/07/22 12:36	11/08/22 04:36	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	ma/Ka			11/08/22 13:53	

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg		_	11/08/22 11:48	1

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Lab Sample ID: 890-3396-3

Analyzed

11/09/22 15:42

Client Sample Results

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

Client Sample ID: PH01

Date Collected: 10/21/22 10:40 Date Received: 11/04/22 13:10

Sample Depth: 18

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:39	1
Diesel Range Organics (Over C10-C28)	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:39	1
Oll Range Organics (Over C28-C36)	<49.9	UH	49.9	mg/Kg		11/07/22 09:04	11/07/22 18:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			11/07/22 09:04	11/07/22 18:39	1
o-Terphenyl	84		70 - 130			11/07/22 09:04	11/07/22 18:39	1

RL

24.9

Unit

mg/Kg

D

Prepared

Result Qualifier

3350

9

11

Dil Fac

5

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Surrogate Summary

Client: Ensolum Job ID: 890-3396-1 Project/Site: MCA 145 SDG: 03D2057027

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)	
880-21188-A-1-H MS	Matrix Spike	97	89	
880-21188-A-1-I MSD	Matrix Spike Duplicate	117	129	
890-3396-1	PH01	101	89	
390-3396-2	PH01	106	88	
390-3396-3	PH01	105	84	
LCS 880-38877/1-A	Lab Control Sample	100	109	
_CSD 880-38877/2-A	Lab Control Sample Dup	97	104	
MB 880-38814/5-A	Method Blank	83	96	
MB 880-38877/5-A	Method Blank	86	93	
Surrogate Legend				

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)	
880-21167-A-1-D MS	Matrix Spike	97	77	
880-21167-A-1-E MSD	Matrix Spike Duplicate	81	74	
890-3396-1	PH01	91	88	
890-3396-2	PH01	115	111	
890-3396-3	PH01	88	84	
LCS 880-38817/2-A	Lab Control Sample	100	97	
LCSD 880-38817/3-A	Lab Control Sample Dup	100	100	
MB 880-38817/1-A	Method Blank	99	102	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3396-1 Project/Site: MCA 145 SDG: 03D2057027

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38814/5-A

Matrix: Solid

Analysis Batch: 38808

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38814

1

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/22 08:53	11/07/22 10:50	
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/22 08:53	11/07/22 10:50	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/22 08:53	11/07/22 10:50	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/22 08:53	11/07/22 10:50	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/22 08:53	11/07/22 10:50	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/22 08:53	11/07/22 10:50	

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83	70 - 130	11/07/22 08:53	11/07/22 10:50	1
1,4-Difluorobenzene (Surr)	96	70 - 130	11/07/22 08:53	11/07/22 10:50	1

Lab Sample ID: MB 880-38877/5-A

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38877

Analysis Batch: 38808 MR MR

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac 11/07/22 21:25 Benzene <0.00200 U 0.00200 mg/Kg 11/07/22 12:36 Toluene <0.00200 U 0.00200 mg/Kg 11/07/22 12:36 11/07/22 21:25 11/07/22 21:25 Ethylbenzene <0.00200 U 0.00200 mg/Kg 11/07/22 12:36 0.00400 11/07/22 12:36 11/07/22 21:25 m-Xylene & p-Xylene <0.00400 U mg/Kg <0.00200 U 0.00200 11/07/22 12:36 11/07/22 21:25 o-Xylene mg/Kg 11/07/22 12:36 Xylenes, Total <0.00400 U 0.00400 mg/Kg 11/07/22 21:25

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	11/07/22 12:36	11/07/22 21:25	1
1,4-Difluorobenzene (Surr)	93		70 - 130	11/07/22 12:36	11/07/22 21:25	1

Lab Sample ID: LCS 880-38877/1-A

Matrix: Solid

Analysis Batch: 38808

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38877

	Spike	LCS	LUS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09773		mg/Kg		98	70 - 130	
Toluene	0.100	0.08315		mg/Kg		83	70 - 130	
Ethylbenzene	0.100	0.08116		mg/Kg		81	70 - 130	
m-Xylene & p-Xylene	0.200	0.1641		mg/Kg		82	70 - 130	
o-Xylene	0.100	0.08211		mg/Kg		82	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	100	70 _ 130
1.4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-38877/2-A

Matrix: Solid

Analysis Batch: 38808

		Prep Type:	Total/NA
		Prep Batc	h: 38877
Spike	LCSD LCSD	%Rec	RPD

Analyte Added Result Qualifier Unit %Rec RPD Limit Limits Benzene 0.100 0.09422 mg/Kg 94 70 - 130 35

Client: Ensolum Job ID: 890-3396-1 Project/Site: MCA 145 SDG: 03D2057027

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

Lab Sample ID: LCSD 880-38877/2-A

Matrix: Solid Analysis Batch: 38808 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 38877

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.08135		mg/Kg		81	70 - 130	2	35
Ethylbenzene	0.100	0.07785		mg/Kg		78	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1583		mg/Kg		79	70 - 130	4	35
o-Xylene	0.100	0.07923		mg/Kg		79	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-21188-A-1-H MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 38808

Prep Batch: 38877

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.0998	0.06942		mg/Kg		70	70 - 130	
Toluene	<0.00200	U F1	0.0998	0.07384		mg/Kg		73	70 - 130	
Ethylbenzene	<0.00200	U F1	0.0998	0.08236		mg/Kg		83	70 - 130	
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1494		mg/Kg		75	70 - 130	
o-Xylene	<0.00200	U	0.0998	0.07315		mg/Kg		73	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	89	70 - 130

Lab Sample ID: 880-21188-A-1-I MSD

Matrix: Solid

Analysis Batch: 38808

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 38877

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.0990	0.06753	F1	mg/Kg		68	70 - 130	3	35
Toluene	<0.00200	U F1	0.0990	0.06338	F1	mg/Kg		64	70 - 130	15	35
Ethylbenzene	<0.00200	U F1	0.0990	0.06831	F1	mg/Kg		69	70 - 130	19	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1388		mg/Kg		70	70 - 130	7	35
o-Xylene	<0.00200	U	0.0990	0.07072		mg/Kg		71	70 - 130	3	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	129		70 - 130

