ENSOLUM

October 11, 2022

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

Re: Closure Request
Gadwall 35 Federal 001H
Incident Number NAPP2218129279
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities performed at the Gadwall 35 Federal 001H (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, COG is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2218129279.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 26, Township 24 South, Range 32 East, in Lea County, New Mexico (32.181389° N, 103.639444° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On June 15, 2022, a fitting on a flow line was found leaking due to corrosion and resulted in the release of approximately 0.05 barrels (bbls) of produced water off pad. No released fluids were recovered. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on June 29, 2022. The release was assigned Incident Number NAPP2218129279.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-04536 POD1, located approximately 1.98 miles west of the Site. The groundwater well has a reported depth to groundwater of 314 feet bgs and a total depth of 500 feet bgs. Regionally, deptht to groundwater ranges from 107 feet

to 450 feet bgs. Depth to water beneath the Site has been reasonally determined to be greater than 100 feet bgs based on nearby water well data and regional depth to water measurements. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an emergent wetland, located 149 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church; however, a wetland is located within 300 feet of the Site. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On September 13, 2022, stained soil was excavated from the release area as indicated by visible and olfactory evidence of impairment and field screenings results. Excavation activities were performed via hand shoveling activities. The excavation was completed to an approximate depth of 0.5 feet bgs. Photographic documentation is included in Appendix B.

The excavation measured approximately 10 square feet in areal extent. A total of approximately 0.02 cubic yards of stained soil was removed during the excavation activities. The stained soil was transported and properly disposed of at the R30 Disposal Facility located in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was restored to original surface grade.

Following removal of stained soil, a 5-point composite soil samples was collected from the floor of the excavation. The 5-point composite sample was collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 was collected from the excavated area at a depth of 0.5 feet bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor samples. The excavation extent and excavation soil sample location are presented on Figure 2.

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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for excavation sample FS01 indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix C.

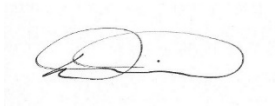
CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the June 15, 2022, release of produced water. Laboratory analytical results of the excavation soil sample indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no further remediation was required. Ensolum recontoured the Site to match pre-existing Site conditions.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. COG believes these remedial actions are protective of human health, the environment, and groundwater. COG respectfully requests closure for Incident Number NAPP2218129279. The Final Form C-141 is included in Appendix D. If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Sincerely,
Ensolum, LLC

Kalei Jennings
Senior Project Manager



Daniel R. Moir, PG
Senior Managing Geologist

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

Appendices:

Figure 1	Site Receptor Map
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	Final C-141

