ENSOLUM

December 28, 2022

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

Re: Closure Request Addendum
Broadcaster 29 Federal 003H
Incident Numbers NAPP2132773092 & NAPP2201938653
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request Addendum* to provide an update to the lateral delineation soil sampling activities performed at the Broadcaster 29 Federal 003H (Site). The purpose of the lateral delineation soil sampling activities was to address the denial by the New Mexico Oil Conservation Division (NMOCD) of an original *Closure Request,* dated October 27, 2022. In the denial, NMOCD expressed concern that the release was not laterally delineated. Based on additional sampling activities, COG is requesting closure for Incident Numbers NAPP2132773092 and NAPP2201938653.

All of the release details regarding the incidents, site characterization, and remediation conducted can be referenced in the original *Closure Request*. NMOCD denied the *Closure Request* on November 28, 2022, for the following reason:

> *Closure Report Denied. Release not laterally delineated (SS01, SS02, & SS03). Delineation samples should be delineated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release, regardless of DTW measurement. Please resubmit a revised closure report to the OCD portal by December 28, 2022.*

It should be noted the soil represented by SS02 was removed during the excavation. Soil remaining in place at that location is represented by subsequent excavation confirmation sample FS01. All delineation samples (including SS01 and SS03) and excavation confirmation sample FS01 meet Table I Closure Criteria, indicating the soil impacted by the release was remediated correctly. It appears NMOCD's concern is that the release was not delineated laterally to the reclamation requirement. All delineation samples near and in the direction of the edge of the well pad, where the reclamation requirement might apply, are below 100 mg/kg TPH and 600 mg/kg chloride. Soil samples SS01, SS03, and FS01 exceed 100 mg/kg TPH and are north and northwest of the flare stack on the well pad.

ADDITIONAL DATA

Based on NMOCD's request, on December 9, 2022, three soil samples (SS08-SS10) were collected adjacent SS01, SS03, and FS01 in the direction of the well pad from a depth of 0.5 feet bgs to assess the lateral extent of the releases. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach®

chloride QuanTab® test strips, respectively. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 1.

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

Laboratory analytical results for all three delineation soil samples indicated concentrations of all COCs were compliant with the reclamation requirement (less than 100 mg/kg TPH). Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included in Appendix A.

CLOSURE REQUEST

Laboratory analytical results for the additional lateral delineation soil samples indicated concentrations of all COCs were compliant with the reclamation requirement. As such, COG respectfully requests closure for Incident Numbers NAPP2132773092 and NAPP2201938653. The Final C-141 is included in Appendix B.

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

Sincerely,
Ensolum, LLC

Hadlie Green
Staff Geologist

Kalei Jennings
Senior Scientist

cc: Charles Beauvais, COG Operating, LLC

Appendices:

