

September 15, 2022

District 1 New Mexico Oil Conservation Division 1625 North French Drive Hobbs, New Mexico 88240

Re: Closure Request

MCA 120

Incident Number NAPP2209531688

Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Natural Resources, LLC (Maverick), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities performed at the MCA 120 (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil and produced water at the Site. Based on excavation activities and laboratory analytical results from the soil sampling events, Maverick is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2209531688.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 22, Township 17 South, Range 32 East, in Lea County, New Mexico (32.81611° N, 103.75305° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On March 22, 2022, a flowline failure resulted in the release of approximately 0.04 barrels (bbls) of produced water and 0.8 bbls of crude oil into the pasture. No fluids were recovered following the release. While the volume of fluids released was below the reporting requirement, the previous operator, ConocoPhillips Company, reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on April 5, 2022. The release was assigned Incident Number NAPP2209531688.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants
601 North Marienfeld Street | Midland, TX 79701 | ensolum.com
Texas PG Firm No. 50588 | Texas PE Firm No. F-21843

Page 2

RA-12521-POD1, located approximately 5,370 feet southwest of the Site. The groundwater well has a reported depth to groundwater of 92 feet bgs and a total depth of 105 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well record is included in Appendix B.

The closest continuously flowing or significant watercourse to the Site is a freshwater pond, located approximately 2,254 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 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 that was impacted by the release, per NMAC 19.15.29.13.D (1) for the top 4 feet of areas that will be reclaimed following remediation.

SITE ASSEMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On July 20, 2022, Ensolum personnel were at the Site to complete site assessment activities based on information provided on the Form C-141 and visible surface staining observed in the release area. Two preliminary assessment soil samples (SS01 and SS02) were collected within the release extent at a depth of 0.5 feet bgs to assess for the presence or absence of impacted soil. Additionally, four lateral delineation soil samples (SS03 through SS06) were collected in each cardinal direction outside of the release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. Soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and preliminary 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 C.

Soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody 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.



Page 3

Laboratory analytical results for preliminary assessment soil sample SS02 indicated the TPH concentration exceeded the reclamation requirement. Laboratory analytical results for preliminary soil samples SS01, collected inside the release extent, and lateral delineation soil samples SS03 through SS06, collected outside the release extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement and successfully define the lateral extent of the release.

Based on visible staining in the release area and laboratory analytical results for preliminary soil sample SS02, excavation activities appeared warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On August 24, 2022, Ensolum personnel were at the Site to oversee excavation activities based on visible staining in the release area and laboratory analytical results for preliminary assessment soil sample SS02. Excavation activities were performed via hand shoveling. To direct excavation activities, soil was field screened for VOCs and chloride.

Following the excavation activities, a 5-point composite sample was collected from the floor of the excavation. The 5-point composite sample was collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample FS01 was collected from the floor of the excavation at a depth of 0.5-feet bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor sample. The soil sample was collected, handled, and analyzed following the same procedures as described above.

Laboratory analytical results from FS01 indicated an exceedance of TPH and additional excavation was required. On September 8, 2022, Ensolum personnel were onsite to oversee the removal of additional soil in the vicinity near FS01. Subsequent sample FS01A was collected from the floor of the excavation at a depth of 1-foot bgs after an additional 6-inches of soil was removed from the remediation area.

The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 3. A photographic log of the excavation is included as Appendix C.

Laboratory analytical results for excavation soil sample FS01A, collected from the final excavation extent, indicated concentrations of all COCs were compliant with the Site Closure Criteria and reclamation requirement. The laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix D.

The excavation measured approximately 180 square feet in areal extent. A total of approximately 5 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the March 22, 2022, release of produced water and crude oil. Laboratory analytical results for the excavation soil sample indicated concentrations of all COCs were compliant with the Site Closure Criteria and reclamation requirement. Based on the laboratory analytical results, no further remediation was required. Maverick will backfill the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions.



Page 4

Excavation of impacted soil has mitigated adverse conditions at this Site. Depth to groundwater has been estimated to be between 51 feet and 100 feet bgs and no sensitive receptors were identified near the release extent. Maverick believes these remedial actions are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2209531688.

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

alui Jennings

Daniel, R. Moir, PG Senior Managing Geologist

cc: Bryce Wagoner, Maverick Natural Resources, LLC

Bureau of Land Management

Attachments:

Figure 1 Site Receptor Map

Figure 2 Preliminary Soil Sample Locations
Figure 3 Excavation Soil Sample Locations
Table 1 Soil Sample Analytical Results

Appendix A Final C-141

Appendix B Referenced Well Records

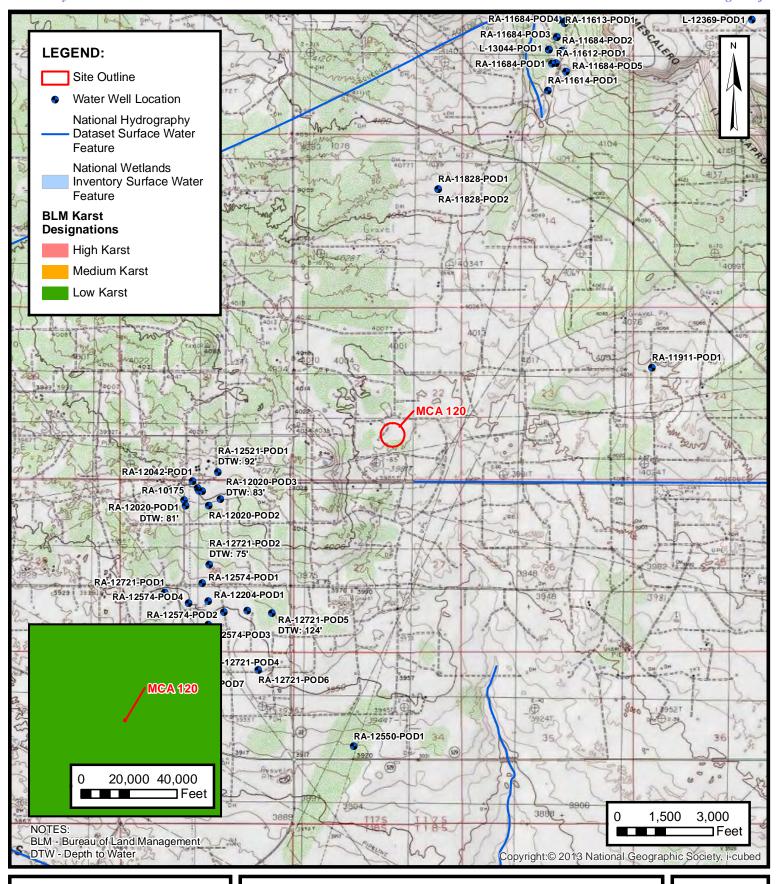
Appendix C Photographic Log

Appendix D Laboratory Analytical Reports





FIGURES

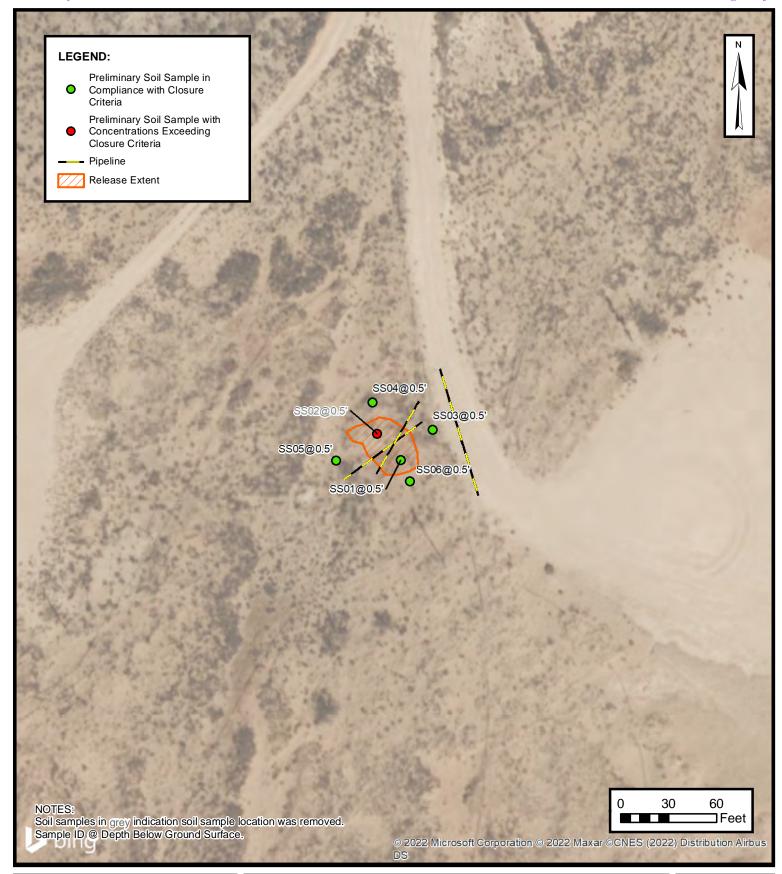




SITE RECEPTOR MAP

MAVERICK NATURAL RESOURCES, LLC MCA 120 NAPP2209531688

Unit O, Sec 22, T17S, R32E Lea County, New Mexico FIGURE





PRELIMINARY SOIL SAMPLE LOCATIONS

MAVERICK NATURAL RESOURCES, LLC MCA 120 NAPP2209531688 Unit O, Sec 22, T17S, R32E Lea County, New Mexico FIGURE





EXCAVATION SOIL SAMPLE LOCATIONS

MAVERICK PERMIAN LLC MCA 120 NAPP2209531688 Unit O, Sec 22, T17S, R32E Lea County, New Mexico FIGURE



TABLE

Received by OCD: 9/16/2022 1:56:20 PM



TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** MCA 120 **Maverick Natural Resources, LLC** Lea County, New Mexico Sample Depth **Total BTEX TPH GRO TPH DRO TPH ORO GRO+DRO Total TPH** Sample Benzene Chloride **Sample Designation** Date (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 10,000 50 NE NE NE 1,000 2,500 **Preliminary Assessment Soil Samples** SS01* 7/20/2022 0.5 < 0.00201 < 0.00402 <50.0 <50.0 <50.0 <50.0 50.0 75.5 SS02³ 0.5 < 0.00200 < 0.00401 <49.9 110 <49.9 110 110 7/20/2022 0.5 <49.8 SS03* < 0.00201 < 0.00402 <49.8 <49.8 <49.8 <49.8 11.5 SS04* 7/20/2022 0.5 < 0.00200 < 0.00399 <50.0 <50.0 <50.0 <50.0 <50.0 18.1 SS05* 7/20/2022 0.5 < 0.00199 <0.00398 <50.0 <50.0 <50.0 <50.0 <50.0 19.3 <0.00199 <0.00398 SS06* 7/20/2022 0.5 <50.0 <50.0 <50.0 <50.0 <50.0 9.49 **Excavation Soil Sample** FS01³ <49.9 <49.9 318 08/24/2022 < 0.00199 < 0.00398 318 318 105 FS01A* 09/08/2022 <0.00200 < 0.00399 <49.9 <49.9 <49.9 <49.9 <49.9 1 235

Notes:

bgs: below ground surface mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

Grey text represents samples that have been excavated

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



APPENDIX A

Final C141

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

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	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party OGRID							
Contact Name Contact				Contact T	Telephone		
Contact email Incident			Incident #	# (assigned by OCD)			
Contact mail	ing address						
			Location	of Release S	ource		
Latitude			(NAD 83 in dec	Longitude imal degrees to 5 decir	mal places)		
Site Name				Site Type			
Date Release	Discovered			API# (if app	plicable)		
Unit Letter	Section	Township	Range	Cour	nty		
Crude Oil	Material	Federal Tr	Nature and	Volume of	justification for t	he volumes provided below) covered (bbls)	
Produced		Volume Release			Volume Recovered (bbls)		
Troduced	Water		ion of dissolved cl	nloride in the	Yes No		
Condensa	te	Volume Released	d (bbls)		Volume Rec	covered (bbls)	
☐ Natural G	as	Volume Released (Mcf)			Volume Recovered (Mcf)		
Other (des	scribe)	Volume/Weight Released (provide units)		Volume/We	ight Recovered (provide units)		
Cause of Rela	ease						

Received by OCD: 9/16/2022 1:56:201PM State of New Mexico Page 2 Oil Conservation Division