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

Lab Sample ID: MB 880-38817/1-A

Matrix: Solid

Analysis Batch: 38798

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

Prep Batch: 38817

мв мв Result Qualifier Unit Prepared <50.0 U 50.0 mg/Kg 11/07/22 08:44 11/07/22 08:46 Gasoline Range Organics

(GRO)-C6-C10

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

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

Lab Sample ID: MB 880-38817/1-A

Matrix: Solid

Analysis Batch: 38798

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 38817

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/07/22 08:44	11/07/22 08:46	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/07/22 08:44	11/07/22 08:46	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			11/07/22 08:44	11/07/22 08:46	1
o-Terphenyl	102		70 - 130			11/07/22 08:44	11/07/22 08:46	1

Lab Sample ID: LCS 880-38817/2-A Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Prep Batch: 38817 **Analysis Batch: 38798** LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 815.6 82 70 - 130 mg/Kg (GRO)-C6-C10 1000 952.9 Diesel Range Organics (Over mg/Kg 95 70 - 130 C10-C28) LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 70 - 130 100 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-38817/3-A

Matrix: Solid

Analysis Batch: 38798

Spike

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 38817

Spike

LCSD LCSD

KRec

RPD

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	787.9		mg/Kg		79	70 - 130	3	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	973.0		mg/Kg		97	70 - 130	2	20
C10-C28)									

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

Lab Sample ID: 880-21167-A-1-D MS

Client Sample ID: Matrix Spike
Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 38798 Prep Batch: 38817

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	868.4		mg/Kg		85	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	997	916.7		mg/Kg		92	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 97
 70 - 130

 o-Terphenyl
 77
 70 - 130

Lab Sample ID: 880-21167-A-1-E MSD

Job ID: 890-3396-1 SDG: 03D2057027

Client: Ensolum Project/Site: MCA 145

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

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Total/NA

Prep Batch: 38817

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<50.0	U	999	895.3		mg/Kg		88	70 - 130	3	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<50.0	U	999	900.5		mg/Kg		90	70 - 130	2	20	
040,000)												

C10-C28)

Matrix: Solid

Analysis Batch: 38798

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	74		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38820/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 39046

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/09/22 14:38	1

Lab Sample ID: LCS 880-38820/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 39046

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	266.6	,	mg/Kg		107	90 - 110	

Lab Sample ID: LCSD 880-38820/3-A

Matrix: Solid

Analysis Batch: 39046

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	267.4		ma/Ka		107	90 - 110		20

Lab Sample ID: 880-21183-A-12-B MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 39046

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	10400		5000	15790		ma/Ka		108	90 - 110	

Lab Sample ID: 880-21183-A-12-C MSD

Matrix: Solid

Analysis Batch: 39046

Allalysis Datcil. 33040												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	10400		5000	15780		mg/Kg		108	90 - 110	0	20	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

GC VOA

Analysis Batch: 38808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	8021B	38877
890-3396-2	PH01	Total/NA	Solid	8021B	38877
890-3396-3	PH01	Total/NA	Solid	8021B	38877
MB 880-38814/5-A	Method Blank	Total/NA	Solid	8021B	38814
MB 880-38877/5-A	Method Blank	Total/NA	Solid	8021B	38877
LCS 880-38877/1-A	Lab Control Sample	Total/NA	Solid	8021B	38877
LCSD 880-38877/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38877
880-21188-A-1-H MS	Matrix Spike	Total/NA	Solid	8021B	38877
880-21188-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38877

Prep Batch: 38814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38814/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 38877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	5035	
890-3396-2	PH01	Total/NA	Solid	5035	
890-3396-3	PH01	Total/NA	Solid	5035	
MB 880-38877/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38877/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38877/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21188-A-1-H MS	Matrix Spike	Total/NA	Solid	5035	
880-21188-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 39011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	Total BTEX	
890-3396-2	PH01	Total/NA	Solid	Total BTEX	
890-3396-3	PH01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	8015B NM	38817
890-3396-2	PH01	Total/NA	Solid	8015B NM	38817
890-3396-3	PH01	Total/NA	Solid	8015B NM	38817
MB 880-38817/1-A	Method Blank	Total/NA	Solid	8015B NM	38817
LCS 880-38817/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38817
LCSD 880-38817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38817
880-21167-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38817
880-21167-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38817

Prep Batch: 38817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	8015NM Prep	
890-3396-2	PH01	Total/NA	Solid	8015NM Prep	
890-3396-3	PH01	Total/NA	Solid	8015NM Prep	
MB 880-38817/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38817/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

GC Semi VOA (Continued)

Prep Batch: 38817 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-38817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21167-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21167-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Total/NA	Solid	8015 NM	
890-3396-2	PH01	Total/NA	Solid	8015 NM	
890-3396-3	PH01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Soluble	Solid	DI Leach	_
890-3396-2	PH01	Soluble	Solid	DI Leach	
890-3396-3	PH01	Soluble	Solid	DI Leach	
MB 880-38820/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38820/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38820/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21183-A-12-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21183-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3396-1	PH01	Soluble	Solid	300.0	38820
890-3396-2	PH01	Soluble	Solid	300.0	38820
890-3396-3	PH01	Soluble	Solid	300.0	38820
MB 880-38820/1-A	Method Blank	Soluble	Solid	300.0	38820
LCS 880-38820/2-A	Lab Control Sample	Soluble	Solid	300.0	38820
LCSD 880-38820/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38820
880-21183-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	38820
880-21183-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38820