Figure 1	Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix B	Final C-141

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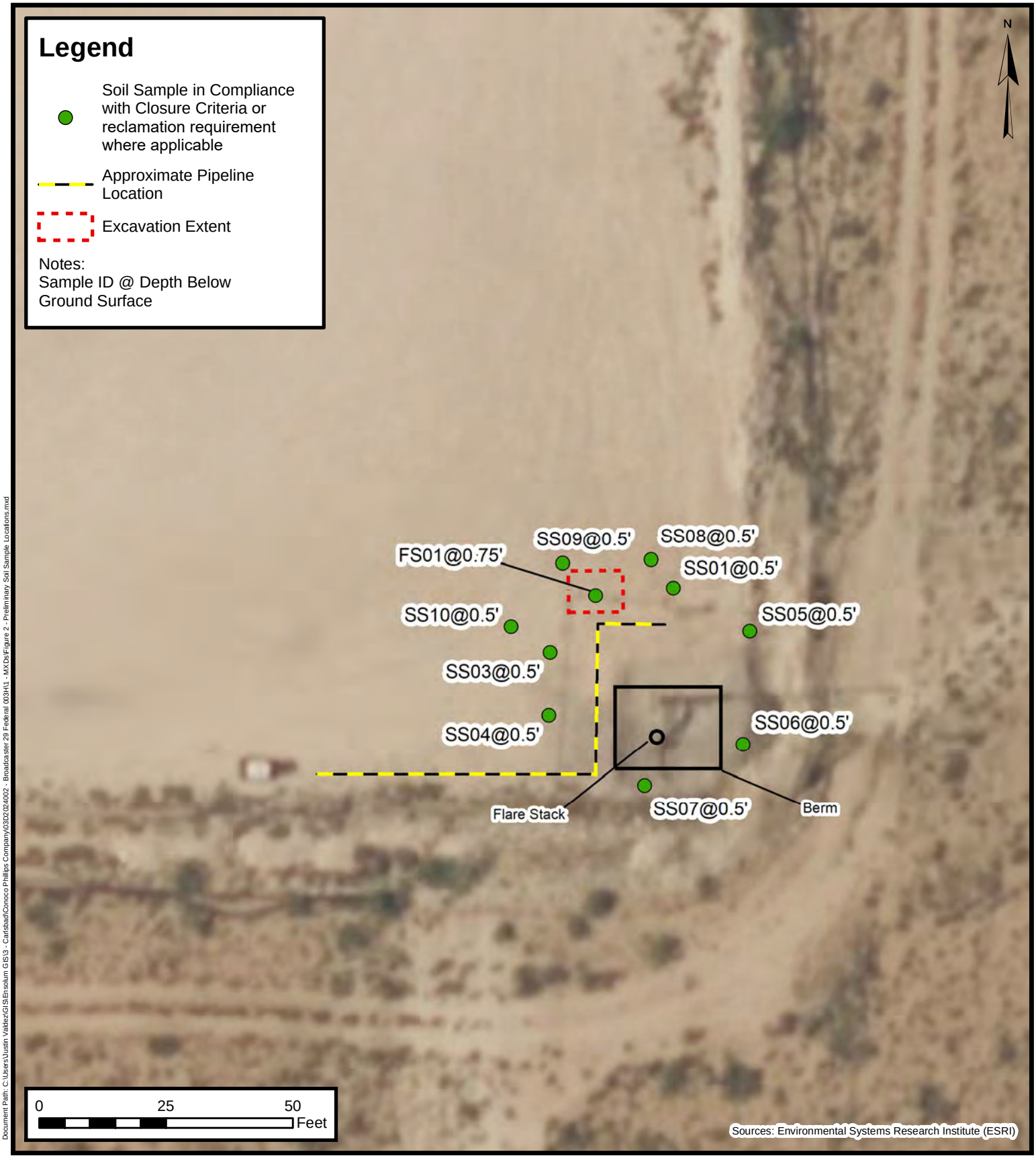
FIGURES



Document Path: C:\Users\Justin Valdez\GIS\Ensolum GIS\3 - Carlsbad\Conoco Phillips Company\03202024002 - Broadcaster 29 Federal 003H\1 - MXDs\Figure 2 - Preliminary Soil Sample Locations.mxd

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Soil Sample Locations

BROADCASTER 29 FEDERAL 003H
COG OPERATING, LLC
Incident Numbers NAPP2132773092 & NAPP2201938653
Unit B, Sec 29 T23S R34E
Lea County, New Mexico

FIGURE
1

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Broadcaster 29 Federal 003H
COG Operating, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Preliminary Assessment Soil Samples										
SS08	12/09/2022	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	38.1
SS09	12/09/2022	0.5	<0.00200	<0.00401	<49.9	53.9	<49.9	53.9	53.9	143
SS10	12/09/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	<5.03

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*

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APPENDIX A

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/27/2022 8:58:21 AM

JOB DESCRIPTION

Broadcaster 29 Federal 003H
SDG NUMBER 03D2024002

JOB NUMBER

890-3622-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

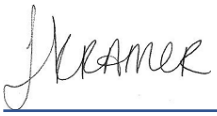
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



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

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Laboratory Job ID: 890-3622-1
SDG: 03D2024002

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3622-1
Project/Site: Broadcaster 29 Federal 003H SDG: 03D2024002

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Job ID: 890-3622-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3622-1

Receipt
The sample was received on 12/12/2022 12:41 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 1.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS09 (890-3622-1).