P	ağ	e	d	3	O,	b	9	1
						ı		

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the resp	onsible party consider this a major release?
19.15.29.7(A) NMAC?		
☐ Yes ☐ No		
If VES, was immediate no	ntice given to the OCD? By whom? To y	whom? When and by what means (phone, email, etc)?
Tr TES, was ininicatate in	side given to the GGB. By whom: To	viioni. When and by what means (phone, email, etc).
	Initial I	Response
The responsible p	party must undertake the following actions immedia	tely unless they could create a safety hazard that would result in injury
☐ The source of the rele	ase has been stopped.	
☐ The impacted area has	s been secured to protect human health ar	d the environment.
Released materials ha	we been contained via the use of berms or	dikes, absorbent pads, or other containment devices.
<u> </u>	ecoverable materials have been removed a	
If all the actions described	d above have <u>not</u> been undertaken, explain	n why:
has begun, please attach a	a narrative of actions to date. If remedia	remediation immediately after discovery of a release. If remediation l efforts have been successfully completed or if the release occurred please attach all information needed for closure evaluation.
regulations all operators are public health or the environm failed to adequately investigations.	required to report and/or file certain release no ment. The acceptance of a C-141 report by the ate and remediate contamination that pose a th	e best of my knowledge and understand that pursuant to OCD rules and stifications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have reat to groundwater, surface water, human health or the environment. In of responsibility for compliance with any other federal, state, or local laws
Printed Name	_	Title:
Signature:	tanizoparnje	Date:
		Telephone:
OCD Only		
Received by: Jocelyn	Harimon	Date: 04/05/2022
·		

Received by OCD: 9/16/2022/1556/20 PM NAPP2209531688 Page 14-of				388 p. p. 142 co.1					
Received by OCD:	9/16/2022/130	6:20 PM lity Name & Number:	MCA well 120					11/11 - 22000010	Page 14:0194
		Asset Area:							
	R/	Release Discovery Date & Time:	03/22/2022 01:20P	M					
		Release Type:	Oil Mixture						
	Provide any	known details about the event:	flow line just starte	ed to leak from Collar/Threads, No f	fluid needed to be picked-up, isloated flov	w line, last time I drov	e by 3B header was	on 03/18/22 @ 1:00pr	n, Off pad and it rained
				Spill Calculation - Subsu	urface Spill - Rectangle				
27	Was #	the release on pad or off-pad?			See reference tab	ole below			
Has it	rained at least a	a half inch in the last 24 hours?	<u> </u>		See reference tab	ole below			
Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	8.0	3.0	1.00	11.67%	0.356	0.042	20.00%	0.008	0.033
Rectangle B				1	0.000	0.000		0.000	0.000
Rectangle C					0.000	0.000		0.000	0.000
Rectangle D				4	0.000	0.000		0.000	0.000

0.000

0.000

0.000

0.000

0.000

0.000

Total Volume Release:

0.000

0.000

0.000

0.000

0.000

0.000

0.042

0.000

0.000

0.000

0.000

0.000

0.000

0.008

0.000

0.000

0.000

0.000

0.000

0.000

0.033

Rectangle E

Rectangle F Rectangle G

Rectangle H

Rectangle I

Released to Imaging: 9/21/2022 2:27:00 PM

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 95967

CONDITIONS

Operator:	OGRID:
CONOCOPHILLIPS COMPANY	217817
600 W. Illinois Avenue	Action Number:
Midland, TX 79701	95967
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created B	y Condition	Condition Date
jharimo	n None	4/5/2022

Page 16 of 91
Incident ID NAPP2209531688

Incident ID NAPP2209531688
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?	51-100 feet 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 X No			
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No			
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ⊠ No			
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No			
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes 🏻 No			
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.				
Characterization Report Checklist: Each of the following items must be included in the report.				
 Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring well Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs 	ls.			
Photographs including date and GIS information				

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

Topographic/Aerial maps

□ Laboratory data including chain of custody

Received by OCD: 9/16/2022 1:56:20 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page 17 of 91

Incident ID	NAPP2209531688
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 no public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a threaddition, 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 reat to groundwater, surface water, human health or the environment. In
Printed Name: Bryce Wagoner	Title: HSE Specialist
Signature:	Date:9/16/2022
email:bryce.wagner@mavresouces.com	Telephone:928-241-1862
OCD Only	
Received by: Jocelyn Harimon	Date:09/16/2022

Page 18 of 91

Incident ID NAPP2209531688
District RP
Facility ID
Application ID

Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.
☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Nhotographs 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
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, numan 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: Bryce Wagoner Title: HSE Specialist Date: 9/16/2022 Date: 9/16/2022 Date: 9/16/2022
OCD Only Jacobyn Hariman
Received by: Jocelyn Harimon Date: 09/16/2022
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Date: Date:
Printed Name: Jennifer Nobui Title: Environmental Specialist A



APPENDIX B

Referenced Well Records



New 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 **POD Number**

X

RA 12521 POD1

Q64 Q16 Q4 Sec Tws Rng 21 17S 32E

615127 3631271

Driller License: 1456 **Driller Company:**

WHITE DRILLING COMPANY

Driller Name:

2.00

Drill Start Date:

WHITE, JOHN W

Drill Finish Date:

07/26/2017 **Plug Date:**

Log File Date:

08/22/2017

PCW Rcv Date:

Source:

Shallow

Pump Type:

07/21/2017

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:

105 feet

Depth Water:

92 feet

Water Bearing Stratifications:

Top Bottom Description

85

Sandstone/Gravel/Conglomerate

101

Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

75 105

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.

9/7/22 1:22 PM

POINT OF DIVERSION SUMMARY



APPENDIX C

Photographic Log



Photographic Log
Maverick Natural Resources, LLC
MCA 120
NAPP2209531688





Photograph 1 Date: 7/20/2022

Description: View of the release area during the initial Site visit

Photograph 2 Date: 7/20/2022
Description: View of the release area during the initial site visit





Photograph 3 Date: 8/24/2022 Photograph 4 Date: 8/24/2022

Description: View of the release area during remediation Description: View of the release area during remediation



APPENDIX D

Laboratory Analytical Reports



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland 1211 W. Florida Ave Midland, TX 79701 Tel: (432)704-5440

Laboratory Job ID: 880-17247-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: MCA 120

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

LAMER

8/2/2022 3:38:17 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

EOL **Have a Question?**

------ LINKS ------

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 9/21/2022 2:27:00 PM signature is intended to be the legally binding equivalent of a traditionally handwritten

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

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

Client: Ensolum
Project/Site: MCA 120
Laboratory Job ID: 880-17247-1
SDG: Lea County NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Surrogate Summary	11
QC Sample Results	13
QC Association Summary	20
Lab Chronicle	23
Certification Summary	25
Method Summary	26
Sample Summary	27
Chain of Custody	28
Receint Checklists	29

2

3

А

5

7

9

10

12

13

Definitions/Glossary

Job ID: 880-17247-1 Client: Ensolum Project/Site: MCA 120 SDG: Lea County NM

Qualifiers

GC VOA Qualifier

S1-

LCS and/or LCSD is outside acceptance limits, low biased. *1 LCS/LCSD RPD exceeds control limits. F1

Qualifier Description

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

GC Semi VOA

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

HPLC/IC Qualifier

U

Qualifier Description

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN

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

Decision Level Concentration (Radiochemistry)

DLC

EDL

Estimated Detection Limit (Dioxin)

LOD LOQ

Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE)

MCL MDA

EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry)

MDC MDL

Minimum Detectable Concentration (Radiochemistry) Method Detection Limit

ML MPN MQL

Minimum Level (Dioxin) Most Probable Number 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**

Presumptive **PRES**

QC

Quality Control

RER Relative Error Ratio (Radiochemistry)

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) TFO

TNTC Too Numerous To Count

Eurofins Midland

Case Narrative

Client: Ensolum

Job ID: 880-17247-1

Project/Site: MCA 120

SDG: Lea County NM

Job ID: 880-17247-1

Laboratory: Eurofins Midland

Narrative

Job Narrative 880-17247-1

Receipt

The samples were received on 7/21/2022 3:26 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-30668 and analytical batch 880-30958 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-30668/2-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-30668 and analytical batch 880-30958 recovered outside control limits for the following analytes: Toluene, Ethylbenzene, m-Xylene & p-Xylene, o-Xylene and Xylenes, Total.

Method 8021B: LCSD biased low. Since only an acceptable LCS is required per the method, the data has been qualified and reported. (LCSD 880-30668/2-A)

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-30596 and analytical batch 880-3058 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-30658 and analytical batch 880-30649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-2603-A-1-F), (890-2603-A-1-G MS) and (890-2603-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SS02 (880-17247-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-30624 and analytical batch 880-30643 contained Gasoline Range Organics (GRO)-C6-C10, Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-30624 and analytical batch 880-30643 were outside control limits. Non-homogeneity is 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

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

- 5

4

5

7

9

1 1

12

Case Narrative

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

Job ID: 880-17247-1 (Continued)

Laboratory: Eurofins Midland (Continued)

Client: Ensolum Job ID: 880-17247-1
Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: SS01

Date Collected: 07/20/22 10:35

Lab Sample ID: 880-17247-1

Matrix: Solid

Date Collected: 07/20/22 10:35
Date Received: 07/21/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		07/26/22 10:46	07/29/22 13:04	
Toluene	<0.00201	U *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 13:04	
Ethylbenzene	<0.00201	U *- F1 *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 13:04	•
m-Xylene & p-Xylene	<0.00402	U *- F1 *1	0.00402	mg/Kg		07/26/22 10:46	07/29/22 13:04	
o-Xylene	<0.00201	U *- F1 *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 13:04	•
Xylenes, Total	<0.00402	U *- F1 *1	0.00402	mg/Kg		07/26/22 10:46	07/29/22 13:04	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			07/26/22 10:46	07/29/22 13:04	1
1,4-Difluorobenzene (Surr)	115		70 - 130			07/26/22 10:46	07/29/22 13:04	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			07/29/22 15:20	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Amaluta	Desuit	Ovelifien	DI.	l lmi4	_	Duamanad	A	DUE
Analyte Total TPH		Qualifier U	RL 50.0	Mg/Kg	<u>D</u>	Prepared	Analyzed 07/27/22 09:04	
Total TPH	<50.0	U			<u>D</u>	Prepared		
	<50.0	U			<u>D</u>	Prepared Prepared		1
Total TPH Method: 8015B NM - Diesel Ran	<50.0	RO) (GC) Qualifier	50.0	mg/Kg			07/27/22 09:04	Dil Fac
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<50.0 ge Organics (D	COO (GC) Qualifier U	50.0	mg/Kg		Prepared	07/27/22 09:04 Analyzed	Dil Fac
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<50.0 ge Organics (Di Result <50.0	RO) (GC) Qualifier U	50.0 RL 50.0	mg/Kg Unit mg/Kg		Prepared 07/25/22 16:28	07/27/22 09:04 Analyzed 07/26/22 18:14	Dil Fac
Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 ge Organics (Di Result <50.0 <50.0	RO) (GC) Qualifier U	50.0 RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28	07/27/22 09:04 Analyzed 07/26/22 18:14 07/26/22 18:14	Dil Fac
Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 ge Organics (Di Result <50.0 <50.0 <50.0	RO) (GC) Qualifier U	50.0 RL 50.0 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28	07/27/22 09:04 Analyzed 07/26/22 18:14 07/26/22 18:14	Dil Fac
Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery	RO) (GC) Qualifier U	50.0 RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28 07/25/22 16:28 Prepared	07/27/22 09:04 Analyzed 07/26/22 18:14 07/26/22 18:14 Analyzed	Dil Fac
Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery 86 94	CO (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28 07/25/22 16:28 Prepared 07/25/22 16:28	07/27/22 09:04 Analyzed 07/26/22 18:14 07/26/22 18:14 Analyzed 07/26/22 18:14	Dil Fac
Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 ge Organics (D) Result <50.0 <50.0 <50.0 %Recovery 86 94 omatography -	CO (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28 07/25/22 16:28 Prepared 07/25/22 16:28	07/27/22 09:04 Analyzed 07/26/22 18:14 07/26/22 18:14 Analyzed 07/26/22 18:14	Dil Fac

Client Sample ID: SS02

Date Collected: 07/20/22 10:37

Lab Sample ID: 880-17247-2

Matrix: Solid

Date Received: 07/21/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
Toluene	0.00205	*1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
Ethylbenzene	<0.00200	U *- *1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
m-Xylene & p-Xylene	<0.00401	U *- *1	0.00401	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
o-Xylene	<0.00200	U *- *1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
Xylenes, Total	<0.00401	U *- *1	0.00401	mg/Kg		07/26/22 10:46	07/29/22 19:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			07/26/22 10:46	07/29/22 19:41	1