Job ID: 890-3396-1

Client: Ensolum Project/Site: MCA 145 SDG: 03D2057027

Client Sample ID: PH01 Lab Sample ID: 890-3396-1

Date Collected: 10/21/22 10:30 Matrix: Solid Date Received: 11/04/22 13:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38877	11/07/22 12:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38808	11/08/22 03:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39011	11/08/22 13:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38989	11/08/22 11:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38817	11/07/22 09:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38798	11/07/22 17:56	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	38820	11/07/22 09:28	СН	EET MID
Soluble	Analysis	300.0		5			39046	11/09/22 15:22	CH	EET MID

Client Sample ID: PH01 Lab Sample ID: 890-3396-2 Date Collected: 10/21/22 10:35 Matrix: Solid

Date Received: 11/04/22 13:10

	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	38877	11/07/22 12:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38808	11/08/22 04:15	MNR	EET MIC
Total/NA	Analysis	Total BTEX		1			39011	11/08/22 13:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38989	11/08/22 11:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38817	11/07/22 09:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38798	11/07/22 18:18	SM	EET MIC
Soluble	Leach	DI Leach			4.99 g	50 mL	38820	11/07/22 09:28	СН	EET MIC
Soluble	Analysis	300.0		10			39046	11/09/22 15:37	CH	EET MID

Client Sample ID: PH01 Lab Sample ID: 890-3396-3 Date Collected: 10/21/22 10:40

Date Received: 11/04/22 13:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38877	11/07/22 12:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38808	11/08/22 04:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39011	11/08/22 13:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38989	11/08/22 11:48	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38817	11/07/22 09:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38798	11/07/22 18:39	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38820	11/07/22 09:28	CH	EET MIC
Soluble	Analysis	300.0		5			39046	11/09/22 15:42	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Matrix: Solid

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

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 hi	it the laboratory is not certific	ed by the governing authority. This list ma	v include analytes for y
the agency does not of	' '	it the laboratory is not certify	ed by the governing additionty. This list me	ay illolude allalytes for v
0 ,	' '	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

 Client: Ensolum
 Job ID: 890-3396-1

 Project/Site: MCA 145
 SDG: 03D2057027

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: MCA 145 Job ID: 890-3396-1

SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	De
890-3396-1	PH01	Solid	10/21/22 10:30	11/04/22 13:10	1
890-3396-2	PH01	Solid	10/21/22 10:35	11/04/22 13:10	10
890-3396-3	PH01	Solid	10/21/22 10:40	11/04/22 13:10	18

Relinquished by: (Signature)

Received by: (Signature)

11818e.h.1

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020 2

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (9 Hobbs, NM (57 Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300

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	Work Order No:	
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State of Project:	Program: UST/PST PRP Brownfields RRC Superfund	Work Order Comments	www.xenco.com	Work Order No:
	RRC Superfund	ents	Page of	

Company Name:	Enso	Ensolum, LLC	0		Program: UST/PST PRP Brownfields RRC	Brownfields RRC Superfund
					C C C C.	_
	601 N	Marie	nfeld St	uite 400	State of Project:	
ZIP:	Midla	nd, TX	79701		Reporting: Level II Level III	PST/UST TRRP Level IV
s@ <u>en</u> solum	COM	ngree	en@ens	um com	Deliverables: EDD	ADaPT Other:
				ANALYSIS REC	QUEST	Preservative Codes
Code						None: NO DI Water: H ₂ O
						Cool: Cool MeOH: Me
ed by						
_	Т					H ₂ SO ₄ : H ₂ NaOH: Na
	.0)					H ₃ PO ₄ : HP
4	300	_		890-3396 Chain of		NaHSO ₄ : NABIS
L	PA:			COO-COO CHAIL OF	Cusiony	Na ₂ S ₂ O ₃ : NaSO ₃
	S (E		1	_	_	Zn Acetate+NaOH: Zn
Ľ	IDE	015)	802 ⁻			NaOH+Ascorbic Acid: SAPC
Grab/ # of Comp Cont		TPH (80	втех (Sample Comments
9 1	×	×	×			
ω 	×	×	×			
ω	×	×	×			
- 11		Ва	B	Ca Cr Co Cu Fe Pb	Mg Mn Mo Ni K Se A	Ag SiO ₂ Na Sr Tl Sn U V Zn
0: 8RCRA	Sb /	\s Ba	Re Co	Cr Co Cu Pb Mn Mo	TI U	Hg: 1631 / 245.1 / 7470 / 7471
Tex	City, State ZIP: Email: klennings@ensolun Turn Around Turn Around Pres. Address: City, State ZIP: City, State ZIP: City, State ZIP: Code Pres. Rush Code Pres. ANN Wet loe: Yes No D: You on tor: O O teading: O O perature: Grab/ # of Sampled Comp Cont 1030 1' g 1 1035 10' g 1 1040 18' g 1 CRA 13PPM Texas 11 AI: TCLP / SPLP 6010: 8RCRA	Parameters O # Parameters O G G G G G G G G G G G G G G G G G G	ACRA A A A A A A A A A A A A A A A A A A	Parameters A No b Parameters CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPE PARAMETERS A NO CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPA SO D NO CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPA SO D	Parameters A No b Parameters CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPE PARAMETERS A NO CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPA SO D NO CORPA SO D NO CORPE PARAMETERS CORPA SO D NO CORPA SO D	ANALYSIS REQUEST Code National Com National Com Reporting: Level II Level Level