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-41840 and analytical batch 880-42076 was outside the upper control limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-41755 and analytical batch 880-42176 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Client Sample ID: SS09

Date Collected: 12/09/22 11:40
Date Received: 12/12/22 12:41
Sample Depth: 0.5

Lab Sample ID: 890-3622-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:05	12/23/22 17:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:05	12/23/22 17:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:05	12/23/22 17:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/22/22 09:05	12/23/22 17:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:05	12/23/22 17:19	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/22/22 09:05	12/23/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/22/22 09:05*	*12/23/22 17:19*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/22/22 09:05*	*12/23/22 17:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/26/22 16:44	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.9**		49.9		mg/Kg			12/19/22 15:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/14/22 14:33	12/17/22 22:10	1
Diesel Range Organics (Over C10-C28)	**53.9**		49.9		mg/Kg		12/14/22 14:33	12/17/22 22:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/14/22 14:33	12/17/22 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/14/22 14:33*	*12/17/22 22:10*	*1*
o-Terphenyl	*103*		*70 - 130*	*12/14/22 14:33*	*12/17/22 22:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**143**		5.04		mg/Kg			12/20/22 12:10	1

Surrogate Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)									
		BFB1	DFBZ1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-3622-1	SS09	101	100								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
890-3622-1	SS09	103	103								
890-3624-A-1-C MS	Matrix Spike	119	92								
890-3624-A-1-D MSD	Matrix Spike Duplicate	106	92								
LCS 880-41840/2-A	Lab Control Sample	109	103								
LCSD 880-41840/3-A	Lab Control Sample Dup	106	114								
MB 880-41840/1-A	Method Blank	141 S1+	140 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

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

Lab Sample ID: MB 880-41840/1-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41840

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*12/14/22 14:33*	*12/17/22 08:52*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*12/14/22 14:33*	*12/17/22 08:52*	*1*

Lab Sample ID: LCS 880-41840/2-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41840

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	890.3		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	873.8		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: LCSD 880-41840/3-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41840

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	927.5		mg/Kg		93	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	976.8		mg/Kg		98	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: 890-3624-A-1-C MS
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 41840

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1103		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1025		mg/Kg		103	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

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

Lab Sample ID: 890-3624-A-1-C MS
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 41840

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-3624-A-1-D MSD
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 41840

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1074		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1029		mg/Kg		103	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	92		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41755/1-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/20/22 11:06	1

Lab Sample ID: LCS 880-41755/2-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.8		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-41755/3-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	230.6		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-3621-A-1-B MS
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	71.0	F1	250	292.0	F1	mg/Kg		88	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3621-A-1-C MSD
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	71.0	F1	250	292.4	F1	mg/Kg		89	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

GC VOA

Analysis Batch: 42465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	8021B	42482

Prep Batch: 42482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	5035	

Analysis Batch: 42620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	8015NM Prep	
MB 880-41840/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41840/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41840/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3624-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3624-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 42076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	8015B NM	41840
MB 880-41840/1-A	Method Blank	Total/NA	Solid	8015B NM	41840
LCS 880-41840/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41840
LCSD 880-41840/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41840
890-3624-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	41840
890-3624-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	41840

Analysis Batch: 42198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 41755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Soluble	Solid	DI Leach	
MB 880-41755/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3621-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3621-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 42176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3622-1	SS09	Soluble	Solid	300.0	41755
MB 880-41755/1-A	Method Blank	Soluble	Solid	300.0	41755
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	300.0	41755
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41755
890-3621-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	41755

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

HPLC/IC (Continued)

Analysis Batch: 42176 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3621-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	41755

Lab Chronicle

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Client Sample ID: SS09

Date Collected: 12/09/22 11:40
Date Received: 12/12/22 12:41

Lab Sample ID: 890-3622-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	42482	12/22/22 09:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42465	12/23/22 17:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42620	12/26/22 16:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42198	12/19/22 15:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41840	12/14/22 14:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42076	12/17/22 22:10	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	41755	12/13/22 13:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42176	12/20/22 12:10	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

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: Broadcaster 29 Federal 003H

Job ID: 890-3622-1
SDG: 03D2024002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3622-1	SS09	Solid	12/09/22 11:40	12/12/22 12:41	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com; jadams@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Broadcaster 29 Federal 003H	Turn Around	
Project Number:	03D2024002	☑ Routine ☐ Rush	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS09	S	12.9.22	1140	0.5'	G	1		x	x	x