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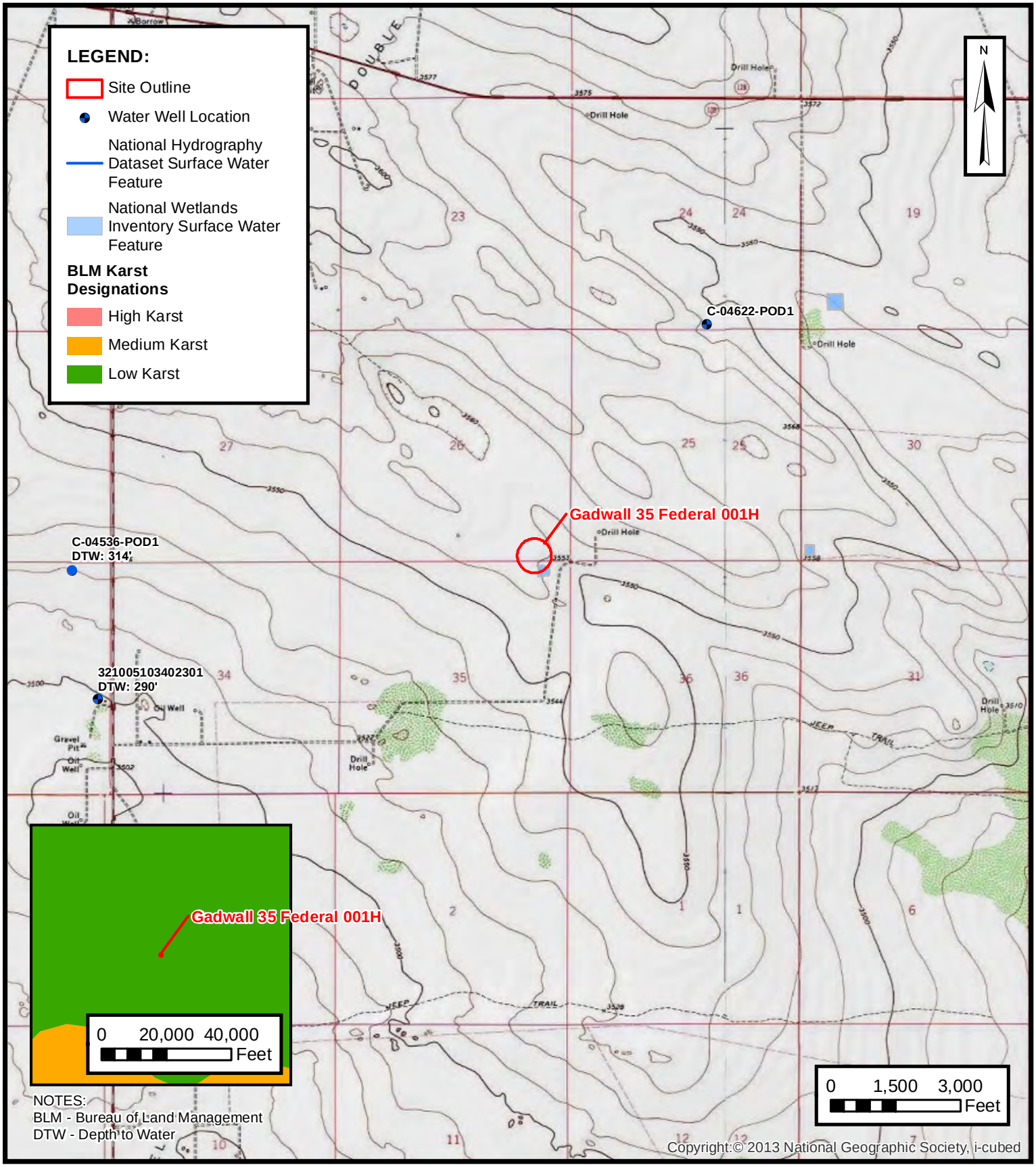
FIGURES