Eurofins Midland

2

3

4

6

8

10

12

A A

Client Sample Results

Client: Ensolum

Project/Site: MCA 120

Job ID: 880-17247-1

SDG: Lea County NM

Client Sample ID: SS02 Lab Sample ID: 880-17247-2

Date Collected: 07/20/22 10:37

Date Received: 07/21/22 15:26

Matrix: Solid

Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130			07/26/22 10:46	07/29/22 19:41	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			07/29/22 15:20	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	110		49.9	mg/Kg		·	07/27/22 09:04	1
•	• • •	RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• • •	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared 07/25/22 16:28	Analyzed 07/26/22 18:36	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier			<u>D</u>			Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)		Qualifier U	49.9	mg/Kg	<u>D</u>	07/25/22 16:28	07/26/22 18:36	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	07/25/22 16:28 07/25/22 16:28	07/26/22 18:36 07/26/22 18:36	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9 110 <49.9	Qualifier U	49.9 49.9 49.9	mg/Kg	<u> </u>	07/25/22 16:28 07/25/22 16:28 07/25/22 16:28	07/26/22 18:36 07/26/22 18:36 07/26/22 18:36	1

Client Sample ID: SS03

Lab Sample ID: 880-17247-3

Date Collected: 07/20/22 10:41

Matrix: Solid

4.99

Unit

mg/Kg

D

Prepared

Result Qualifier

75.5

Date Collected: 07/20/22 10:41 Date Received: 07/21/22 15:26

Method: 300.0 - Anions, Ion Chromatography - Soluble

Sample Depth: 0.5

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
Toluene	<0.00201	U *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
Ethylbenzene	<0.00201	U *- *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
o-Xylene	<0.00201	U *- *1	0.00201	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
Xylenes, Total	<0.00402	U *- *1	0.00402	mg/Kg		07/26/22 10:46	07/29/22 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			07/26/22 10:46	07/29/22 20:02	1
1,4-Difluorobenzene (Surr)	118		70 - 130			07/26/22 10:46	07/29/22 20:02	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			07/29/22 15:20	1
Method: 8015 NM - Diesel Rang	je Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8		49.8	mg/Kg			07/27/22 09:04	

Eurofins Midland

Dil Fac

Analyzed

07/26/22 20:00

Matrix: Solid

Lab Sample ID: 880-17247-3

Client Sample Results

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: SS03

Date Collected: 07/20/22 10:41 Date Received: 07/21/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		07/25/22 16:28	07/26/22 18:58	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		07/25/22 16:28	07/26/22 18:58	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		07/25/22 16:28	07/26/22 18:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			07/25/22 16:28	07/26/22 18:58	1
o-Terphenyl	101		70 - 130			07/25/22 16:28	07/26/22 18:58	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SS04 Lab Sample ID: 880-17247-4 Date Collected: 07/20/22 10:43 Matrix: Solid

Date Received: 07/21/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/26/22 10:46	07/29/22 20:23	
Toluene	<0.00200	U *1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 20:23	1
Ethylbenzene	<0.00200	U *- *1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 20:23	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399	mg/Kg		07/26/22 10:46	07/29/22 20:23	1
o-Xylene	<0.00200	U *- *1	0.00200	mg/Kg		07/26/22 10:46	07/29/22 20:23	1
Xylenes, Total	<0.00399	U *- *1	0.00399	mg/Kg		07/26/22 10:46	07/29/22 20:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			07/26/22 10:46	07/29/22 20:23	1
1,4-Difluorobenzene (Surr)	115		70 - 130			07/26/22 10:46	07/29/22 20:23	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			07/29/22 15:20	1
		-	0.0000	9/. 19			****	
Method: 8015 NM - Diesel Range	Organics (DR		0.0000	99				
- -	•		RL	Unit	D	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range	•	O) (GC) Qualifier			<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte	Result <50.0	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0	O) (GC) Qualifier	RL	Unit	D_	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	RL 50.0	Unit mg/Kg			Analyzed 07/27/22 09:04	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result Ge Organics (D) Result <50.0	Qualifier U RO) (GC) Qualifier U	RL 50.0	Unit mg/Kg Unit mg/Kg		Prepared 07/25/22 16:28	Analyzed 07/27/22 09:04 Analyzed 07/26/22 19:20	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U	RL	Unit mg/Kg		Prepared	Analyzed 07/27/22 09:04 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result Ge Organics (D) Result <50.0	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0	Unit mg/Kg Unit mg/Kg		Prepared 07/25/22 16:28	Analyzed 07/27/22 09:04 Analyzed 07/26/22 19:20	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28	Analyzed 07/27/22 09:04 Analyzed 07/26/22 19:20 07/26/22 19:20	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U U U U	RL 50.0 RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 07/25/22 16:28 07/25/22 16:28	Analyzed 07/27/22 09:04 Analyzed 07/26/22 19:20 07/26/22 19:20	Dil Fac

Eurofins Midland

8/2/2022

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: SS04 Lab Sample ID: 880-17247-4 Date Collected: 07/20/22 10:43

Matrix: Solid

Date Received: 07/21/22 15:26 Sample Depth: 0.5

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.1		4.95	mg/Kg			07/26/22 20:19	1

Client Sample ID: SS05 Lab Sample ID: 880-17247-5

Date Collected: 07/20/22 10:47 Date Received: 07/21/22 15:26

Method: 8021B - Volatile Organic	c Compounds (GC)						
Analyte	-	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		07/26/22 10:46	07/29/22 20:43	
Toluene	< 0.00199	U *1	0.00199	mg/Kg		07/26/22 10:46	07/29/22 20:43	
Ethylbenzene	< 0.00199	U *- *1	0.00199	mg/Kg		07/26/22 10:46	07/29/22 20:43	
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		07/26/22 10:46	07/29/22 20:43	
o-Xylene	< 0.00199	U *- *1	0.00199	mg/Kg		07/26/22 10:46	07/29/22 20:43	
Xylenes, Total	<0.00398	U *- *1	0.00398	mg/Kg		07/26/22 10:46	07/29/22 20:43	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	95		70 - 130			07/26/22 10:46	07/29/22 20:43	
1,4-Difluorobenzene (Surr)	118		70 - 130			07/26/22 10:46	07/29/22 20:43	
Method: Total BTEX - Total BTE)	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			07/29/22 15:20	
Analyte Total TPH	Result <50.0	Qualifier U	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 07/27/22 09:04	Dil Fa
Total TPH - -	<50.0	U	50.0	mg/Kg			07/27/22 09:04	
Method: 8015B NM - Diesel Rang	• •	RO) (GC) Qualifier	RL	Unit		Duamanad	Amalumad	Dil Fa
Analyte					D	Prepared	Analyzed	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 19:42	
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 19:42	
C10-C28)	00.0		33.3	9/9		0.720722 .0.20	0.720722 .02	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 19:42	
Oil Range Organics (Over C26-C36)								Dil Fa
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	DII Fa
Surrogate		Qualifier	<u>Limits</u> 70 - 130			Prepared 07/25/22 16:28	Analyzed 07/26/22 19:42	
Surrogate 1-Chlorooctane		Qualifier				<u> </u>		DIIF
Surrogate	99 105		70 - 130			07/25/22 16:28	07/26/22 19:42	
Surrogate 1-Chlorooctane o-Terphenyl	99 105 omatography -		70 - 130	Unit	D	07/25/22 16:28	07/26/22 19:42	Dil Fa

Matrix: Solid

Lab Sample ID: 880-17247-6

Client Sample Results

Client: Ensolum

Project/Site: MCA 120

Job ID: 880-17247-1

SDG: Lea County NM

Client Sample ID: SS06

Date Collected: 07/20/22 10:50 Date Received: 07/21/22 15:26

Sample Depth: 0.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
Toluene	<0.00199	U	0.00199	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		07/29/22 14:53	08/02/22 13:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			07/29/22 14:53	08/02/22 13:02	1
1,4-Difluorobenzene (Surr)	97		70 - 130			07/29/22 14:53	08/02/22 13:02	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			07/29/22 15:20	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			07/27/22 09:04	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/26/22 08:36	07/26/22 19:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/26/22 08:36	07/26/22 19:43	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/26/22 08:36	07/26/22 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130			07/26/22 08:36	07/26/22 19:43	1
o-Terphenyl	94		70 - 130			07/26/22 08:36	07/26/22 19:43	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.49		4.98	mg/Kg			07/26/22 20:56	1

Eurofins Midland

Surrogate Summary

Client: Ensolum

Project/Site: MCA 120

Job ID: 880-17247-1

SDG: Lea County NM

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)	
880-17204-A-79-C MS	Matrix Spike	88	111	
880-17204-A-79-D MSD	Matrix Spike Duplicate	87	110	
880-17247-1	SS01	86	115	
880-17247-1 MS	SS01	86	110	
880-17247-1 MSD	SS01	88	109	
880-17247-2	SS02	94	114	
880-17247-3	SS03	97	118	
880-17247-4	SS04	90	115	
880-17247-5	SS05	95	118	
880-17247-6	SS06	101	97	
880-17512-A-1-D MS	Matrix Spike	280 S1+	77	
880-17512-A-1-E MSD	Matrix Spike Duplicate	35 S1-	87	
LCS 880-30596/1-A	Lab Control Sample	85	108	
LCS 880-30668/1-A	Lab Control Sample	82	110	
LCS 880-31023/1-A	Lab Control Sample	70	102	
LCSD 880-30596/2-A	Lab Control Sample Dup	84	108	
LCSD 880-30668/2-A	Lab Control Sample Dup	56 S1-	126	
LCSD 880-31023/2-A	Lab Control Sample Dup	104	109	
MB 880-30596/5-A	Method Blank	83	107	
MB 880-30668/5-A	Method Blank	83	107	
MB 880-31023/5-A	Method Blank	78	93	
MB 880-31030/5-A	Method Blank	73	97	

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)	
880-17247-1	SS01	86	94	
880-17247-2	SS02	63 S1-	56 S1-	
880-17247-3	SS03	96	101	
880-17247-4	SS04	76	78	
880-17247-5	SS05	99	105	
880-17247-6	SS06	76	94	
890-2603-A-1-G MS	Matrix Spike	77	67 S1-	
890-2603-A-1-H MSD	Matrix Spike Duplicate	66 S1-	56 S1-	
890-2606-A-1-D MS	Matrix Spike	70	70	
890-2606-A-1-E MSD	Matrix Spike Duplicate	71	73	
LCS 880-30624/2-A	Lab Control Sample	113	109	
LCS 880-30658/2-A	Lab Control Sample	106	111	
LCSD 880-30624/3-A	Lab Control Sample Dup	101	101	
LCSD 880-30658/3-A	Lab Control Sample Dup	94	101	
MB 880-30624/1-A	Method Blank	82	87	
MB 880-30658/1-A	Method Blank	74	83	

Eurofins Midland

Surrogate Summary

Client: Ensolum
Project/Site: MCA 120

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Job ID: 880-17247-1 SDG: Lea County NM

-

3

4

6

8

3

11

13

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-30596/5-A

Matrix: Solid

Analysis Batch: 30958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30596

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/25/22 14:08	07/29/22 23:50	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/25/22 14:08	07/29/22 23:50	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/25/22 14:08	07/29/22 23:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/25/22 14:08	07/29/22 23:50	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/25/22 14:08	07/29/22 23:50	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/25/22 14:08	07/29/22 23:50	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83	70 - 130	07/25/22 14:08	07/29/22 23:50	1
1,4-Difluorobenzene (Surr)	107	70 - 130	07/25/22 14:08	07/29/22 23:50	1

Lab Sample ID: LCS 880-30596/1-A

Matrix: Solid

Analysis Batch: 30958

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 30596

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1121	-	mg/Kg		112	70 - 130	
Toluene	0.100	0.09289		mg/Kg		93	70 - 130	
Ethylbenzene	0.100	0.08843		mg/Kg		88	70 - 130	
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130	
o-Xylene	0.100	0.08588		mg/Kg		86	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	85		70 - 130		
1,4-Difluorobenzene (Surr)	108		70 - 130		

Lab Sample ID: LCSD 880-30596/2-A

Matrix: Solid

Analysis Batch: 30958

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 30596

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1128		mg/Kg		113	70 - 130	1	35
Toluene	0.100	0.09219		mg/Kg		92	70 - 130	1	35
Ethylbenzene	0.100	0.08800		mg/Kg		88	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1710		mg/Kg		86	70 - 130	0	35
o-Xylene	0.100	0.08542		mg/Kg		85	70 - 130	1	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	84	70 - 130
1 4-Difluorobenzene (Surr)	108	70 130

Lab Sample ID: MB 880-30668/5-A

Matrix: Solid

Analysis Batch: 30958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30668

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/26/22 10:46	07/29/22 12:42	1
Toluene	< 0.00200	U	0.00200	mg/Kg		07/26/22 10:46	07/29/22 12:42	1