Parameters

890-3622 Chain of Custody

Sample Comments

Incident Number

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12.12.22 1224	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3622-1
SDG Number: 03D2024002

Login Number: 3622
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3622-1
SDG Number: 03D2024002

Login Number: 3622
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/13/22 11:24 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/27/2022 8:38:04 AM

JOB DESCRIPTION

BROADCASTER 29 FEDERAL 003H
SDG NUMBER Lea County NM

JOB NUMBER

890-3623-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

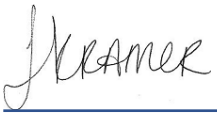
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



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12/27/2022 8:38:04 AM

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

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Laboratory Job ID: 890-3623-1
SDG: Lea County NM

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3623-1
Project/Site: BROADCASTER 29 FEDERAL 003H SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Job ID: 890-3623-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3623-1

Receipt
The sample was received on 12/12/2022 12:41 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 1.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS10 (890-3623-1).

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-41840 and analytical batch 880-42076 was outside the upper control limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-41755 and analytical batch 880-42176 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Client Sample ID: SS10

Date Collected: 12/09/22 11:45
Date Received: 12/12/22 12:41
Sample Depth: 0.5

Lab Sample ID: 890-3623-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/22/22 09:22	12/23/22 14:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/22/22 09:22	12/23/22 14:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/22/22 09:22	12/23/22 14:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/22/22 09:22	12/23/22 14:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/22/22 09:22	12/23/22 14:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/22/22 09:22	12/23/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*12/22/22 09:22*	*12/23/22 14:46*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/22/22 09:22*	*12/23/22 14:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/24/22 08:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/19/22 15:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/14/22 14:33	12/17/22 13:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/14/22 14:33	12/17/22 13:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/14/22 14:33	12/17/22 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*12/14/22 14:33*	*12/17/22 13:08*	*1*
o-Terphenyl	*113*		*70 - 130*	*12/14/22 14:33*	*12/17/22 13:08*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03		mg/Kg			12/20/22 12:15	1

Surrogate Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3623-1	SS10	132 S1+	86
890-3625-A-1-C MS	Matrix Spike	95	93
890-3625-A-1-D MSD	Matrix Spike Duplicate	98	95
LCS 880-42483/1-A	Lab Control Sample	99	95
LCSD 880-42483/2-A	Lab Control Sample Dup	94	95
MB 880-42420/5-A	Method Blank	97	90
MB 880-42483/5-A	Method Blank	101	86

Surrogate Legend

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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3623-1	SS10	120	113
890-3624-A-1-C MS	Matrix Spike	119	92
890-3624-A-1-D MSD	Matrix Spike Duplicate	106	92
LCS 880-41840/2-A	Lab Control Sample	109	103
LCSD 880-41840/3-A	Lab Control Sample Dup	106	114
MB 880-41840/1-A	Method Blank	141 S1+	140 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42420/5-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42420

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/21/22 12:40	12/22/22 22:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/21/22 12:40*	*12/22/22 22:51*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/21/22 12:40*	*12/22/22 22:51*	*1*

Lab Sample ID: MB 880-42483/5-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42483

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/22/22 09:22	12/23/22 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/22/22 09:22*	*12/23/22 09:36*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/22/22 09:22*	*12/23/22 09:36*	*1*

Lab Sample ID: LCS 880-42483/1-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1020		mg/Kg		102	70 - 130		
Toluene			0.100	0.09648		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.08974		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			0.200	0.1921		mg/Kg		96	70 - 130		
o-Xylene			0.100	0.09734		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-42483/2-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08380		mg/Kg		84	70 - 130	20	35

QC Sample Results

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-42483/2-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.07951		mg/Kg		80	70 - 130	19	35
Ethylbenzene			0.100	0.07270		mg/Kg		73	70 - 130	21	35
m-Xylene & p-Xylene			0.200	0.1547		mg/Kg		77	70 - 130	22	35
o-Xylene			0.100	0.07994		mg/Kg		80	70 - 130	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-3625-A-1-C MS
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0996	0.08752		mg/Kg		88	70 - 130
Toluene	<0.00201	U	0.0996	0.08182		mg/Kg		82	70 - 130
Ethylbenzene	<0.00201	U	0.0996	0.07396		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1562		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.0996	0.07911		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 890-3625-A-1-D MSD
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 42483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09585		mg/Kg		96	70 - 130	9	35
Toluene	<0.00201	U	0.100	0.08682		mg/Kg		87	70 - 130	6	35
Ethylbenzene	<0.00201	U	0.100	0.07977		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1658		mg/Kg		83	70 - 130	6	35
o-Xylene	<0.00201	U	0.100	0.08489		mg/Kg		85	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-41840/1-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41840