Eurofins Carlsbad

1089 N Canal St. Carlsbad NM 88220 Phone. 575-988-3199 Fax 575-988-3199

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Chain of Custody Record

🔅 eurofins

Environment Testing

PH01 (890-3396-1) Project Name MCA 145 State Zip TX 79701 Deliverable Requested | II III IV Other (specify) vote: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the aboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes is a current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central. PH01 (890-3396-3) PH01 (890-3396-2) Sample Identification - Client ID (Lab ID) ossible Hazard Identification hone: 432-704-5440(Tel) Empty Kit Relinquished by Midland 1211 W Florida Ave Eurofins Environment Testing South Centre Shipping/Receiving Client Information (Sub Contract Lab) elinquished by elinquished by: elinquished by: Custody Seals Intact: Yes 8 Custody Seal No Project #: 89000094 Date/Time Date/Time Date/Time Primary Deliverable Rank Due Date Requested 11/10/2022 Phone TAT Requested (days) 10/21/22 10/21/22 0/21/22 Date Mountain 10 40 Mountain 10 35 Mountain Sample 10 30 (C=comp, G=grab) Sample Preservation Code: Type BT=Tissue, A=Al Company Company Matrix Solid Solid Solid Jessica Kramer@et.eurofinsus com Kramer Jessica Accreditations Required NELAP - Texas Ime Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Monte Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Received by 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks × × × × 8015MOD_Calc × × × 300_ORGFM_28D/DI_LEACH Chloride × × × 8021B/6035FP_Calc (MOD) BTEX Analysis Requested Total_BTEX_GCV × × × State of Origin: New Mexico Carrier Tracking No(s) Method of Shipment Date/Time Date/Time Date/Time Total Number of containers allin * A HCL
B NaOH
ROTE
C Zn Acelate
D Nitric Acid
E NaHSO4
F MoOH
G Amchior
H Ascorbic Acid
I loe
J Di Water
K EDTA
L EDA COC No 890-1011 1 Preservation Codes Page 1 of 1 90-3396-1 M Hexane
N None
O - AsNao2
P Na2O4S
Q Na2SO3
R Na2SO3
R Na2SO3
S - H2SO4
T TSP Dodecahydrate
U Acetone
V MCAA
V pH 4-5
V pH 4-5 Company Company Months other (specify) Any changes to buth Central LLC.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3396-1 SDG Number: 03D2057027

Login Number: 3396 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3396-1

 SDG Number: 03D2057027

SDG Number: 03D2057027

List Source: Eurofins Midland
List Number: 2
List Creation: 11/07/22 09:10 AM

Creator: Teel, Brianna

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

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<6mm (1/4").



Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3397-1

Laboratory Sample Delivery Group: 03D2057027

Client Project/Site: MCA 145

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/9/2022 4:48:17 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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

Client: Ensolum
Project/Site: MCA 145
Laboratory Job ID: 890-3397-1
SDG: 03D2057027

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	20

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13

Definitions/Glossary

Job ID: 890-3397-1 Client: Ensolum Project/Site: MCA 145 SDG: 03D2057027

Qualifiers

GC VOA

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. Н Sample was prepped or analyzed beyond the specified holding time Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description** Н Sample was prepped or analyzed beyond the specified holding time U Indicates the analyte was analyzed for but not detected.

HPLC/IC Qualifier

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

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit **CNF** Contains No Free Liquid

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE) EPA recommended "Maximum Contaminant Level" MCL

MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

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

Not Calculated

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

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

PRES Presumptive

QC

Quality Control RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum Job ID: 890-3397-1 Project/Site: MCA 145 SDG: 03D2057027

Job ID: 890-3397-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3397-1

Receipt

The samples were received on 11/4/2022 1:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

Receipt Exceptions

The following samples were received outside of holding time for TPH and BTEX: PH02 (890-3397-1) and PH02 (890-3397-2).

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3397-1) and PH02 (890-3397-2).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38855 and analytical batch 880-38810 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: The following samples were received outside of holding time: PH02 (890-3397-1) and PH02 (890-3397-2).

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 following samples were received outside of holding time: PH02 (890-3397-1) and PH02 (890-3397-2).

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.

Eurofins Carlsbad 11/9/2022

Lab Sample ID: 890-3397-1

 Client: Ensolum
 Job ID: 890-3397-1

 Project/Site: MCA 145
 SDG: 03D2057027

Client Sample ID: PH02

Date Collected: 10/21/22 12:35 Date Received: 11/04/22 13:10

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	UH	0.00198	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
Toluene	<0.00198	UH	0.00198	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
Ethylbenzene	<0.00198	UH	0.00198	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
m-Xylene & p-Xylene	< 0.00396	UH	0.00396	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
o-Xylene	<0.00198	UH	0.00198	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
Xylenes, Total	<0.00396	UH	0.00396	mg/Kg		11/07/22 11:02	11/07/22 22:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			11/07/22 11:02	11/07/22 22:44	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/07/22 11:02	11/07/22 22:44	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/08/22 13:40	1
Method: SW846 8015 NM - Diese	al Pango Organ	ics (DRO) ((3C)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/08/22 11:48	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	UH	50.0	mg/Kg		11/07/22 09:04	11/07/22 19:01	1
Diesel Range Organics (Over	<50.0	UH	50.0	mg/Kg		11/07/22 09:04	11/07/22 19:01	1
C10-C28)								
C10-C28) OII Range Organics (Over C28-C36)	<50.0	UH	50.0	mg/Kg		11/07/22 09:04	11/07/22 19:01	1
,	<50.0		50.0 <i>Limit</i> s	mg/Kg		11/07/22 09:04 Prepared	11/07/22 19:01 Analyzed	
OII Range Organics (Over C28-C36)				mg/Kg				
Oll Range Organics (Over C28-C36) Surrogate	%Recovery		Limits	mg/Kg		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	%Recovery 96 92	Qualifier	Limits 70 - 130 70 - 130	mg/Kg		Prepared 11/07/22 09:04	Analyzed 11/07/22 19:01	Dil Fac
Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	%Recovery 96 92 s, lon Chromato	Qualifier	Limits 70 - 130 70 - 130	mg/Kg Unit	D	Prepared 11/07/22 09:04	Analyzed 11/07/22 19:01	Dil Fac

Client Sample ID: PH02

Date Collected: 10/21/22 12:40 Date Received: 11/04/22 13:10

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	UH	0.00202	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
Toluene	0.00412	Н	0.00202	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
Ethylbenzene	<0.00202	UH	0.00202	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
m-Xylene & p-Xylene	<0.00403	UH	0.00403	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
o-Xylene	0.00215	Н	0.00202	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
Xylenes, Total	<0.00403	UH	0.00403	mg/Kg		11/07/22 11:02	11/07/22 23:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			11/07/22 11:02	11/07/22 23:05	1