Eurofins Midland

Page 13 of 29

Client: Ensolum Job ID: 880-17247-1 SDG: Lea County NM Project/Site: MCA 120

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

Lab Sample ID: MB 880-30668/5-A **Matrix: Solid**

Analysis Batch: 30958

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30668

Prep Batch: 30668

	IVID	IAID					
Analyte	Result	Qualifier	RL	Unit	D Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	07/26/22 10:	46 07/29/22 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	07/26/22 10:	46 07/29/22 12:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	07/26/22 10:	46 07/29/22 12:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	07/26/22 10:	46 07/29/22 12:42	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	07/26/22 10:46	07/29/22 12:42	1
1,4-Difluorobenzene (Surr)	107		70 - 130	07/26/22 10:46	07/29/22 12:42	1

Lab Sample ID: LCS 880-30668/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 30958

-	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1249		mg/Kg		125	70 - 130
Toluene	0.100	0.1035		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.1926		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09308		mg/Kg		93	70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	82	70 - 130
1,4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: LCSD 880-30668/2-A

Matrix: Solid

Analysis Batch: 30958

Client	Samnla	ID· I al	b Contro	l Samnla	Dun

Prep Type: Total/NA

Prep Batch: 30668

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1202		mg/Kg		120	70 - 130	4	35
Toluene	0.100	0.07106	*1	mg/Kg		71	70 - 130	37	35
Ethylbenzene	0.100	0.06468	*- *1	mg/Kg		65	70 - 130	44	35
m-Xylene & p-Xylene	0.200	0.1112	*- *1	mg/Kg		56	70 - 130	54	35
o-Xylene	0.100	0.05417	*- *1	mg/Kg		54	70 - 130	53	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	56	S1-	70 - 130
1,4-Difluorobenzene (Surr)	126		70 - 130

Lab Sample ID: 880-17247-1 MS

Matrix: Solid

Analysis Batch: 30958

•	Client	Sample	ID: SS01
---	--------	--------	----------

Prep Type: Total/NA Prep Batch: 30668

•	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00201	U	0.0996	0.1114		mg/Kg		112	70 - 130
Toluene	<0.00201	U *1	0.0996	0.07654		mg/Kg		77	70 - 130
Ethylbenzene	<0.00201	U *- F1 *1	0.0996	0.05750	F1	mg/Kg		58	70 - 130
m-Xylene & p-Xylene	<0.00402	U *- F1 *1	0.199	0.08803	F1	mg/Kg		44	70 - 130

Client Sample ID: SS01

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31023

QC Sample Results

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

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

Lab Sample ID: 880-17247-1 MS **Matrix: Solid**

Prep Type: Total/NA Analysis Batch: 30958 Prep Batch: 30668

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
o-Xylene	<0.00201	U *- F1 *1	0.0996	0.06393	F1	mg/Kg		64	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 _ 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-17247-1 MSD

Client Sample ID: SS01 Matrix: Solid Prep Type: Total/NA Analysis Batch: 30958 Prep Batch: 30668

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00201	U	0.100	0.1060		mg/Kg		106	70 - 130	5	35	
Toluene	<0.00201	U *1	0.100	0.07556		mg/Kg		75	70 - 130	1	35	
Ethylbenzene	<0.00201	U *- F1 *1	0.100	0.05625	F1	mg/Kg		56	70 - 130	2	35	
m-Xylene & p-Xylene	<0.00402	U *- F1 *1	0.200	0.08627	F1	mg/Kg		43	70 - 130	2	35	
o-Xylene	<0.00201	U *- F1 *1	0.100	0.06458	F1	mg/Kg		64	70 - 130	1	35	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: MB 880-31023/5-A

Matrix: Solid

Analysis Batch: 31193

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/29/22 14:53	08/02/22 06:34	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/29/22 14:53	08/02/22 06:34	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/29/22 14:53	08/02/22 06:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/29/22 14:53	08/02/22 06:34	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/29/22 14:53	08/02/22 06:34	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/29/22 14:53	08/02/22 06:34	1

	MB	MB			
Surrogate	%Recovery	Qualifier Limi	rs Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78	70 -	07/29/22 14:53	08/02/22 06:34	1
1.4-Difluorobenzene (Surr)	93	70 -	30 07/29/22 14:53	08/02/22 06:34	1

Lab Sample ID: LCS 880-31023/1-A

Matrix: Solid

Analysis Batch: 31193							Prep E	atch: 31023
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09121		mg/Kg		91	70 - 130	
Toluene	0.100	0.08538		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08659		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1757		mg/Kg		88	70 - 130	
o-Xylene	0.100	0.09078		mg/Kg		91	70 - 130	

Eurofins Midland

Prep Type: Total/NA

Released to Imaging: 9/21/2022 2:27:00 PM

Job ID: 880-17247-1 SDG: Lea County NM

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

Lab Sample ID: LCS 880-31023/1-A

Matrix: Solid

Client: Ensolum

Project/Site: MCA 120

Analysis Batch: 31193

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31023

LCS LCS

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

Lab Sample ID: LCSD 880-31023/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 31193

Prep Type: Total/NA

Prep Batch: 31023

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1074		mg/Kg		107	70 - 130	16	35
Toluene	0.100	0.09979		mg/Kg		100	70 - 130	16	35
Ethylbenzene	0.100	0.1017		mg/Kg		102	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.2063		mg/Kg		103	70 - 130	16	35
o-Xylene	0.100	0.1125		mg/Kg		113	70 - 130	21	35

LCSD LCSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 104 70 - 130 1,4-Difluorobenzene (Surr) 109 70 - 130

Lab Sample ID: MB 880-31030/5-A Client Sample ID: Method Blank

Analysis Batch: 31193

Matrix: Solid

Prep Type: Total/NA

Prep Batch: 31030

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/29/22 15:39	08/01/22 17:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/29/22 15:39	08/01/22 17:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/29/22 15:39	08/01/22 17:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/29/22 15:39	08/01/22 17:07	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/29/22 15:39	08/01/22 17:07	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/29/22 15:39	08/01/22 17:07	1

мв мв

MD MD

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	07/29/22 15:39	08/01/22 17:07	1
1,4-Difluorobenzene (Surr)	97		70 - 130	07/29/22 15:39	08/01/22 17:07	1

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

Lab Sample ID: MB 880-30624/1-A

Matrix: Solid

Analysis Batch: 30643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30624

	IVID	INID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 09:44	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 09:44	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/25/22 16:28	07/26/22 09:44	1
C10-C28)				0 0		***************************************	****	1

Job ID: 880-17247-1 Client: Ensolum Project/Site: MCA 120 SDG: Lea County NM

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

Lab Sample ID: MB 880-30624/1-A

Matrix: Solid

Analysis Batch: 30643

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 30624

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
	1-Chlorooctane	82		70 - 130	07/25/22	2 16:28	07/26/22 09:44	1
l	o-Terphenyl	87		70 - 130	07/25/22	2 16:28	07/26/22 09:44	1

Lab Sample ID: LCS 880-30624/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 30643

Prep Type: Total/NA

Prep Batch: 30624

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	1000	922.1		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1096		mg/Kg		110	70 - 130

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-30624/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 30643

Diesel Range Organics (Over

Prep Type: Total/NA

70 - 130

98

Prep Batch: 30624

12

20

Spike LCSD LCSD Added Result Qualifier Unit %Rec Limits RPD Limit Gasoline Range Organics 1000 836.9 mg/Kg 84 70 - 130 10 20 (GRO)-C6-C10

975.9

mg/Kg

C10-C28)

Analyte

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	101		70 - 130		
o-Ternhenyl	101		70 - 130		

Lab Sample ID: MB 880-30658/1-A Client Sample ID: Method Blank

1000

Matrix: Solid

Analysis Batch: 30649

Prep Type: Total/NA

Prep Batch: 30658

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		07/26/22 08:35	07/26/22 10:49	1
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		07/26/22 08:35	07/26/22 10:49	1
C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/26/22 08:35	07/26/22 10:49	1

мв мв

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	07/26/22 08:35	07/26/22 10:49	1
o-Terphenyl	83		70 - 130	07/26/22 08:35	07/26/22 10:49	1

Job ID: 880-17247-1

Client: Ensolum Project/Site: MCA 120 SDG: Lea County NM

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

Lab Sample ID: LCS 880-30658/2-A Client Sample ID: Lab Control Sample **Matrix: Solid**

Limits

Prep Type: Total/NA Prep Batch: 30658

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits D Gasoline Range Organics 1000 1058 mg/Kg 106 70 - 130 (GRO)-C6-C10 1000 70 - 130Diesel Range Organics (Over 1146 mg/Kg 115

C10-C28)

Matrix: Solid

Analysis Batch: 30649

LCS LCS %Recovery Qualifier Surrogate

Lab Sample ID: LCSD 880-30658/3-A

1-Chlorooctane 70 - 130 106 o-Terphenyl 111 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 30658

Analysis Batch: 30649 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 6 Gasoline Range Organics 1120 mg/Kg 112 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1009 mg/Kg 101 70 - 130 13 20

C10-C28)

LCSD LCSD Qualifier Surrogate %Recovery Limits 1-Chlorooctane 94 70 - 130 101 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-30598/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble

Analysis Batch: 30688

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 07/26/22 17:23 mg/Kg

Lab Sample ID: LCS 880-30598/2-A Client Sample ID: Lab Control Sample **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 30688

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 257.9 103 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-30598/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 30688

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier %Rec Limits RPD Limit Unit D Chloride 250 104 259.0 mg/Kg 90 _ 110 20

QC Sample Results

Client: Ensolum

Project/Site: MCA 120

Job ID: 880-17247-1

SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-17247-5 MS

Matrix: Solid

Client Sample ID: SS05

Prep Type: Soluble

Analysis Batch: 30688

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	19.3		248	284.3		mg/Kg		107	90 - 110	

Lab Sample ID: 880-17247-5 MSD

Matrix: Solid

Client Sample ID: SS05

Prep Type: Soluble

Analysis Batch: 30688

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	19.3		248	284.8		mg/Kg		107	90 - 110	0	20

Client: Ensolum
Project/Site: MCA 120
Job ID: 880-17247-1
SDG: Lea County NM

GC VOA

Prep Batch: 30596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-30596/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-30596/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-30596/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 30668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	5035	
880-17247-2	SS02	Total/NA	Solid	5035	
880-17247-3	SS03	Total/NA	Solid	5035	
880-17247-4	SS04	Total/NA	Solid	5035	
880-17247-5	SS05	Total/NA	Solid	5035	
MB 880-30668/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-30668/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-30668/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17247-1 MS	SS01	Total/NA	Solid	5035	
880-17247-1 MSD	SS01	Total/NA	Solid	5035	

Analysis Batch: 30958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	8021B	30668
880-17247-2	SS02	Total/NA	Solid	8021B	30668
880-17247-3	SS03	Total/NA	Solid	8021B	30668
880-17247-4	SS04	Total/NA	Solid	8021B	30668
880-17247-5	SS05	Total/NA	Solid	8021B	30668
MB 880-30596/5-A	Method Blank	Total/NA	Solid	8021B	30596
MB 880-30668/5-A	Method Blank	Total/NA	Solid	8021B	30668
LCS 880-30596/1-A	Lab Control Sample	Total/NA	Solid	8021B	30596
LCS 880-30668/1-A	Lab Control Sample	Total/NA	Solid	8021B	30668
LCSD 880-30596/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	30596
LCSD 880-30668/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	30668
880-17247-1 MS	SS01	Total/NA	Solid	8021B	30668
880-17247-1 MSD	SS01	Total/NA	Solid	8021B	30668

Prep Batch: 31023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-6	SS06	Total/NA	Solid	5035	
MB 880-31023/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-31023/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-31023/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 31026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	Total BTEX	
880-17247-2	SS02	Total/NA	Solid	Total BTEX	
880-17247-3	SS03	Total/NA	Solid	Total BTEX	
880-17247-4	SS04	Total/NA	Solid	Total BTEX	
880-17247-5	SS05	Total/NA	Solid	Total BTEX	
880-17247-6	SS06	Total/NA	Solid	Total BTEX	

Eurofins Midland

1

9

Λ

6

g

9

11

13

Client: Ensolum
Project/Site: MCA 120

Job ID: 880-17247-1 SDG: Lea County NM

GC VOA

Prep Batch: 31030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31030/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31193

Lab Sample ID 880-17247-6	Client Sample ID SS06	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 31023
MB 880-31023/5-A	Method Blank	Total/NA	Solid	8021B	31023
MB 880-31030/5-A	Method Blank	Total/NA	Solid	8021B	31030
LCS 880-31023/1-A	Lab Control Sample	Total/NA	Solid	8021B	31023
LCSD 880-31023/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	31023