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1

QC Sample Results

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-41840/1-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41840

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/22 14:33	12/17/22 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*12/14/22 14:33*	*12/17/22 08:52*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*12/14/22 14:33*	*12/17/22 08:52*	*1*

Lab Sample ID: LCS 880-41840/2-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41840

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	890.3		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	873.8		mg/Kg		87	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

Lab Sample ID: LCSD 880-41840/3-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41840

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	927.5		mg/Kg		93	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	976.8		mg/Kg		98	70 - 130	11	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: 890-3624-A-1-C MS
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 41840

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1103		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1025		mg/Kg		103	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

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

Lab Sample ID: 890-3624-A-1-D MSD
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 41840

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1074		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1029		mg/Kg		103	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41755/1-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/20/22 11:06	1

Lab Sample ID: LCS 880-41755/2-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.8		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-41755/3-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	230.6		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-3621-A-1-B MS
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	71.0	F1	250	292.0	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 890-3621-A-1-C MSD
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	71.0	F1	250	292.4	F1	mg/Kg		89	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

GC VOA

Prep Batch: 42420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-42420/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 42466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	8021B	42483
MB 880-42420/5-A	Method Blank	Total/NA	Solid	8021B	42420
MB 880-42483/5-A	Method Blank	Total/NA	Solid	8021B	42483
LCS 880-42483/1-A	Lab Control Sample	Total/NA	Solid	8021B	42483
LCSD 880-42483/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42483
890-3625-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	42483
890-3625-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	42483

Prep Batch: 42483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	5035	
MB 880-42483/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42483/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42483/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3625-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3625-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 42579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	8015NM Prep	
MB 880-41840/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41840/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41840/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3624-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3624-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 42076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	8015B NM	41840
MB 880-41840/1-A	Method Blank	Total/NA	Solid	8015B NM	41840
LCS 880-41840/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41840
LCSD 880-41840/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41840
890-3624-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	41840
890-3624-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	41840

Analysis Batch: 42194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

HPLC/IC

Leach Batch: 41755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Soluble	Solid	DI Leach	
MB 880-41755/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3621-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3621-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 42176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3623-1	SS10	Soluble	Solid	300.0	41755
MB 880-41755/1-A	Method Blank	Soluble	Solid	300.0	41755
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	300.0	41755
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41755
890-3621-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	41755
890-3621-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	41755

Lab Chronicle

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Client Sample ID: SS10

Date Collected: 12/09/22 11:45
Date Received: 12/12/22 12:41

Lab Sample ID: 890-3623-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	42483	12/22/22 09:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42466	12/23/22 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42579	12/24/22 08:27	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42194	12/19/22 15:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41840	12/14/22 14:33	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42076	12/17/22 13:08	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	41755	12/13/22 13:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42176	12/20/22 12:15	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
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

Sample Summary

Client: Ensolum
Project/Site: BROADCASTER 29 FEDERAL 003H

Job ID: 890-3623-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3623-1	SS10	Solid	12/09/22 11:45	12/12/22 12:41	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com; jadams@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Broadcaster 29 Federal 003H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024002	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS10	S	12.9.22	1145	0.5'	G	1		x	x	x

Parameters

890-3623 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number

12.9.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12.12.22 1247			
3				4		
5				6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3623-1
SDG Number: Lea County NM

Login Number: 3623
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3623-1
SDG Number: Lea County NM

Login Number: 3623
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/13/22 11:24 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 12/27/2022 8:38:27 AM

JOB DESCRIPTION

Broadcaster 29 Federal 003H
SDG NUMBER Lea County NM

JOB NUMBER

890-3626-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
12/27/2022 8:38:27 AM

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

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Laboratory Job ID: 890-3626-1
SDG: Lea County NM

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3626-1
Project/Site: Broadcaster 29 Federal 003H SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Job ID: 890-3626-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3626-1

Receipt
The sample was received on 12/12/2022 12:41 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 1.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS08 (890-3626-1).