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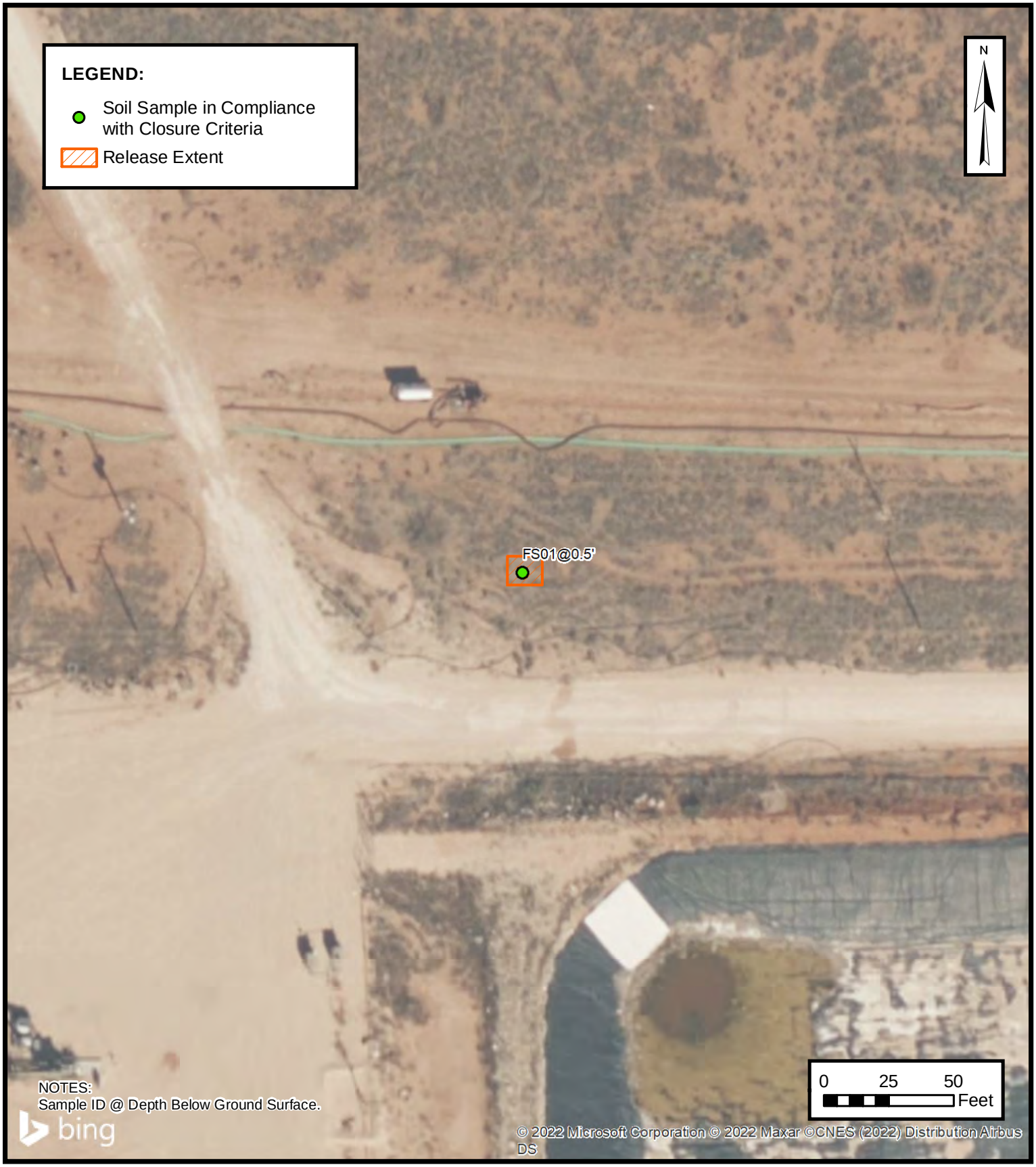
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

COG OPERATING, LLC
GADWALL 35 FEDERAL 001H
Incident Number
Unit P, Sec 26, T24S, R32E
Lea County, New Mexico

FIGURE
1



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EXCAVATION SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
GADWALL 35 FEDERAL 001H
NAPP2218129279
Unit P, Sec 26, T24S, R32E
Lea County, New Mexico

FIGURE
2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Gadwall Federal 001H
COG Operating, LLC
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
Preliminary Assessment Soil Samples										
FS01	09/13/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	68.0

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

Released to Imaging: 10/25/2022 3:50:54 PM

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APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
20E37	C 04536 POD1	1	2	2	33	24S	32E	625019	3561244

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: BRYCE WALLACE

Drill Start Date:	06/09/2021	**Drill Finish Date:**	06/10/2021	**Plug Date:**	
Log File Date:	06/21/2021	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	4 GPM
Casing Size:	4.30	**Depth Well:**	500 feet	**Depth Water:**	314 feet

Water Bearing Stratifications:	Top	Bottom	Description
	235	480	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	300	500

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

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APPENDIX B

Photographic Log

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Photographic Log
COG Operating, LLC
Gadwall 35 Federal 001H
NAPP2218129279

Photograph 1 Date: 7/15/2022
Description: View of release point prior to remediation activities.

Photograph 2 Date: 7/15/2022
Description: View of release point prior to remediation activities.

Photograph 3 Date: 9/13/2022
Description: View of release point subsequent to remediation activities.

Photograph 4 Date: 9/13/2022
Description: View of release point subsequent to remediation activities.

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APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2948-1
Laboratory Sample Delivery Group: 03D2024091
Client Project/Site: Gadwall 35 Federal 001H
Revision: 1

For:
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

Attn: Joe Gable

JKramer

Authorized for release by:
10/11/2022 1:15:22 PM

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

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Laboratory Job ID: 890-2948-1
SDG: 03D2024091

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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
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: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Job ID: 890-2948-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2948-1

REVISION

The report being provided is a revision of the original report sent on 9/20/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID change.