Eurofins Carlsbad

Lab Sample ID: 890-3397-2

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Matrix: Solid

Lab Sample ID: 890-3397-2

11/09/22 15:52

Client Sample Results

 Client: Ensolum
 Job ID: 890-3397-1

 Project/Site: MCA 145
 SDG: 03D2057027

Client Sample ID: PH02

Date Collected: 10/21/22 12:40 Date Received: 11/04/22 13:10

Sample Depth: 4

Chloride

urrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Difluorobenzene (Surr)	103		70 - 130			11/07/22 11:02	11/07/22 23:05	1
lethod: TAL SOP Total BTEX -	Total BTEX Cald	ulation						
nalyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
otal BTEX	0.00627		0.00403	mg/Kg			11/08/22 13:40	1
lethod: SW846 8015 NM - Dies	el Range Organ	ics (DRO) (GC)					
nalyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
otal TPH	<50.0	U	50.0	mg/Kg			11/08/22 11:48	1
nalyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
lethod: SW846 8015B NM - Die	esel Range Orga	nics (DRO)	(GC)					
asoline Range Organics	<50.0	UH	50.0	mg/Kg		11/07/22 09:04	11/07/22 19:23	1
GRO)-C6-C10	<50.0		50.0	m = /// =		11/07/22 09:04	11/07/22 19:23	
iesel Range Organics (Over 10-C28)	\50.0	υп	50.0	mg/Kg		11/07/22 09.04	11/07/22 19.23	'
II Range Organics (Over C28-C36)	<50.0	UH	50.0	mg/Kg		11/07/22 09:04	11/07/22 19:23	1
urrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
-Chlorooctane	96		70 - 130			11/07/22 09:04	11/07/22 19:23	1
-Terphenyl	90		70 - 130			11/07/22 09:04	11/07/22 19:23	1

249

mg/Kg

16000

Surrogate Summary

Job ID: 890-3397-1 Client: Ensolum Project/Site: MCA 145 SDG: 03D2057027

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)	
890-3376-A-1-F MS	Matrix Spike	97	100	
890-3376-A-1-G MSD	Matrix Spike Duplicate	112	95	
890-3397-1	PH02	118	100	
890-3397-2	PH02	114	103	
LCS 880-38855/1-A	Lab Control Sample	108	93	
LCSD 880-38855/2-A	Lab Control Sample Dup	97	99	
MB 880-38855/5-A	Method Blank	84	101	

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 Rec
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21167-A-1-D MS	Matrix Spike	97	77	
880-21167-A-1-E MSD	Matrix Spike Duplicate	81	74	
890-3397-1	PH02	96	92	
890-3397-2	PH02	96	90	
LCS 880-38817/2-A	Lab Control Sample	100	97	
LCSD 880-38817/3-A	Lab Control Sample Dup	100	100	
MB 880-38817/1-A	Method Blank	99	102	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3397-1 SDG: 03D2057027 Project/Site: MCA 145

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38855/5-A

Matrix: Solid Analysis Batch: 38810 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38855

MB	MB
Decula	0

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/07/22 11:02	11/07/22 14:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/07/22 11:02	11/07/22 14:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/07/22 11:02	11/07/22 14:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/07/22 11:02	11/07/22 14:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/07/22 11:02	11/07/22 14:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/07/22 11:02	11/07/22 14:38	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84	70 - 130	11/07/22 11:02	11/07/22 14:38	1
1,4-Difluorobenzene (Surr)	101	70 ₋ 130	11/07/22 11:02	11/07/22 14:38	1

Lab Sample ID: LCS 880-38855/1-A

Matrix: Solid

Analysis Batch: 38810

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38855

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1042		mg/Kg		104	70 - 130	
Toluene	0.100	0.1138		mg/Kg		114	70 - 130	
Ethylbenzene	0.100	0.1111		mg/Kg		111	70 - 130	
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130	
o-Xylene	0.100	0.09890		mg/Kg		99	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-38855/2-A

Matrix: Solid

Analysis Batch: 38810

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control	Sample Dup
--	------------	-------------	---------	------------

Prep Type: Total/NA

Prep Batch: 38855

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09577		mg/Kg		96	70 - 130	8	35	
Toluene	0.100	0.1047		mg/Kg		105	70 - 130	8	35	
Ethylbenzene	0.100	0.09891		mg/Kg		99	70 - 130	12	35	
m-Xylene & p-Xylene	0.200	0.1722		mg/Kg		86	70 - 130	15	35	
o-Xylene	0.100	0.08427		mg/Kg		84	70 - 130	16	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1.4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-3376-A-1-F MS

Matrix: Solid

Analysis Batch: 38810

Client Sample ID: Matrix Spik	е
Prep Type: Total/Na	4

Prep Batch: 38855

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.09235		mg/Kg		91	70 - 130	
Toluene	<0.00202	U	0.101	0.09881		mg/Kg		97	70 - 130	

Client: Ensolum Job ID: 890-3397-1 Project/Site: MCA 145 SDG: 03D2057027

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

Lab Sample ID: 890-3376-A-1-F MS

Lab Sample ID: 890-3376-A-1-G MSD

Matrix: Solid

Analysis Batch: 38810

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38855

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	0.0177	F1	0.101	0.08335	F1	mg/Kg		65	70 - 130	
m-Xylene & p-Xylene	0.00451	F1	0.202	0.1199	F1	mg/Kg		57	70 - 130	
o-Xylene	0.0143	F1	0.101	0.07681	F1	mg/Kg		62	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

RPD

9

Limit

35

Prep Batch: 38855 RPD

Matrix: Solid Analysis Batch: 38810

Sample Sample Spike MSD MSD Result Qualifier Result Qualifier %Rec Analyte babbA Unit Limits Benzene <0.00202 U 0.0994 0.1011 mg/Kg 101 70 - 130 0.1115 Toluene <0.00202 U 0.0994 mg/Kg 112 70 - 130