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

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-41841 and analytical batch 880-42076 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) 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.

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

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

Client Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Client Sample ID: SS08

Date Collected: 12/09/22 11:35
Date Received: 12/12/22 12:41
Sample Depth: 0.5'

Lab Sample ID: 890-3626-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		12/22/22 09:22	12/23/22 15:06	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/22/22 09:22	12/23/22 15:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/22/22 09:22	12/23/22 15:06	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/22/22 09:22	12/23/22 15:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/22/22 09:22	12/23/22 15:06	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/22/22 09:22	12/23/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*12/22/22 09:22*	*12/23/22 15:06*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*12/22/22 09:22*	*12/23/22 15:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			12/24/22 08:27	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/19/22 15:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 23:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 23:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/14/22 14:38*	*12/17/22 23:59*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/14/22 14:38*	*12/17/22 23:59*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**38.1**		5.00		mg/Kg			12/20/22 13:44	1

Surrogate Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3625-A-1-C MS	Matrix Spike	95	93
890-3625-A-1-D MSD	Matrix Spike Duplicate	98	95
890-3626-1	SS08	133 S1+	91
LCS 880-42483/1-A	Lab Control Sample	99	95
LCSD 880-42483/2-A	Lab Control Sample Dup	94	95
MB 880-42420/5-A	Method Blank	97	90
MB 880-42483/5-A	Method Blank	101	86

Surrogate Legend

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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3626-1	SS08	106	104
890-3626-1 MS	SS08	104	88
890-3626-1 MSD	SS08	108	89
LCS 880-41841/2-A	Lab Control Sample	112	124
LCSD 880-41841/3-A	Lab Control Sample Dup	120	116
MB 880-41841/1-A	Method Blank	115	121

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42420/5-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42420

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/21/22 12:40	12/22/22 22:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/21/22 12:40	12/22/22 22:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/21/22 12:40*	*12/22/22 22:51*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/21/22 12:40*	*12/22/22 22:51*	*1*

Lab Sample ID: MB 880-42483/5-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42483

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/22/22 09:22	12/23/22 09:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/22/22 09:22	12/23/22 09:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/22/22 09:22*	*12/23/22 09:36*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/22/22 09:22*	*12/23/22 09:36*	*1*

Lab Sample ID: LCS 880-42483/1-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1020		mg/Kg		102	70 - 130		
Toluene			0.100	0.09648		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.08974		mg/Kg		90	70 - 130		
m-Xylene & p-Xylene			0.200	0.1921		mg/Kg		96	70 - 130		
o-Xylene			0.100	0.09734		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-42483/2-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08380		mg/Kg		84	70 - 130	20	35

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-42483/2-A
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42483

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.07951		mg/Kg		80	70 - 130	19	35
Ethylbenzene			0.100	0.07270		mg/Kg		73	70 - 130	21	35
m-Xylene & p-Xylene			0.200	0.1547		mg/Kg		77	70 - 130	22	35
o-Xylene			0.100	0.07994		mg/Kg		80	70 - 130	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-3625-A-1-C MS
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 42483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.0996	0.08752		mg/Kg		88	70 - 130
Toluene	<0.00201	U	0.0996	0.08182		mg/Kg		82	70 - 130
Ethylbenzene	<0.00201	U	0.0996	0.07396		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1562		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.0996	0.07911		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 890-3625-A-1-D MSD
Matrix: Solid
Analysis Batch: 42466

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 42483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09585		mg/Kg		96	70 - 130	9	35
Toluene	<0.00201	U	0.100	0.08682		mg/Kg		87	70 - 130	6	35
Ethylbenzene	<0.00201	U	0.100	0.07977		mg/Kg		80	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1658		mg/Kg		83	70 - 130	6	35
o-Xylene	<0.00201	U	0.100	0.08489		mg/Kg		85	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-41841/1-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41841

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 22:54	1

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-41841/1-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41841

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 22:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/14/22 14:38	12/17/22 22:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*12/14/22 14:38*	*12/17/22 22:54*	*1*
o-Terphenyl	*121*		*70 - 130*	*12/14/22 14:38*	*12/17/22 22:54*	*1*