GC Semi VOA

Prep Batch: 30624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	8015NM Prep	
880-17247-2	SS02	Total/NA	Solid	8015NM Prep	
880-17247-3	SS03	Total/NA	Solid	8015NM Prep	
880-17247-4	SS04	Total/NA	Solid	8015NM Prep	
880-17247-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-30624/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-30624/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-30624/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 30643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	8015B NM	30624
880-17247-2	SS02	Total/NA	Solid	8015B NM	30624
880-17247-3	SS03	Total/NA	Solid	8015B NM	30624
880-17247-4	SS04	Total/NA	Solid	8015B NM	30624
880-17247-5	SS05	Total/NA	Solid	8015B NM	30624
MB 880-30624/1-A	Method Blank	Total/NA	Solid	8015B NM	30624
LCS 880-30624/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	30624
LCSD 880-30624/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	30624

Analysis Batch: 30649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-6	SS06	Total/NA	Solid	8015B NM	30658
MB 880-30658/1-A	Method Blank	Total/NA	Solid	8015B NM	30658
LCS 880-30658/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	30658
LCSD 880-30658/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	30658

Prep Batch: 30658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-6	SS06	Total/NA	Solid	8015NM Prep	
MB 880-30658/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-30658/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-30658/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 30773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Total/NA	Solid	8015 NM	

Client: Ensolum
Project/Site: MCA 120
Job ID: 880-17247-1
SDG: Lea County NM

GC Semi VOA (Continued)

Analysis Batch: 30773 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-2	SS02	Total/NA	Solid	8015 NM	
880-17247-3	SS03	Total/NA	Solid	8015 NM	
880-17247-4	SS04	Total/NA	Solid	8015 NM	
880-17247-5	SS05	Total/NA	Solid	8015 NM	
880-17247-6	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 30598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Soluble	Solid	DI Leach	
880-17247-2	SS02	Soluble	Solid	DI Leach	
880-17247-3	SS03	Soluble	Solid	DI Leach	
880-17247-4	SS04	Soluble	Solid	DI Leach	
880-17247-5	SS05	Soluble	Solid	DI Leach	
880-17247-6	SS06	Soluble	Solid	DI Leach	
MB 880-30598/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-30598/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-30598/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17247-5 MS	SS05	Soluble	Solid	DI Leach	
880-17247-5 MSD	SS05	Soluble	Solid	DI Leach	

Analysis Batch: 30688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17247-1	SS01	Soluble	Solid	300.0	30598
880-17247-2	SS02	Soluble	Solid	300.0	30598
880-17247-3	SS03	Soluble	Solid	300.0	30598
880-17247-4	SS04	Soluble	Solid	300.0	30598
880-17247-5	SS05	Soluble	Solid	300.0	30598
880-17247-6	SS06	Soluble	Solid	300.0	30598
MB 880-30598/1-A	Method Blank	Soluble	Solid	300.0	30598
LCS 880-30598/2-A	Lab Control Sample	Soluble	Solid	300.0	30598
LCSD 880-30598/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	30598
880-17247-5 MS	SS05	Soluble	Solid	300.0	30598
880-17247-5 MSD	SS05	Soluble	Solid	300.0	30598

Lab Chronicle

Client: Ensolum Job ID: 880-17247-1 Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: SS01 Lab Sample ID: 880-17247-1 Date Collected: 07/20/22 10:35

Matrix: Solid

Date Received: 07/21/22 15:26

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			30668	07/26/22 10:46	MR	XEN MID
Total/NA	Analysis	8021B		1	30958	07/29/22 13:04	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	31026	07/29/22 15:20	SM	XEN MID
Total/NA	Analysis	8015 NM		1	30773	07/27/22 09:04	AJ	XEN MID
Total/NA	Prep	8015NM Prep			30624	07/25/22 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	30643	07/26/22 18:14	AJ	XEN MID
Soluble	Leach	DI Leach			30598	07/25/22 15:14	KS	XEN MID
Soluble	Analysis	300.0		1	30688	07/26/22 19:51	CH	XEN MID

Lab Sample ID: 880-17247-2 **Client Sample ID: SS02**

Date Collected: 07/20/22 10:37 **Matrix: Solid**

Date Received: 07/21/22 15:26

Batch Batch Dilution Batch Prepared Prep Type Туре Method Run Factor Number or Analyzed Analyst Lab Prep 5035 XEN MID Total/NA 30668 07/26/22 10:46 MR Total/NA 8021B 30958 07/29/22 19:41 XEN MID Analysis 1 MR Total/NA Total BTEX 31026 07/29/22 15:20 XEN MID Analysis 1 SM Total/NA Analysis 8015 NM 30773 07/27/22 09:04 XEN MID Total/NA 30624 XEN MID Prep 8015NM Prep 07/25/22 16:28 DM Total/NA Analysis 8015B NM 30643 07/26/22 18:36 AJ XEN MID Soluble XEN MID Leach DI Leach 30598 07/25/22 15:14 KS Soluble Analysis 300.0 1 30688 07/26/22 20:00 СН XEN MID

Client Sample ID: SS03 Lab Sample ID: 880-17247-3 Date Collected: 07/20/22 10:41

Date Received: 07/21/22 15:26

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035	 -		30668	07/26/22 10:46	MR	XEN MID
Total/NA	Analysis	8021B		1	30958	07/29/22 20:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	31026	07/29/22 15:20	SM	XEN MID
Total/NA	Analysis	8015 NM		1	30773	07/27/22 09:04	AJ	XEN MID
Total/NA	Prep	8015NM Prep			30624	07/25/22 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	30643	07/26/22 18:58	AJ	XEN MID
Soluble	Leach	DI Leach			30598	07/25/22 15:14	KS	XEN MID
Soluble	Analysis	300.0		1	30688	07/26/22 20:09	CH	XEN MID

Client Sample ID: SS04 Lab Sample ID: 880-17247-4 Date Collected: 07/20/22 10:43 Matrix: Solid

Date Received: 07/21/22 15:26

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			30668	07/26/22 10:46	MR	XEN MID
Total/NA	Analysis	8021B		1	30958	07/29/22 20:23	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	31026	07/29/22 15:20	SM	XEN MID

Eurofins Midland

Page 23 of 29

Matrix: Solid

Client: Ensolum

Project/Site: MCA 120

Client Sample ID: SS04

Date Collected: 07/20/22 10:43

Date Received: 07/21/22 15:26

Job ID: 880-17247-1

SDG: Lea County NM

Lab Sample ID: 880-17247-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	30773	07/27/22 09:04	AJ	XEN MID
Total/NA	Prep	8015NM Prep			30624	07/25/22 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	30643	07/26/22 19:20	AJ	XEN MID
Soluble	Leach	DI Leach			30598	07/25/22 15:14	KS	XEN MID
Soluble	Analysis	300.0		1	30688	07/26/22 20:19	CH	XEN MID

Client Sample ID: SS05 Lab Sample ID: 880-17247-5

Date Collected: 07/20/22 10:47 **Matrix: Solid**

Date Received: 07/21/22 15:26

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			30668	07/26/22 10:46	MR	XEN MID
Total/NA	Analysis	8021B		1	30958	07/29/22 20:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	31026	07/29/22 15:20	SM	XEN MID
Total/NA	Analysis	8015 NM		1	30773	07/27/22 09:04	AJ	XEN MID
Total/NA	Prep	8015NM Prep			30624	07/25/22 16:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	30643	07/26/22 19:42	AJ	XEN MID
Soluble	Leach	DI Leach			30598	07/25/22 15:14	KS	XEN MID
Soluble	Analysis	300.0		1	30688	07/26/22 20:28	CH	XEN MID

Client Sample ID: SS06 Lab Sample ID: 880-17247-6

Date Collected: 07/20/22 10:50 **Matrix: Solid** Date Received: 07/21/22 15:26

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31023	07/29/22 14:53	MR	XEN MID
Total/NA	Analysis	8021B		1	31193	08/02/22 13:02	MR	XEN MID
Total/NA	Analysis	Total BTEX		1	31026	07/29/22 15:20	SM	XEN MID
Total/NA	Analysis	8015 NM		1	30773	07/27/22 09:04	AJ	XEN MID
Total/NA	Prep	8015NM Prep			30658	07/26/22 08:36	DM	XEN MID
Total/NA	Analysis	8015B NM		1	30649	07/26/22 19:43	AJ	XEN MID
Soluble	Leach	DI Leach			30598	07/25/22 15:14	KS	XEN MID
Soluble	Analysis	300.0		1	30688	07/26/22 20:56	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 120
Job ID: 880-17247-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

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

3

C

0

4.0

11

13

Method Summary

Client: Ensolum

Project/Site: MCA 120

Job ID: 880-17247-1

SDG: Lea County NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum Project/Site: MCA 120 Job ID: 880-17247-1

SDG: Lea County NM

3	
3	
3	
3	
3	
3	
3	
3	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-17247-1	SS01	Solid	07/20/22 10:35	07/21/22 15:26	0.5
880-17247-2	SS02	Solid	07/20/22 10:37	07/21/22 15:26	0.5
880-17247-3	SS03	Solid	07/20/22 10:41	07/21/22 15:26	0.5
880-17247-4	SS04	Solid	07/20/22 10:43	07/21/22 15:26	0.5
880-17247-5	SS05	Solid	07/20/22 10:47	07/21/22 15:26	0.5
880-17247-6	SS06	Solid	07/20/22 10:50	07/21/22 15:26	0.5

3.

Project Manager

City, State ZIP: \ddress: Company Name

Project Location. Project Number: Project Name:

Ø302057819

Due Date Routine

Turn Around

ANALYSIS REQUEST

None NO

DI Water H₂O

Preservative Codes

Rush

Chain of Custody

	Preservative Codes	QUEST	ANALYSIS REQUEST	Turn Around		OZI MOMI
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 Bill to: (if different) Kalei Jennigns Company Name. Ensolum, LLC Address. 601 N Marienfeld St Suite 400 City, State ZIP. Midland, TX 79701 Email. kiennings@ensolum.com						*
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 Bill to: (if different) Kalei Jennigns Company Name. Ensolum, LLC Address. 601 N Marienfeld St Suite 400 City, State ZIP. Midland, TX 79701	ADaPT ☐ Other:		n com	all. kjennings@ensolun		817-683-2503
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, Carisbad, NM (575) 988-3199 Bill to: (if different) Kalei Jennigns Company Name. Ensolum, LLC Address. 601 N Marienfeld St Suite 400	□ PST/UST	Reporting Level III	Midland, TX 79701	City, State ZIP.	79701	Midland, TX 79701
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 Bill to: (if different) Kalei Jennigns Company Name. Ensolum, LLC		State of Project:	601 N Marienfeld St Suite 400	Address.	nfeld St Suite 400	601 N Marie
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 www.xenco.com P Work Order Comm	Brownfields ☐ RRC ☐ Superfund ☐	Program: UST/PST PRP	Ensolum, LLC	Company Name.	C	Ensolum, LLC
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Work Order No: Midland TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 www.xenco.com P	Order Comments	Work (Kalei Jennigns	Bill to: (if different)	98	Kaleı Jennings
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, Carisbad, NM (575) 988-3199	co.com Page l of l	www xenc				
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland TX (432) 704-5440, San Antonio, TX (210) 509-3334 Work Order No:	-		X (915) 585-3443, Lubbock, TX (806) 794-1296 (575) 392-7550, Carisbad, NM (575) 988-3199	EL Paso, T) Hobbs, NM	S. C.	
		Work Ord	X (281) 240-4200, Dallas, TX (214) 902-0300 432) 704-5440, San Antonio, TX (210) 509-3334	Houston, T Midland TX (revioument Testing	V

	6	6:26	2 6 12 17	Received by: (Signature)	reviews signature or unis document and reinquistment 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 pipelied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn			000 4 4 4 0001	Lhal Lhal	1043	loul	 7-vn 1035 0.5 G 1 XXX	Sampled Sampled Depth Comp Cont F T	1	পূৰ্	80 21(ram 21			TAT starts the day received by	Due Date 5 DAY
Revised Date: 08/25/2020 Rev. 2020.2				(Signature) Received by (Signature) Date/Time	contractors. It assigns standard terms and conditions ich losses are due to circumstances beyond the control These terms will be enforced unless previously negotiated.	Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn Mn Mo Ni Se Ag Ti U Hg 1631/2451/7470/7471		COC-1/247 Chain of Custody						Sample Comments	NaOH+Ascorbic Acid SAPC	Zn Acetate+NaOH Zn	Na ₂ S ₂ O ₃ NaSO ₃	NaHSO ₄ NABIS	•	H ₂ SO ₂ H ₂ NaOH Na		Cool Cool

Login Sample Receipt Checklist

Client: Ensolum Job Number: 880-17247-1

SDG Number: Lea County NM

List Source: Eurofins Midland Login Number: 17247 List Number: 1

Creator: Rodriguez, Leticia

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

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2837-1

Laboratory Sample Delivery Group: Lea County NM

Client Project/Site: MCA 120

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

JURAMER

Authorized for release by 9/7/2022 3:58:17 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

Review your project results through EO L.