12 35 Ethylbenzene 0.0177 F1 0.0994 0.09824 81 70 - 130 16 35 mg/Kg 0.199 70 - 130 m-Xylene & p-Xylene 0.00451 F1 0.1351 F1 mg/Kg 66 12 35 0.0143 F1 0.0994 0.08784 74 70 - 130 o-Xylene mg/Kg 13

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-38817/1-A

Matrix: Solid

Analysis Batch: 38798

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

Prep Batch: 38817

MB MB Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte Gasoline Range Organics 50.0 11/07/22 08:44 11/07/22 08:46 <50.0 U mg/Kg (GRO)-C6-C10 11/07/22 08:46 Diesel Range Organics (Over <50.0 U 50.0 11/07/22 08:44 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 11/07/22 08:44 11/07/22 08:46 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Pre	epared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	11/07	/22 08:44	11/07/22 08:46	1
o-Terphenyl	102		70 - 130	11/07.	/22 08:44	11/07/22 08:46	1

Lab Sample ID: LCS 880-38817/2-A

Matrix: Solid

Analysis Batch: 38798

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38817

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	815.6		mg/Kg		82	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	952.9		mg/Kg		95	70 - 130	
C10-C28)								

Job ID: 890-3397-1

SDG: 03D2057027

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

Lab Sample ID: LCS 880-38817/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Client: Ensolum

Project/Site: MCA 145

Analysis Batch: 38798

Prep Type: Total/NA Prep Batch: 38817

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 100 70 - 130 o-Terphenyl 97 70 - 130

Lab Sample ID: LCSD 880-38817/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 38798

Prep Type: Total/NA Prep Batch: 38817

%Rec RPD Limits **RPD** Limit 70 - 130 3 20

Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec 1000 787.9 79 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 973.0 97 mg/Kg 70 - 1302 20 C10-C28)

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

Lab Sample ID: 880-21167-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 38798

Prep Type: Total/NA

Prep Batch: 38817

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	<50.0	U	997	868.4		mg/Kg		85	70 - 130		
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	997	916.7		mg/Kg		92	70 - 130		
C10-C28)											

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 97 o-Terphenyl 77 70 - 130

Lab Sample ID: 880-21167-A-1-E MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid**

Analysis Batch: 38798

Prep Type: Total/NA Prep Batch: 38817

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	999	895.3		mg/Kg		88	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	999	900.5		mg/Kg		90	70 - 130	2	20
C10-C28)											

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	74		70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: Ensolum Job ID: 890-3397-1 Project/Site: MCA 145 SDG: 03D2057027

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38820/1-A

Matrix: Solid

Analysis Batch: 39046

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Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/09/22 14:38

Lab Sample ID: LCS 880-38820/2-A

Matrix: Solid

Analysis Batch: 39046

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 266.6 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-38820/3-A

Matrix: Solid

Analysis Batch: 39046

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 267.4 107 mg/Kg 90 - 110

Lab Sample ID: 880-21183-A-12-B MS

Matrix: Solid

Analysis Batch: 39046

Sample Sample MS MS Spike %Rec Analyte Qualifier Added %Rec Result Result Qualifier Unit Limits Chloride 10400 5000 15790 108 90 - 110 mg/Kg

Lab Sample ID: 880-21183-A-12-C MSD

Matrix: Solid

Analysis Batch: 39046

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 5000 Chloride 10400 15780 mg/Kg 108 90 - 110 0 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3397-1

 Project/Site: MCA 145
 SDG: 03D2057027

GC VOA

Analysis Batch: 38810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	8021B	38855
890-3397-2	PH02	Total/NA	Solid	8021B	38855
MB 880-38855/5-A	Method Blank	Total/NA	Solid	8021B	38855
LCS 880-38855/1-A	Lab Control Sample	Total/NA	Solid	8021B	38855
LCSD 880-38855/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38855
890-3376-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	38855
890-3376-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38855

Prep Batch: 38855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	5035	
890-3397-2	PH02	Total/NA	Solid	5035	
MB 880-38855/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38855/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38855/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3376-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-3376-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 39005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	Total BTEX	
890-3397-2	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	8015B NM	38817
890-3397-2	PH02	Total/NA	Solid	8015B NM	38817
MB 880-38817/1-A	Method Blank	Total/NA	Solid	8015B NM	38817
LCS 880-38817/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38817
LCSD 880-38817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38817
880-21167-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38817
880-21167-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38817

Prep Batch: 38817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	8015NM Prep	
890-3397-2	PH02	Total/NA	Solid	8015NM Prep	
MB 880-38817/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38817/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21167-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21167-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Total/NA	Solid	8015 NM	
890-3397-2	PH02	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3397-1

 Project/Site: MCA 145
 SDG: 03D2057027

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Leach Batch: 38820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Soluble	Solid	DI Leach	
890-3397-2	PH02	Soluble	Solid	DI Leach	
MB 880-38820/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38820/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38820/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21183-A-12-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21183-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3397-1	PH02	Soluble	Solid	300.0	38820
890-3397-2	PH02	Soluble	Solid	300.0	38820
MB 880-38820/1-A	Method Blank	Soluble	Solid	300.0	38820
LCS 880-38820/2-A	Lab Control Sample	Soluble	Solid	300.0	38820
LCSD 880-38820/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38820
880-21183-A-12-B MS	Matrix Spike	Soluble	Solid	300.0	38820
880-21183-A-12-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38820

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Client: Ensolum Job ID: 890-3397-1 Project/Site: MCA 145 SDG: 03D2057027

Client Sample ID: PH02

Lab Sample ID: 890-3397-1

Matrix: Solid

Date Collected: 10/21/22 12:35 Date Received: 11/04/22 13:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	38855	11/07/22 11:02	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38810	11/07/22 22:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39005	11/08/22 13:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38990	11/08/22 11:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38817	11/07/22 09:04	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38798	11/07/22 19:01	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38820	11/07/22 09:28	СН	EET MID
Soluble	Analysis	300.0		10			39046	11/09/22 15:47	CH	EET MID