Lab Sample ID: LCS 880-41841/2-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41841

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1190		mg/Kg		119	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1036		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: LCSD 880-41841/3-A
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41841

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1158		mg/Kg		116	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	967.1		mg/Kg		97	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 890-3626-1 MS
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: SS08
Prep Type: Total/NA
Prep Batch: 41841

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	817.4		mg/Kg		80	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	960.5		mg/Kg		96	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

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

Lab Sample ID: 890-3626-1 MSD
Matrix: Solid
Analysis Batch: 42076

Client Sample ID: SS08
Prep Type: Total/NA
Prep Batch: 41841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	906.8		mg/Kg		89	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	986.4		mg/Kg		99	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41755/1-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			12/20/22 11:06	1

Lab Sample ID: LCS 880-41755/2-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	229.8		mg/Kg		92	90 - 110		

Lab Sample ID: LCSD 880-41755/3-A
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	230.6		mg/Kg		92	90 - 110	0	20

Lab Sample ID: 890-3625-A-6-B MS
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	143		248	365.1		mg/Kg		90	90 - 110		

Lab Sample ID: 890-3625-A-6-C MSD
Matrix: Solid
Analysis Batch: 42176

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	143		248	365.7		mg/Kg		90	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

GC VOA

Prep Batch: 42420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-42420/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 42466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	8021B	42483
MB 880-42420/5-A	Method Blank	Total/NA	Solid	8021B	42420
MB 880-42483/5-A	Method Blank	Total/NA	Solid	8021B	42483
LCS 880-42483/1-A	Lab Control Sample	Total/NA	Solid	8021B	42483
LCSD 880-42483/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42483
890-3625-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	42483
890-3625-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	42483

Prep Batch: 42483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	5035	
MB 880-42483/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42483/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42483/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3625-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3625-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 42580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	8015NM Prep	
MB 880-41841/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41841/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41841/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3626-1 MS	SS08	Total/NA	Solid	8015NM Prep	
890-3626-1 MSD	SS08	Total/NA	Solid	8015NM Prep	

Analysis Batch: 42076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	8015B NM	41841
MB 880-41841/1-A	Method Blank	Total/NA	Solid	8015B NM	41841
LCS 880-41841/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41841
LCSD 880-41841/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41841
890-3626-1 MS	SS08	Total/NA	Solid	8015B NM	41841
890-3626-1 MSD	SS08	Total/NA	Solid	8015B NM	41841

Analysis Batch: 42199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

HPLC/IC

Leach Batch: 41755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Soluble	Solid	DI Leach	
MB 880-41755/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3625-A-6-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3625-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 42176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3626-1	SS08	Soluble	Solid	300.0	41755
MB 880-41755/1-A	Method Blank	Soluble	Solid	300.0	41755
LCS 880-41755/2-A	Lab Control Sample	Soluble	Solid	300.0	41755
LCSD 880-41755/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41755
890-3625-A-6-B MS	Matrix Spike	Soluble	Solid	300.0	41755
890-3625-A-6-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	41755

Lab Chronicle

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Client Sample ID: SS08

Date Collected: 12/09/22 11:35
Date Received: 12/12/22 12:41

Lab Sample ID: 890-3626-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	42483	12/22/22 09:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42466	12/23/22 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			42580	12/24/22 08:27	AJ	EET MID
Total/NA	Analysis	8015 NM		1			42199	12/19/22 15:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	41841	12/14/22 14:38	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	42076	12/17/22 23:59	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	41755	12/13/22 13:06	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	42176	12/20/22 13:44	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
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

Sample Summary

Client: Ensolum
Project/Site: Broadcaster 29 Federal 003H

Job ID: 890-3626-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3626-1	SS08	Solid	12/09/22 11:35	12/12/22 12:41	0.5'

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	817.683.2503	Email:	kjennings@ensolum.com; jadams@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Broadcaster 29 Federal 003H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024002	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	Thm607
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS08	S	12.9.22	1135	0.5'	G	1		x	x	x

Parameters

890-3626 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident Number

12.9.22

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12-12-22 12:41			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3626-1
SDG Number: Lea County NM

Login Number: 3626
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3626-1
SDG Number: Lea County NM