Report revision history

Receipt
The sample was received on 9/13/2022 3:26 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 7.0°C

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-34554 and analytical batch 880-34548 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
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: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Client Sample ID: FS01
Date Collected: 09/13/22 12:45
Date Received: 09/13/22 15:26
Sample Depth: 0.5

Lab Sample ID: 890-2948-1
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		09/16/22 09:35	09/16/22 19:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/16/22 09:35	09/16/22 19:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/16/22 09:35	09/16/22 19:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/16/22 09:35	09/16/22 19:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/16/22 09:35	09/16/22 19:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/16/22 09:35	09/16/22 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*09/16/22 09:35*	*09/16/22 19:56*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*09/16/22 09:35*	*09/16/22 19:56*	*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			09/19/22 09:16	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			09/15/22 17:29	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		09/15/22 08:44	09/15/22 12:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 12:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*09/15/22 08:44*	*09/15/22 12:04*	*1*
o-Terphenyl	*104*		*70 - 130*	*09/15/22 08:44*	*09/15/22 12:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.0**		5.04		mg/Kg			09/19/22 11:41	1

Surrogate Summary

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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)
890-2943-A-20-E MS	Matrix Spike	78	110
890-2943-A-20-F MSD	Matrix Spike Duplicate	94	98
890-2948-1	FS01	105	108
LCS 880-34645/1-A	Lab Control Sample	88	106
LCSD 880-34645/2-A	Lab Control Sample Dup	101	105
MB 880-34645/5-A	Method Blank	103	116

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)
890-2943-A-29-E MS	Matrix Spike	102	98
890-2943-A-29-F MSD	Matrix Spike Duplicate	102	97
890-2948-1	FS01	98	104
LCS 880-34554/2-A	Lab Control Sample	101	118
LCSD 880-34554/3-A	Lab Control Sample Dup	100	117
MB 880-34554/1-A	Method Blank	133 S1+	150 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34645/5-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34645

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/22 09:35	09/16/22 14:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/22 09:35	09/16/22 14:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/22 09:35	09/16/22 14:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/22 09:35	09/16/22 14:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*09/16/22 09:35*	*09/16/22 14:12*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*09/16/22 09:35*	*09/16/22 14:12*	*1*

Lab Sample ID: LCS 880-34645/1-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34645

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1013		mg/Kg		101	70 - 130		
Toluene			0.100	0.08163		mg/Kg		82	70 - 130		
Ethylbenzene			0.100	0.08202		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene			0.200	0.1687		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08438		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-34645/2-A
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34645

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	3	35
Toluene			0.100	0.09323		mg/Kg		93	70 - 130	13	35
Ethylbenzene			0.100	0.09404		mg/Kg		94	70 - 130	14	35
m-Xylene & p-Xylene			0.200	0.1899		mg/Kg		95	70 - 130	12	35
o-Xylene			0.100	0.09802		mg/Kg		98	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2943-A-20-E MS
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.1142		mg/Kg		113	70 - 130		
Toluene	<0.00199	U	0.0998	0.08756		mg/Kg		86	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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

Lab Sample ID: 890-2943-A-20-E MS
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00348		0.0998	0.08386		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.00629		0.200	0.1663		mg/Kg		80	70 - 130
o-Xylene	0.00317		0.0998	0.08249		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-2943-A-20-F MSD
Matrix: Solid
Analysis Batch: 34644

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34645

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0996	0.09661		mg/Kg		95	70 - 130	17	35
Toluene	<0.00199	U	0.0996	0.08954		mg/Kg		88	70 - 130	2	35
Ethylbenzene	0.00348		0.0996	0.08965		mg/Kg		87	70 - 130	7	35
m-Xylene & p-Xylene	0.00629		0.199	0.1869		mg/Kg		91	70 - 130	12	35
o-Xylene	0.00317		0.0996	0.09360		mg/Kg		91	70 - 130	13	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-34554/1-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34554

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		09/15/22 08:44	09/15/22 09:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*09/15/22 08:44*	*09/15/22 09:19*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*09/15/22 08:44*	*09/15/22 09:19*	*1*

Lab Sample ID: LCS 880-34554/2-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	830.3		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)			1000	901.2		mg/Kg		90	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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