Client Sample ID: PH02 Lab Sample ID: 890-3397-2

Date Collected: 10/21/22 12:40 **Matrix: Solid**

Date Received: 11/04/22 13:10

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 4.96 g 5 mL 38855 11/07/22 11:02 EL EET MID 8021B Total/NA 5 mL 11/07/22 23:05 **EET MID** Analysis 1 5 mL 38810 MNR Total/NA Total BTEX 39005 11/08/22 13:40 Analysis 1 AJ **EET MID** Total/NA Analysis 8015 NM 38990 11/08/22 11:48 SM **EET MID** 38817 11/07/22 09:04 Total/NA Prep 8015NM Prep 10.00 g 10 mL DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 38798 11/07/22 19:23 SM **EET MID** 11/07/22 09:28 Soluble **EET MID** Leach DI Leach 5.02 g 50 mL 38820 CH Soluble Analysis 300.0 50 39046 11/09/22 15:52 СН **EET MID**

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3397-1 Project/Site: MCA 145 SDG: 03D2057027

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, bu	it the laboratory is not certifi	ied by the governing authority. This list ma	av include analytes for
the agency does not of		,	ieu sy ale gerelling aanenly.	ay morado dilarytoo lor
the agency does not of Analysis Method		Matrix	Analyte	ay molado analytoo tor
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Method Summary

 Client: Ensolum
 Job ID: 890-3397-1

 Project/Site: MCA 145
 SDG: 03D2057027

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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum Project/Site: MCA 145 Job ID: 890-3397-1 SDG: 03D2057027

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3397-1	PH02	Solid	10/21/22 12:35	11/04/22 13:10	1
890-3397-2	PH02	Solid	10/21/22 12:40	11/04/22 13:10	4

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

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Project Manager:	Kalei Jennings			Bill to: (if different)	rent)	Kale	Kalei Jennings	sg							5	Vork C	rder	Work Order Comments	ents			
Company Name:	Ensolum, LLC			Company Name	me:	Ensc	Ensolum, LLC	С				P	ogram	UST/F	ST	PRP	Brow	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐	RR	C	Superfund [
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City, State ZIP:	Midland, TX 79701			City, State ZIP:	, o	Midla	Midland, TX 79701	79701				R	porting	Level	=	evel III	PS.	Reporting: Level II Level III PST/UST TRRP	☐ TR	RP _	Level IV	È
	817-683-2503		Email:	Email: Rennings@ensolum.com.	ensolu	m com		hgreen@ensolum com	lum co	13		l l	liverab	Deliverables: EDD	ĕ r		ADaPT 🗆		Other	er		
Project Name:	MCA 145		Turn	Turn Around						ANALYS	YSIS F	IS REQUEST	ST					-	reser	vative	Preservative Codes	
Project Number:	03D2057027		Routine	Rush	Code	a :												None: NO	O	D	DI Water: H ₂ O	120
Project Location:	32.805570,-103.748544		Due Date:													_		Cool: Cool	Cool	~	MeOH: Me	
Sampler's Name:	Conner Shore		TAT starts the	TAT starts the day received by	by							_		-	-	-	-	HCL: HC	. F	I	HNO ₃ : HN	
PO#:)	the lab, if rec	the lab, if received by 4:30pm	_					_								H ₂ S0 ₄ : H ₂	H ₂	z	NaOH: Na	
SAMPLE RECEIPT	PT Temp Blank:	(Yes) No	Wet Ice:	Yes No	nete	.0)												H ₃ PO ₄ : HP	HP	;		
Samples Received Intact:	itact: Kes No	Thermometer ID:	D: 7	MOG	1	300	_		_									NaHS	NaHSO4: NABIS	BIS		
Cooler Custody Seals:	s: Yes No MA	Correction Factor:	tor:	6.0		PA:					330		Chain of Custody	tody				Na ₂ S ₂	Na ₂ S ₂ O ₃ : NaSO ₃	SO3		_
Sample Custody Seals:	is: Yes No VALLA	Temperature Reading:	eading:	0		S (E		1		1.	090-000						1	Zn Ac	etate+i	Zn Acetate+NaOH: Zn	Zn	_
Total Containers:		Corrected Temperature:	perature:	20	<u>L</u>	RIDE	015)	8021	+			_						NaOF	+Asco	rbic Ac	NaOH+Ascorbic Acid: SAPC	
Sample Identification	tification Matrix	Date Sampled	Time Sampled	Depth Grab/	ab/ # of mp Cont	CHLOF	TPH (8	BTEX (45	Samp	le Con	Sample Comments	
PH02	2	10/21/2022	1235	1' 9		×	×	×				\vdash	-		r							
PH02	2	10/21/2022	1240	4.		×	×	×		T		-	-	+	\dagger		T					
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Total 200.7 / 6010 Circle Method(s) and I	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed		8RCRA 13PPM TCLP / SPLF	RA 13PPM Texas 11 AITCLP / SPLP 6010: 8RCRA	11 AI 8RCR/	(၂)	Ba S B	Be B Cd a Be Cd	Cr Co	င် င	Cu Fe I	Pb Mg Mi Mo Ni Se	Mn M Se Ag	Mn MoNiK Se Ag TIU	Se	Ag s Hg:	SiO ₂ Na lg: 1631 /	g SiO ₂ Na Sr Tl Sn U Hg: 1631 / 245.1 / 7470	TI Sn U 1/7470/	U V Zn 0 /7471	Zn 71	<u> </u>
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Ver 06/08/2021

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3397-1

 SDG Number: 03D2057027

Login Number: 3397 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3397-1 SDG Number: 03D2057027

Login Number: 3397 **List Source: Eurofins Midland** List Number: 2 List Creation: 11/07/22 09:10 AM

Creator: Teel, Brianna

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



APPENDIX E

NMOCD Notifications

From: Nobui, Jennifer, EMNRD

To: <u>Kalei Jennings</u>

Cc: <u>Bratcher, Michael, EMNRD</u>

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

Date: Wednesday, October 26, 2022 4:04:54 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png image005.jpg

[**EXTERNAL EMAIL**]

Kalei

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

Thanks,

Jennifer Nobui

From: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Sent: Wednesday, October 26, 2022 3:58 PM

To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD

<Jennifer.Nobui@emnrd.nm.gov>

Subject: FW: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

Jocelyn Harimon • Environmental Specialist

Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@state.nm.us

http://www.emnrd.nm.gov



From: Kalei Jennings < kjennings@ensolum.com > Sent: Wednesday, October 26, 2022 3:37 PM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 10/31/2022)

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

All,

On behalf of Maverick Natural Resources, LLC we respectfully submit notification of sampling to be conducted at the below locations the week of 10/31/2022.