Login Number: 3626
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/13/22 11:24 AM

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

ENSOLUM

APPENDIX B

Final C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2132773092
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2132773092
District RP	
Facility ID	
Application ID	

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

Initial Response

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

- ☐ The source of the release has been stopped.
- ☐ The impacted area has been secured to protect human health and the environment.
- ☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: Ramona Marcus Date: 11/29/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 63506
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	11/29/2021

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2132773092
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2132773092
District RP	
Facility ID	
Application ID	

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

Printed Name: ___Charles Beauvais_____ Title: _Senior Environmental Engineer_____

Signature:___Charles R. Beauvais II_____ Date: __12/28/2022_____

email: _Charles.R.Beauvais@conocophillips.com _____ Telephone: ___575-988-2043_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: ____12/28/2022____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2132773092
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

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: ___Charles Beauvais_____ Title: ___Senior Environmental Engineer____

Signature: ___Charles R. Beauvais II_____ Date: ___12/28/2022_____

email: __Charles.R.Beauvais@conocophillips.com____ Telephone: ___575-988-2043_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: __12/28/2022____

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: _____

Printed Name: _____ Title: _____

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	NAPP2201938653
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC	OGRID	229137
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688-9057
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # *(assigned by OCD)*	NAPP2201938653
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.28158 Longitude -103.49006
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Broadcaster 29 Federal 003H	Site Type	Tank Battery
Date Release Discovered	January 4, 2022	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
B	29	23S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Limestone Basin Prop Ranch, LLC)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 0.2	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The release was caused by a oil to flare event.
No fluid was recovered due to the fire burning off and standing fluid. The release resulted in a flare fire on and off pad.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2201938653
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The release involved a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was given by Kelsy Waggaman via e-mail January 5, 2022 at 6:00 pm to BLM_NM_CFO_Spill@blm.gov and ocd.enviro@state.nm.us.

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Brittany N. Esparza Title: Environmental Technician

Signature: Brittany Esparza Date: 1/19/2022

email: Brittany.Esparza@ConocoPhillips.com Telephone: (432) 221-0398

OCD Only

Received by: Ramona Marcus Date: 1/19/2022

L48 Spill Volume Estimate Form

Facility Name & Number:	BROADCASTER 29 FED 3H BATTERY / LEASE #NM092199 / API #30-025-41909
Asset Area:	NDBE
Release Discovery Date & Time:	1-4-2021 @ 10:28AM
Release Type:	Oil
Provide any known details about the event:	Found that the regulator that supplies the pneumatic oil dump froze. This did not allow supply gas to enter the dump causing the dump to be inoperable. A few months back we made modifications to the battery. Some of the modifications included adding high liquid level kills to each ko and heater. During this upset condition we failed to receive an alarm, notifying us that

NAPP2201938653

Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?	See reference table below
Has it rained at least a half inch in the last 24 hours?	See reference table 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	80.0	40.0	0.03	15.16%	1.486	0.225	[redacted]		
Rectangle B					0.000	0.000			
Rectangle C					0.000	0.000			
Rectangle D					0.000	0.000			
Rectangle E					0.000	0.000			
Rectangle F					0.000	0.000			
Rectangle G					0.000	0.000			
Rectangle H					0.000	0.000			
Rectangle I					0.000	0.000			
Rectangle J					0.000	0.000			
					Total Volume Release:	0.225			

District I
1625 N. French Dr., Hobbs, NM 88240
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District II
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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 73462
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	1/19/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2201938653
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

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.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2201938653
District RP	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ___Charles Beauvais_____ Title: _Senior Environmental Engineer_____

Signature: Charles R. Beauvais II Date: __12/28/2022_____

email: _Charles.R.Beauvais@conocophillips.com _____ Telephone: ___575-988-2043_____

OCD Only

Received by: Jocelyn Harimon Date: 12/28/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2201938653
District RP	
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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

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Charles Beauvais Title: Senior Environmental Engineer

Signature: Charles R. Beauvais II Date: 12/28/2022

email: Charles.R.Beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: Jocelyn Harimon Date: 12/28/2022

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: Jennifer Nobui Date: 01/24/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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CONDITIONS

Action 170747

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 170747
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please implement 19.15.29.13 NMAC when completing P&A.	1/24/2023