Have a Question?

The Expert

Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 9/21/2022 2:27:00 PM

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

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

1

3

4

5

7

10

12

Client: Ensolum

Project/Site: MCA 120

Laboratory Job ID: 890-2837-1 SDG: Lea County NM

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

2

3

4

6

8

10

12

13

Definitions/Glossary

Job ID: 890-2837-1 Client: Ensolum Project/Site: MCA 120 SDG: Lea County NM

Qualifiers

GC VOA

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

F2 MS/MSD RPD exceeds control limits

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

GC Semi VOA

Qualifier **Qualifier Description**

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) 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 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: 890-2837-1

Project/Site: MCA 120

SDG: Lea County NM

Job ID: 890-2837-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2837-1

Receipt

The sample was received on 8/24/2022 4:27 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C

GC VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33075 and analytical batch 880-33438 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.

3

А

5

6

7

_

10

10

13

Matrix: Solid

Lab Sample ID: 890-2837-1

Client Sample Results

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: FS01

Date Collected: 08/24/22 14:30 Date Received: 08/24/22 16:27

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
Toluene	< 0.00199	U	0.00199	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/02/22 16:09	09/06/22 16:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130			09/02/22 16:09	09/06/22 16:53	1
1,4-Difluorobenzene (Surr)	92		70 - 130			09/02/22 16:09	09/06/22 16:53	1
- Method: Total BTEX - Total BTE)	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/07/22 16:12	1
Analyte Total TPH	Result 318	Qualifier	RL 49.9	Unit mg/Kg	D	Prepared	Analyzed 08/29/22 11:33	Dil Fac
Total IPH	318		49.9	mg/Kg			00/29/22 11:33	Į.
Method: 8015B NM - Diesel Rang	ao Organico (D	PO) (GC)						
	ge Organics (D.	(00)						
	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• •	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared 08/26/22 15:45	Analyzed 08/29/22 01:51	Dil Fac
Analyte Gasoline Range Organics	Result	Qualifier			<u>D</u>	<u>.</u>		
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	08/26/22 15:45	08/29/22 01:51	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 318	Qualifier U	49.9	mg/Kg	<u>D</u>	08/26/22 15:45 08/26/22 15:45	08/29/22 01:51 08/29/22 01:51	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9 318 <49.9	Qualifier U	49.9 49.9 49.9	mg/Kg	<u>D</u>	08/26/22 15:45 08/26/22 15:45 08/26/22 15:45	08/29/22 01:51 08/29/22 01:51 08/29/22 01:51	1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 318 <49.9 %Recovery	Qualifier U	49.9 49.9 49.9 <i>Limits</i>	mg/Kg	<u>D</u>	08/26/22 15:45 08/26/22 15:45 08/26/22 15:45 Prepared	08/29/22 01:51 08/29/22 01:51 08/29/22 01:51 Analyzed	1 1 1 <i>Dil Fac</i>
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	08/26/22 15:45 08/26/22 15:45 08/26/22 15:45 Prepared 08/26/22 15:45	08/29/22 01:51 08/29/22 01:51 08/29/22 01:51 Analyzed 08/29/22 01:51	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	08/26/22 15:45 08/26/22 15:45 08/26/22 15:45 Prepared 08/26/22 15:45	08/29/22 01:51 08/29/22 01:51 08/29/22 01:51 Analyzed 08/29/22 01:51	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Surrogate Summary

Client: Ensolum Job ID: 890-2837-1
Project/Site: MCA 120 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptar	ice Limits)
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
820-5532-A-1-B MS	Matrix Spike	123	96		
820-5532-A-1-C MSD	Matrix Spike Duplicate	289 S1+	263 S1+		
890-2837-1	FS01	123	92		
LCS 880-33665/1-A	Lab Control Sample	126	96		
LCSD 880-33665/2-A	Lab Control Sample Dup	118	100		
MB 880-33665/5-A	Method Blank	101	90		
Surrogate Legend					
BFB = 4-Bromofluorobe	nzene (Surr)				
DFBZ = 1,4-Difluoroben	,				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2837-1	FS01	97	90	
890-2838-A-1-C MS	Matrix Spike	92	81	
890-2838-A-1-D MSD	Matrix Spike Duplicate	88	75	
LCS 880-33085/2-A	Lab Control Sample	95	111	
LCSD 880-33085/3-A	Lab Control Sample Dup	93	107	
MB 880-33085/1-A	Method Blank	98	107	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33665/5-A

Matrix: Solid Analysis Batch: 33800 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33665

	MB	MB					
Analyte	Result	Qualifier	RL	Unit D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	09/02/22 16:09	09/06/22 12:05	1
Toluene	<0.00200	U	0.00200	mg/Kg	09/02/22 16:09	09/06/22 12:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	09/02/22 16:09	09/06/22 12:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	09/02/22 16:09	09/06/22 12:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	09/02/22 16:09	09/06/22 12:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	09/02/22 16:09	09/06/22 12:05	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/02/22 16:09	09/06/22 12:05	1
1,4-Difluorobenzene (Surr)	90		70 - 130	09/02/22 16:09	09/06/22 12:05	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-33665/1-A

Matrix: Solid

Analysis Batch: 33800

Prep Type: Total/NA

Prep Batch: 33665

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08711		mg/Kg		87	70 - 130	
Toluene	0.100	0.08943		mg/Kg		89	70 - 130	
Ethylbenzene	0.100	0.09716		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.2159		mg/Kg		108	70 - 130	
o-Xylene	0.100	0.1238		mg/Kg		124	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	· Limits
4-Bromofluorobenzene (Surr)	126	70 - 130
1,4-Difluorobenzene (Surr)	96	70 - 130

Lab Sample ID: LCSD 880-33665/2-A

Matrix: Solid

Analysis Batch: 33800

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33665

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08487		mg/Kg		85	70 - 130	3	35
Toluene	0.100	0.07853		mg/Kg		79	70 - 130	13	35
Ethylbenzene	0.100	0.08168		mg/Kg		82	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.1695		mg/Kg		85	70 - 130	24	35
o-Xylene	0.100	0.09698		mg/Kg		97	70 - 130	24	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 820-5532-A-1-B MS

Matrix: Solid

Analysis Batch: 33800

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33665

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F2 F1	0.0998	0.09790		mg/Kg		98	70 - 130	
Toluene	< 0.00201	U F2 F1	0.0998	0.1016		mg/Kg		102	70 - 130	

Eurofins Carlsbad

Page 7 of 19

Prep Batch: 33665

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

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

Lab Sample ID: 820-5532-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 33800

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U F2 F1	0.0998	0.1080		mg/Kg		108	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.2384		mg/Kg		119	70 - 130	
o-Xylene	<0.00201	U F2 F1	0.0998	0.1367	F1	mg/Kg		137	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 123 1,4-Difluorobenzene (Surr) 70 - 130 96

Lab Sample ID: 820-5532-A-1-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 33800

Analysis Batch: 33800									Prep	Prep Batch: 33665		
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00201	U F2 F1	0.100	0.1904	F1 F2	mg/Kg		190	70 - 130	64	35	
Toluene	<0.00201	U F2 F1	0.100	0.1718	F1 F2	mg/Kg		171	70 - 130	51	35	
Ethylbenzene	<0.00201	U F2 F1	0.100	0.1726	F1 F2	mg/Kg		172	70 - 130	46	35	
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.201	0.3550	F1 F2	mg/Kg		177	70 - 130	39	35	
o-Xylene	<0.00201	U F2 F1	0.100	0.2080	F1 F2	mg/Kg		207	70 - 130	41	35	

MSD MSD Surrogate Qualifier Limits %Recovery 289 S1+ 70 - 130 4-Bromofluorobenzene (Surr) 1,4-Difluorobenzene (Surr) 263 S1+ 70 - 130

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

--- ---

Lab Sample ID: MB 880-33085/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 33085

Analysis Batch: 33129

	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		08/26/22 15:45	08/28/22 17:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/26/22 15:45	08/28/22 17:32	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/26/22 15:45	08/28/22 17:32	1

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 08/26/22 15:45 1-Chlorooctane 98 70 - 130 08/28/22 17:32 08/28/22 17:32 o-Terphenyl 107 70 - 130 08/26/22 15:45

Lab Sample ID: LCS 880-33085/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 33129							Prep	Batch: 33085
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	948.5		mg/Kg		95	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	903.2		mg/Kg		90	70 - 130	
C10-C28)								

Eurofins Carlsbad

Prep Type: Total/NA

Job ID: 890-2837-1 SDG: Lea County NM

Client: Ensolum Project/Site: MCA 120

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

Lab Sample ID: LCS 880-33085/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 33129

Prep Type: Total/NA

Prep Batch: 33085 LCS LCS

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 95 70 - 130 o-Terphenyl 111 70 - 130

Lab Sample ID: LCSD 880-33085/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 33129

Prep Batch: 33085

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 982.2 98 70 - 130 3 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 933.2 93 mg/Kg 70 - 1303 20

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 93 70 - 130 1-Chlorooctane o-Terphenyl 107 70 - 130

Lab Sample ID: 890-2838-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 33129

Prep Type: Total/NA

Prep Batch: 33085

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1001		mg/Kg		99	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	907.4		mg/Kg		87	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 70 - 130 1-Chlorooctane 92 o-Terphenyl 81 70 - 130

Lab Sample ID: 890-2838-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 33129

Matrix: Solid

Prep Type: Total/NA Prep Batch: 33085

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.9	U	998	989.6		mg/Kg		98	70 - 130	1	20	
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	998	858.7		mg/Kg		82	70 - 130	6	20	
C40 C20\												

C10-C28)

	INISD	INISD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	75		70 - 130

QC Sample Results

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33075/1-A

Matrix: Solid

Analysis Batch: 33438

Client Sample ID: Method Blank **Prep Type: Soluble**

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 09/01/22 09:56

Lab Sample ID: LCS 880-33075/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33438

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 247.9 mg/Kg 99 90 - 110

MB MB

Lab Sample ID: LCSD 880-33075/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33438

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 249.0 mg/Kg 100 90 - 110

Lab Sample ID: 890-2830-A-1-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33438

Spike MS MS Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 29.5 F1 250 305.8 F1 90 - 110 mg/Kg

Lab Sample ID: 890-2830-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33438

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 29.5 F1 250 303.7 mg/Kg 110 90 - 110 20

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

GC VOA

Prep Batch: 33665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Total/NA	Solid	5035	
MB 880-33665/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33665/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33665/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-5532-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
820-5532-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Total/NA	Solid	8021B	33665
MB 880-33665/5-A	Method Blank	Total/NA	Solid	8021B	33665
LCS 880-33665/1-A	Lab Control Sample	Total/NA	Solid	8021B	33665
LCSD 880-33665/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33665
820-5532-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	33665
820-5532-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33665

Analysis Batch: 33946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33085

Lab Sample ID 890-2837-1	Client Sample ID FS01	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-33085/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33085/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33085/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2838-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2838-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Total/NA	Solid	8015B NM	33085
MB 880-33085/1-A	Method Blank	Total/NA	Solid	8015B NM	33085
LCS 880-33085/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33085
LCSD 880-33085/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33085
890-2838-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33085
890-2838-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33085

Analysis Batch: 33215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Soluble	Solid	DI Leach	
MB 880-33075/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33075/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33075/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Client: Ensolum
Project/Site: MCA 120
Job ID: 890-2837-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 33075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2830-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2830-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2837-1	FS01	Soluble	Solid	300.0	33075
MB 880-33075/1-A	Method Blank	Soluble	Solid	300.0	33075
LCS 880-33075/2-A	Lab Control Sample	Soluble	Solid	300.0	33075
LCSD 880-33075/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33075
890-2830-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	33075
890-2830-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33075

1

4

6

9

10

12

Lab Chronicle

Client: Ensolum Job ID: 890-2837-1 Project/Site: MCA 120 SDG: Lea County NM

Client Sample ID: FS01

Date Received: 08/24/22 16:27

Lab Sample ID: 890-2837-1 Date Collected: 08/24/22 14:30

Matrix: Solid

EET MID

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33665	09/02/22 16:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33800	09/06/22 16:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			33946	09/07/22 16:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			33215	08/29/22 11:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33085	08/26/22 15:45	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33129	08/29/22 01:51	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33075	08/26/22 14:54	KS	EET MID