Leamex 8 / Incident Number NAPP2200641724 MCA 145 / Incident Number NAPP2229469315 Leamex 018 / Incident Number NAPP2229947721

Thank you,





APPENDIX F

Final C-141

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	nAPP2229469315
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC			OGRID: 3	331199	
Contact Name: Bryce Wagoner			Contact Te	elephone: 928-241-1862	
Contact email: Bryce.Wagoner@mavresources.com			Incident #	(assigned by OCD)	
Contact mailing address: 1410 NW County Road Hobbs, NM 88240					
Location of Release Source					
Latitude 32.805570 Longitude -103.748544 (NAD 83 in decimal degrees to 5 decimal places)					
Site Name MCA Unit #	145			Site Type	
Date Release Discovered	d October 14, 2022	,		API# (if app	plicable) 30-025-00714
Unit Letter Section	Township	Range		Coun	nty
H 27	17S	32E	Lea		
Surface Owner: State Federal Tribal Private (Name: Nature and Volume of Release Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)					
Crude Oil				Volume Recovered (bbls) 21.16 bbls	
Produced Water	Volume Release	ed (bbls) 254.24 b	bls		Volume Recovered (bbls) 238.84
	Is the concentra produced water	tion of dissolved >10,000 mg/l?	chloride	e in the	☐ Yes ☐ No
Condensate					Volume Recovered (bbls)
☐ Natural Gas	Natural Gas Volume Released (Mcf)				Volume Recovered (Mcf)
Other (describe)	Other (describe) Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release The release was caused by an injection line rupture due to corrosion. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. An evaluation will be conducted at the Site to determine if we may commence remediation immediately or delineate any possible impact from the release.					

Received by OCD: 1/18/2023 2:22:09 PM Form C-141 State of New Mexico Page 2 Oil Conservation Division

Name Marriag		Page 122 of 1	2
New Mexico	Incident ID	nAPP2229469315	Ì

Incident ID	nAPP2229469315
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release? Release volume greater than 25 bbls.	
19.15.29.7(A) NMAC?		
⊠ Yes □ No		
If VES was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	
Immediate notice was giv	then by Kalei Jennings with Ensolum on behalf of Maverick Permian via email on October 15, 2022 at 12:32 d.nm.gov and EMNRD-OCD-District1spills@emnrd.nm.gov	
	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.	
If all the actions described	d above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NM	AC the responsible party may commence remediation immediately after discovery of a release. If remediation	
has begun, please attach	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred at area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws		
and/or regulations.		
Printed Name:Bryce	e Wagoner Title:Permian HSE Specialist II	
Signature:	Date:10/21/2022	
email:Bryce.Wago	ner@mavresources.com Telephone:928-241-1862	
OCD Only		
-	n Harimon Date: <u>01/18/2023</u>	
Received by	Date: 01/10/2025	

Received by OCD: 1/18/2023 2:22:09 PM Form C-141 State of New Mexico Page 3 Oil Conservation Division

Incident ID nAPP2229469315

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?	<u>>100</u> (ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No	
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No	
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No	
Are the lateral extents of the release within a 100-year floodplain?		
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ⊠ No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.		
Characterization Report Checklist: Each of the following items must be included in the report.		
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information 		
Topographic/Aerial maps		

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

Received by OCD: 1/18/2023 2:22:09 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

	Page 124 of 1	27
Incident ID	nAPP2229469315	
District RP		
Facility ID		
Application ID		

I hereby certify that the information given above is true and complete to the regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	oCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Bryce Wagoner	Title:Permian HSE Specialist II
Signature:	Date:
email:bryce.wagoner@mavresources.com	Telephone: 928-241-1862
	•
OCD Only	
Received by: Jocelyn Harimon	Date:01/18/2023

ate of New Mexico

Incident ID	nAPP2229469315
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.
 Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)
Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
Extents of contamination must be fully delineated.
Contamination does not cause an imminent risk to human health, the environment, or groundwater.
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: Bryce Wagoner Title: Permian HSE Specialist II Signature: Date: 1/12/2022 email: bryce.wagoner@mavresources.com Telephone: 928-241-1862
OCD Only
Received by: Date: Date:
☐ Approved
Signature: Jennifer Nobili Date: 02/09/2023

Received by OCD: 1/18/2023 2:22:09 PM Form C-141 State of New Mexico Page 6 Oil Conservation Division

Closure

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

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

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)		
☐ Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases who 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 watch human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: Title: Title:	ich	
Signature: Date:		
Signature Date		
email: Telephone:		
email: Telephone:		
email: Telephone: OCD Only		
email: Telephone: OCD Only Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should their operations have failed to adequately investigate the responsible party of liability should the liability should be adequately should be a		

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 177225

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	177225
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Remediation Plan Approved with Conditions. The depth to groundwater has not been adequately determined for the least stringent criteria (20,000 mg/kg chloride). When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. OCD will accept dtw 51-100' and 10,000 mg/kg chloride. Please ensure your remediation efforts reflect the accepted criteria. Composite confirmation samples will be collected from the bottom of the excavation from areas representing no more than four hundred (400) square feet. Composite confirmation samples will be collected from the sidewalls of the excavation from areas representing no more than two hundred (200) sq ft.	2/9/2023