50 mL

33438

09/01/22 12:50

СН

50 mL

Laboratory References:

Soluble

Analysis

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

300.0

Accreditation/Certification Summary

Client: Ensolum
Project/Site: MCA 120
Job ID: 890-2837-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority		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 certifi	ed by the governing authority. This list ma	av include analytes for
the agency does not of	• •	it the laboratory is not certifi	ed by the governing authority. This list his	ay include arialytes for t
0 ,	• •	Matrix	Analyte	ay include analytes for v
the agency does not of	fer certification.	•	, , ,	ay include analytes for v

Method Summary

Client: Ensolum Job ID: 890-2837-1
Project/Site: MCA 120 SDG: Lea County NM

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

1

3

4

a

10

4.0

13

Sample Summary

Client: Ensolum Project/Site: MCA 120 Job ID: 890-2837-1

SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2837-1	FS01	Solid	08/24/22 14:30	08/24/22 16:27	0.5'

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

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM

otice: Signature of this document and relinquishment of samples constitutes a valid purcha

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

Relinquished by: (Signature)

mount a

alhe/s

162

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date 08/25/2020 Rev 2020 2

Received by: (Signature)

🔅 eurofins **Environment Testing** Xenco

Phone:

817-683-2503 Carlsbad, NM 88220 3122 National Parks HWY

City, State ZIP:

ddress:

Project Manager:

Company Name:

Ensolum Kalei Jennings

Project Number:

Project Name:

SAMPLE RECEIPT

Sampler's Name:

Project Location:

Lea County, NM Gilbert Moreno

03D2057019 MCA 120

Samples Received Intact:

8

Thermometer ID: (es) No

Wet Ice:

N/A Correction Factor:

Cooler Custody Seals:

ample Custody Seals:

Yes No Yes No (Yes Temp Blank:

(X)

Corrected Temperature: Temperature Reading:

Total Containers:

Sample Identification FS01

Matrix

Date

S

8.24.22 Sampled

Chain of Custody

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

Work Order No:

으

	Bill to: (if different)	_	(alei J	Kalei Jennings	S					_				Wo	K Orc	ler Cc	Work Order Comments		
	Company Name:	m.	Ensolum	3						<u>-</u>	Program: UST/PST	n: US	r/PST	PR	POB	rownf] PRP 🗌 Brownfields 🔲 RRC 🗌	☐ Superfund ☐	
	Address:	w	122 N	3122 National Parks HWY	Parks	WH.	,			S	State of Project:	f Proje	ct:						
	City, State ZIP:		arlsba	Carlsbad, NM 88220	8822					70	eporti	ng: Lev	el II]Leve	≣	PST/	Reporting: Level II	Level IV	
Email:	Email: kjennings@ensolum.com	olum.c	com								Deliverables: EDD	bles:	EDD		Þ	ADaPT 🗆	Other:		
Turn	Turn Around							ANALYSIS REQUEST	SIS F	EQU	EST						Preservativ	tive Codes	
✓ Routine		Pres. Code															None: NO	DI Water: H ₂ O	
Due Date:	5 Day TAT														1	0	Cool: Cool	MeOH: Me	
TAT starts the	TAT starts the day received by the lab, if received by 4:30pm	S														- -	HCL: HC H ₂ SO ₄ : H ₂	NaOH: Na	
Wet Ice:	No Reg	nete	.0)													_	H ₃ PO ₄ : HP		
ır ID:	100-101	aran	: 300													7 7	NaHSO4: NABIS	- w	19
Reading:	00.00	F	(EPA													NI .	Zn Acetate+NaOH	OH: Zn	7 of
emperature:	0		IDES)15)	8021		890-	890-2837 Chain of Custody	hain c	f Cus	tody			İ		7	NaOH+Ascorbic Acid: SAPC	c Acid: SAPC	e 1
Time Sampled	Depth Grab/ Comp C	# of Cont	CHLOF	TPH (8	BTEX (Sample (Sample Comments	Pag
14:30	0.5' Comp		×	×	×			_	_		_	_							
										L	_			1					
								_	-	1	1	Ц		_			Incident N	Numbers	
							1		_				L		_		NAPP22	NAPP2209531688	
>			1	\downarrow		_		_		_	_	_	_	_					
1/9-	ani						_	-		_	-	-	-	_	_	1			РМ
12/1							-	-	lacksquare			-	\downarrow		1				00
				<u> </u>	L			-	+	-	1	-	1	1	1				27-
								_	_	_									2 2:
RCRA 13F	13PPM Texas 11	<u>A</u>	Sb As Ba	ВаВ	ВеВ	င္ရ င္ရ	임	င္ပ	Cu Fe	Pb	Pb Mg Mn Mo Ni K	M	Z.	Se A	Ag SiO ₂	Na Na	Sr TI Sn U	V Zn	202
TCLP / S	6010: 8RC	RA	Sb As	Ba	ВеС	d Cr	Co C	Рь	Mn N	ō Z	Se A	g T		[]	ig: 1€	31/2	1	11 42	/21/
stitutes a valid	stitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	client co	mpany	to Euro	fins Xer	ico, its	affiliates	and sub	contrac	tors. It	assigns	standa	d term	s and c	ondition	3 4			o: 0.
d shall not ass project and a c	id shall not assume any responsibility for any losses or expenses incurred by the cilent if such losses are due to circumstances beyond the control project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	y for an	y losse submitt	ed to Eu	enses i	ncurred (enco, t	by the court not a	lient if s	uch loss These t	erms wi	ll be en	ircumst forced u	ances b	eyond t	he cont	iated.			ino

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2837-1 SDG Number: Lea County NM

List Source: Eurofins Carlsbad

Login Number: 2837 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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Page 18 of 19 9/7/2022 Released to Imaging: 9/21/2022 2:27:00 PM

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2837-1

SDG Number: Lea County NM

Login Number: 2837 List Source: Eurofins Midland List Number: 2 List Creation: 08/26/22 11:03 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	

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2909-1

Laboratory Sample Delivery Group: 03D2057019

Client Project/Site: MCA 120

Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Josh Adams

MRAMER

Authorized for release by: 9/14/2022 9:38:11 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project

results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 9/21/2022 2:27:00 PM

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

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

1

_

3

_

6

7

10

15

Client: Ensolum
Project/Site: MCA 120
Laboratory Job ID: 890-2909-1
SDG: 03D2057019

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receint Checklists	18

2

3

4

6

8

10

12

13

Definitions/Glossary

Client: Ensolum Job ID: 890-2909-1 Project/Site: MCA 120 SDG: 03D2057019

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

GC Semi VOA

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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)

Dilution Factor Dil Fac

Detection Limit (DoD/DOE) DΙ

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

Job ID: 890-2909-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2909-1

REVISION

The report being provided is a revision of the original report sent on 9/13/2022. The report (revision 1) is being revised due to Per client email, requestin TPH re run.

Report revision history

Receipt

The sample was received on 9/9/2022 9:22 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34295 and analytical batch 880-34173 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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.

_

3

Λ

5

7

8

9

11

1/

Matrix: Solid

Lab Sample ID: 890-2909-1

Client: Ensolum Job ID: 890-2909-1 Project/Site: MCA 120 SDG: 03D2057019

Client Sample ID: FS01A

Date Collected: 09/08/22 13:15 Date Received: 09/09/22 09:22

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
Ethylbenzene	< 0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
m-Xylene & p-Xylene	< 0.00399	U F1	0.00399	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/12/22 13:31	09/12/22 22:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			09/12/22 13:31	09/12/22 22:18	1
1,4-Difluorobenzene (Surr)	95		70 - 130			09/12/22 13:31	09/12/22 22:18	1
- Method: Total BTEX - Total B	ΓEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/13/22 08:36	1
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (6	C)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg		<u>.</u>	09/12/22 15:38	1
Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/13/22 08:23	09/13/22 17:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/13/22 08:23	09/13/22 17:25	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/13/22 08:23	09/13/22 17:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			09/13/22 08:23	09/13/22 17:25	1
o-Terphenyl	106		70 - 130			09/13/22 08:23	09/13/22 17:25	1
Method: 300.0 - Anions, Ion C	hromatogra	phy - Solu	ible					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	235		4.98	mg/Kg			09/12/22 14:50	1

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-			Perc	ent Surrogate Recovery (Acceptance	Limits)
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
890-2909-1	FS01A	103	95		
890-2909-1 MS	FS01A	117	108		
890-2909-1 MSD	FS01A	122	110		
LCS 880-34295/1-A	Lab Control Sample	116	109		
LCSD 880-34295/2-A	Lab Control Sample Dup	110	107		
MB 880-34213/5-A	Method Blank	96	86		
MB 880-34295/5-A	Method Blank	93	92		
Surrogate Legend					
BFB = 4-Bromofluorob	enzene (Surr)				

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

Matrix: Solid Prep Type: Total/NA

			Percent	Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)	
890-2909-1	FS01A	96	106	
890-2914-A-1-D MS	Matrix Spike	91	87	
890-2914-A-1-E MSD	Matrix Spike Duplicate	95	91	
LCS 880-34341/2-A	Lab Control Sample	74	84	
LCSD 880-34341/3-A	Lab Control Sample Dup	79	88	
MB 880-34341/1-A	Method Blank	102	114	

1CO = 1-Chlorooctane

Released to Imaging: 9/21/2022 2:27:00 PM

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2909-1 Project/Site: MCA 120 SDG: 03D2057019

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34213/5-A

Matrix: Solid

Analysis Batch: 34173

Client	Sample	ID:	Method	Blank

Prep Type: Total/NA

Prep Batch: 34213

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/12/22 09:23	09/12/22 10:47	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/12/22 09:23	09/12/22 10:47	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/12/22 09:23	09/12/22 10:47	1

Lab Sample ID: MB 880-34295/5-A

Matrix: Solid

Analysis Batch: 34173

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

Prep Batch: 34295

	IVID	VID .						
Analyte	Result (Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 21:57	1
Toluene	<0.00200 l	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 21:57	1
Ethylbenzene	<0.00200 l	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 21:57	1
m-Xylene & p-Xylene	<0.00400 L	U	0.00400	mg/Kg		09/12/22 13:31	09/12/22 21:57	1
o-Xylene	<0.00200 l	U	0.00200	mg/Kg		09/12/22 13:31	09/12/22 21:57	1
Xylenes, Total	<0.00400 l	U	0.00400	mg/Kg		09/12/22 13:31	09/12/22 21:57	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/12/22 13:31	09/12/22 21:57	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/12/22 13:31	09/12/22 21:57	1

Lab Sample ID: LCS 880-34295/1-A

Matrix: Solid

Analysis Batch: 34173

Client Sample	ID: Lab Control Sample
	Dron Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34295

	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	0.100	0.08965		mg/Kg		90	70 - 130		-
Toluene	0.100	0.07941		mg/Kg		79	70 - 130		
Ethylbenzene	0.100	0.08581		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene	0.200	0.1763		mg/Kg		88	70 - 130		
o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130		

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1.4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-34295/2-A

M

l	Matrix: Solid							Prep Ty	pe: Tot	al/NA		
Analysis Batch: 34173								Prep Batch: 34295				
		Spike	LCSD	LCSD				%Rec		RPD		
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
	Benzene	0.100	0.08509		mg/Kg		85	70 - 130	5	35		

QC Sample Results

Client: Ensolum Job ID: 890-2909-1 Project/Site: MCA 120 SDG: 03D2057019

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

Lab Sample ID: LCSD 880-34295/2-A

Matrix: Solid

Analysis Batch: 34173

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34295

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits RPD Limit 0.100 0.07692 mg/Kg 77 70 - 130 3 35 0.100 0.07998 mg/Kg 80 70 - 1307 35

Toluene Ethylbenzene 0.200 0.1649 mg/Kg 82 70 - 130 7 35 m-Xylene & p-Xylene 0.100 0.09309 93 35 o-Xylene mg/Kg 70 - 130 10

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-2909-1 MS Client Sample ID: FS01A

Matrix: Solid

Analysis Batch: 34173

Prep Type: Total/NA

Prep Batch: 34295

Sample Sample Spike MS MS %Rec Result Qualifier Analyte Added Result Qualifier D %Rec Limits Unit Benzene <0.00200 U 0.0998 0.08265 83 70 - 130 mg/Kg Toluene <0.00200 U 0.0998 0.07198 mg/Kg 72 70 - 130 Ethylbenzene <0.00200 U 0.0998 0.07267 mg/Kg 73 70 - 130 m-Xylene & p-Xylene <0.00399 UF1 0.200 68 70 - 130 0.1366 F1 mg/Kg o-Xylene <0.00200 U 0.0998 0.08208 mg/Kg 82 70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	108	70 - 130

Lab Sample ID: 890-2909-1 MSD

Matrix: Solid

Analysis Batch: 34173

Client Sample ID: FS01A

Prep Type: Total/NA

Prep Batch: 34295

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00200	U	0.100	0.09325		mg/Kg		93	70 - 130	12	35	
Toluene	<0.00200	U	0.100	0.07646		mg/Kg		76	70 - 130	6	35	
Ethylbenzene	<0.00200	U	0.100	0.07457		mg/Kg		74	70 - 130	3	35	
m-Xylene & p-Xylene	< 0.00399	U F1	0.200	0.1342	F1	mg/Kg		67	70 - 130	2	35	
o-Xylene	<0.00200	U	0.100	0.08506		mg/Kg		85	70 - 130	4	35	

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

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

Lab Sample ID: MB 880-34341/1-A

Matrix: Solid

Analysis Batch: 34338

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

Prep Batch: 34341

MB MB Result Qualifier RL Unit Analyte Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/13/22 08:23 09/13/22 09:38 (GRO)-C6-C10

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

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

Lab Sample ID: MB 880-34341/1-A

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34341

	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		09/13/22 08:23	09/13/22 09:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/13/22 08:23	09/13/22 09:38	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			09/13/22 08:23	09/13/22 09:38	1
o-Terphenyl	114		70 - 130			09/13/22 08:23	09/13/22 09:38	1

Lab Sample ID: LCS 880-34341/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 34338** Prep Batch: 34341 LCS LCS Spike %Rec Added Result Qualifier Limits Analyte Unit %Rec Gasoline Range Organics 1000 948.0 mg/Kg 95 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 846.8 mg/Kg 85 70 - 130 C10-C28) LCS LCS Surrogate Qualifier Limits %Recovery 70 - 130 1-Chlorooctane 74 70 - 130 o-Terphenyl 84

Lab Sample ID: LCSD 880-34341/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Total/NA **Analysis Batch: 34338** Prep Batch: 34341 Spike LCSD LCSD %Rec **RPD Analyte** Added Result Qualifier Unit D %Rec Limits RPD Limit Gasoline Range Organics 1000 893.7 mg/Kg 89 70 - 130 6 20 (GRO)-C6-C10 1000 70 - 130 Diesel Range Organics (Over 800.1 mg/Kg 80 6 20 C10-C28)

	LCSD LCS	SD
Surrogate	%Recovery Qua	lifier Limits
1-Chlorooctane	79	70 - 130
o-Terphenyl	88	70 - 130

Lab Sample ID: 890-2914-A-1-D MS **Client Sample ID: Matrix Spike Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 34338** Prep Batch: 34341 Spike MS MS %Rec Sample Sample **Analyte** Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 996 827.2 80 70 - 130 mg/Kg (GRO)-C6-C10 <49.9 U 996 738.7 74 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28) MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 91 70 - 130 o-Terphenyl 87 70 - 130

Eurofins Carlsbad

_

3

5

0

9

11

13

14

rofins Carisbad

Client: Ensolum Job ID: 890-2909-1 Project/Site: MCA 120 SDG: 03D2057019

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

Lab Sample ID: 890-2914-A-1-E MSD **Client Sample ID: Matrix Spike Duplicate**

Matrix: Solid

Analysis Batch: 34338

Prep Type: Total/NA Prep Batch: 34341

Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier D %Rec Limits RPD Limit Analyte Unit Gasoline Range Organics <49.9 U 999 867.5 mg/Kg 84 70 - 130 5 20 (GRO)-C6-C10 Diesel Range Organics (Over 999 783.4 78 70 - 130 <49.9 U mg/Kg 6 20

C10-C28)

MSD MSD

Surrogate	%Recovery Qual	lifier Limits
1-Chlorooctane	95	70 - 130
o-Terphenyl	91	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34276/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34297

MD MD

	1410	1410						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/12/22 13:09	1

Lab Sample ID: LCS 880-34276/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34297

	Spike	LCS LCS	S			%Rec	
Analyte	Added	Result Qua	alifier Unit	D	%Rec	Limits	
Chloride	250	241.0	mg/Kg		96	90 - 110	

Lab Sample ID: LCSD 880-34276/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34297

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	241.4		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-19068-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34297

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	91.0		250	361.4		ma/Ka		108	90 - 110	

Lab Sample ID: 880-19068-A-1-C MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34297

Released to Imaging: 9/21/2022 2:27:00 PM

Analysis Datch. 34231											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	91.0		250	361.9		mg/Kg		109	90 - 110	0	20

QC Association Summary

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

GC VOA

Analysis Batch: 34173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	8021B	34295
MB 880-34213/5-A	Method Blank	Total/NA	Solid	8021B	34213
MB 880-34295/5-A	Method Blank	Total/NA	Solid	8021B	34295
LCS 880-34295/1-A	Lab Control Sample	Total/NA	Solid	8021B	34295
LCSD 880-34295/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34295
890-2909-1 MS	FS01A	Total/NA	Solid	8021B	34295
890-2909-1 MSD	FS01A	Total/NA	Solid	8021B	34295

Prep Batch: 34213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34213/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	5035	
MB 880-34295/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34295/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34295/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2909-1 MS	FS01A	Total/NA	Solid	5035	
890-2909-1 MSD	FS01A	Total/NA	Solid	5035	

Analysis Batch: 34345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	8015 NM	

Analysis Batch: 34338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	8015B NM	34341
MB 880-34341/1-A	Method Blank	Total/NA	Solid	8015B NM	34341
LCS 880-34341/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34341
LCSD 880-34341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34341
890-2914-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	34341
890-2914-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34341

Prep Batch: 34341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Total/NA	Solid	8015NM Prep	
MB 880-34341/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34341/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2914-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2914-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

9

2

5

8

9

11

4.0

. .

QC Association Summary

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

HPLC/IC

Leach Batch: 34276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Soluble	Solid	DI Leach	
MB 880-34276/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34276/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34276/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19068-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19068-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2909-1	FS01A	Soluble	Solid	300.0	34276
MB 880-34276/1-A	Method Blank	Soluble	Solid	300.0	34276
LCS 880-34276/2-A	Lab Control Sample	Soluble	Solid	300.0	34276
LCSD 880-34276/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34276
880-19068-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	34276
880-19068-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34276

7

6

8

9

11

12

13

Lab Chronicle

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

Client Sample ID: FS01A

Date Collected: 09/08/22 13:15 Date Received: 09/09/22 09:22 Lab Sample ID: 890-2909-1

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			5.01 g	5 mL	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/12/22 22:18	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34345	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34306	09/12/22 15:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 17:25	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34276	09/12/22 11:11	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34297	09/12/22 14:50	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

2

3

4

5

9

1 1

13

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2909-1

 Project/Site: MCA 120
 SDG: 03D2057019

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 analyte:	s are included in this rend	ort but the laboratory is r	not certified by the governing authority.	This list may include analytes for y
the agency does not o	•	ore, but the laboratory is i	lot certified by the governing authority.	This list may include analytes for v
,	•	Matrix	Analyte	This list may include analytes for v
the agency does not o	offer certification.	•	, , ,	This list may include analytes for v

2

4

4

6

8

10

4.0

13

Method Summary

Client: Ensolum Project/Site: MCA 120 Job ID: 890-2909-1 SDG: 03D2057019

otocol	Laboratory
V846	EET MID
L SOP	EET MID
V846	EET MID
V846	EET MID

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 120

Job ID: 890-2909-1 SDG: 03D2057019

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received
 Depth

 890-2909-1
 FS01A
 Solid
 09/08/22 13:15
 09/09/22 09:22
 1

3

6

Q

9

10

12

13

1/2

Work Order No:

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing Xenco

eurofins ...

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

												www.xenco.com	1co.com	Page ←	of 1
Project Manager:	Josh Adams				Bill to: (if o	to: (if different)	Jo	Josh Adams				Work	Order C	Work Order Comments	
	Ensolum, LLC				Company Name:	Name:	En	Ensolum, LLC	S		Prog	Program: UST/PST 🗌 PRP	□ Brown	□ PRP □ Brownfields □ RRC □	☐ Superfund ☐
Address:	601 N Marienfeld St Suite 400	Id St Su	lite 400		Address:		9	1 N Marie	601 N Marienfeld St Suite 400	uite 400	State	State of Project:			
te ZIP:	Midland, TX 79701	701			City, State	State ZIP:	Mi	Midland, TX 79701	79701		Repo	Reporting: Level II Level III PST/UST	III 🗆 PST	/UST TRRP	☐ Level IV☐
	303.517.8437			Email: jad	jadams(c	ams@ensolum.com	n.com				Deliv	Deliverables: EDD	ADaPT	Other	
Project Name:	MC	MCA 120		Turn	Turn Around		-			ANALY	ANALYSIS REQUEST			Preserva	Preservative Codes
Project Number:	03D2	03D2057019	_	□ Routine	Z Rust	5								None: NO	DI Water: H ₂ O
Project Location:				Due Date:	09.13.2022									Cool: Cool	MeOH: Me
Sampler's Name:	Conne	Conner Shore	a)	TAT starts the day	e day received by	ed by		_		_				HCL: HC	HNO3: HN
PO#:			(the lab, if received by 4:30pm	Seived by 4:	-	SJ			(MINITERED	And And Little and Comment	_		H ₂ S0 ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	PT Temp Blank:		(Yes) No	Wet Ice:	6	No	nete	(0)						H ₃ PO ₄ : HP	
Samples Received Intact:	Yes	2	Thermometer ID:	ILID:	JAM 80									NaHSO4: NABIS	(A
Cooler Custody Seals:	*	E	Correction Factor:	actor:	0-	0								Na ₂ S ₂ O ₃ : NaSO ₃	13
Sample Custody Seals:	ls: Yes No	¥ الإ	Temperature Reading:	Reading:	1.4		3/ 5	-\-		890-2909 CF	890-2909 Chain of Custody			Zn Acetate+NaOH: Zn	OH: Zn
Total Containers:)	Corrected Temperature:	emperature:	0.		Jul		208	-				NaOH+Ascorbic Acid: SAPC	: Acid: SAPC
Sample Identification	tification	Matrix	Date Sampled	Time	Depth	Grab/ #	CHTOE Cont Cont Cont)8) H T T) ХЭТӨ					Sample	Sample Comments
FS01A		S	09.08.2022	1315	1.	comp	1 X	×	×						
							1								
						1								Inciden	Incident Number
							-							NAPP22	NAPP2209531688
	7		1				\vdash	-							
		1	1				-	L							
		1				-									
							-								
							-								
\															
Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed	110 200.8 / 6020: The Metal(s) to be an	020: 3 analyz		BRCRA 13PPM TCLP / SPLF	- 0	8RC		Sb As Ba Be B Sb As Ba Be C	Be B C	3 Cd Ca Cr Co Cu Cd Cr Co Cu Pb	r Co Cu Fe Pb Mg Mn Mo Ni Cu Pb Mn Mo Ni Se Ag Ti U	K Se A	kg SiO ₂ Na Sr Tl Hg:1631/245.1/	Sn U 7470	1 V Zn /7471
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase of service. Eurofins scroowilb per labbe only for the cost of samples and shall not assume any of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of the cost of samples of \$75.00 will be applied to each project and a charge of \$75.00 will be applied to each proj	document and relingue to will be liable only for Imum charge of \$85.0	uishment or the cos 30 will be	of samples con t of samples at applied to each	stitutes a valid of shall not assu project and a c	purchase or ume any res tharge of \$5	der from ci ponsibility for each sa	ent com for any I mple sul	pany to Eu psses or e pmitted to	rofins Xenc (penses inc Eurofins Xe	, its affilates and subc ured by the client if su ico, but not analyzed.	ontractors. It assigns to losses are due the free terms will be	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 service. Eurofins Xenco will be liable only 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.	ditions control negotiated.		
Relinquished by: (Signature)	: (Signature)		Receive	Received by: (Signature	ature)		۵	Date/Time		Relinquished by: (Signature)	: (Signature)	Received by: (Signature)	(Signatur	(ə.	Date/Time
		4	tro Ca	7		5	Ŏ	9	933						
3)					4						
				>					9						

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-2909-1

 SDG Number: 03D2057019

Login Number: 2909 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Page 18 of 19 9/14/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2909-1

SDG Number: 03D2057019

List Source: Eurofins Midland
List Number: 2
List Creation: 09/12/22 09:08 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 <6mm (1/4").	N/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 144173

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC	331199
1111 Bagby Street Suite 1600	Action Number:
Houston, TX 77002	144173
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jnobui	Closure Report Approved.	9/21/2022