Lab Sample ID: LCS 880-34554/2-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34554

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: LCSD 880-34554/3-A
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 34554

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	805.4		mg/Kg		81	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	890.3		mg/Kg		89	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: 890-2943-A-29-E MS
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1049		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	176		996	1029		mg/Kg		86	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-2943-A-29-F MSD
Matrix: Solid
Analysis Batch: 34548

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34554

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	<49.9	U	999	1078		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	176		999	1034		mg/Kg		86	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	97		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34584/1-A
Matrix: Solid
Analysis Batch: 34849

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			09/19/22 10:49	1

Lab Sample ID: LCS 880-34584/2-A
Matrix: Solid
Analysis Batch: 34849

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.5		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-34584/3-A
Matrix: Solid
Analysis Batch: 34849

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	251.2		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 890-2942-A-17-B MS
Matrix: Solid
Analysis Batch: 34849

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	30.8		251	268.1		mg/Kg		95	90 - 110		

Lab Sample ID: 890-2942-A-17-C MSD
Matrix: Solid
Analysis Batch: 34849

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	30.8		251	270.0		mg/Kg		96	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

GC VOA

Analysis Batch: 34644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	8021B	34645
MB 880-34645/5-A	Method Blank	Total/NA	Solid	8021B	34645
LCS 880-34645/1-A	Lab Control Sample	Total/NA	Solid	8021B	34645
LCSD 880-34645/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34645
890-2943-A-20-E MS	Matrix Spike	Total/NA	Solid	8021B	34645
890-2943-A-20-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34645

Prep Batch: 34645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	5035	
MB 880-34645/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34645/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34645/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2943-A-20-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2943-A-20-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	8015B NM	34554
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015B NM	34554
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34554
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34554
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34554
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34554

Prep Batch: 34554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	8015NM Prep	
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Soluble	Solid	DI Leach	
MB 880-34584/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34584/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

HPLC/IC (Continued)

Leach Batch: 34584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2942-A-17-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2942-A-17-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2948-1	FS01	Soluble	Solid	300.0	34584
MB 880-34584/1-A	Method Blank	Soluble	Solid	300.0	34584
LCS 880-34584/2-A	Lab Control Sample	Soluble	Solid	300.0	34584
LCSD 880-34584/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34584
890-2942-A-17-B MS	Matrix Spike	Soluble	Solid	300.0	34584
890-2942-A-17-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34584

Lab Chronicle

Client: Ensolum
Project/Site: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Client Sample ID: FS01
Date Collected: 09/13/22 12:45
Date Received: 09/13/22 15:26

Lab Sample ID: 890-2948-1
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			5.02 g	5 mL	34645	09/16/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34644	09/16/22 19:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			34757	09/19/22 09:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34618	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 12:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34584	09/15/22 11:21	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34849	09/19/22 11:41	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: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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	T104704400-22-24	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: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

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: Gadwall 35 Federal 001H

Job ID: 890-2948-1
SDG: 03D2024091

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2948-1	FS01	Solid	09/13/22 12:45	09/13/22 15:26	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:	Joe Gable	Bill to: (If different)	
Company Name:	Ensolum	Company Name:	
Address:	3122 National Parks	Address:	
City, State ZIP:	Carlsbad NM 88220	City, State ZIP:	
Phone:	903-386-8077	Email:	JGable@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:	Gaddell 35	Turn Around	
Project Number:	03D2024091	☐ Routine	☒ Rush
Project Location:	Lea County	Due Date:	2 Day
Sampler's Name:	CJ	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: TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor: -0.0
Sample Custody Seals:	Yes No (N/A)	Temperature Reading: 7.2
Total Containers:		Corrected Temperature: 7.0

ANALYSIS REQUEST — Pres. Code — Parameters: CHL, BTEX, TPH

890-2948 Chain of Custody

Preservative Codes

None: NO	DI Water: H_2O
Cool: Cool	MeOH: Me
HCL: HC	HNO_3: HN
H_2SO_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	CHL	BTEX	TPH	Sample Comments
SS01	S	9-13	1245	.2	G	1	✓	✓	✓	Inc FD NAPP2218129279

CJ

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

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	[signature]	[signature]	9-13-22 1526	2			
3				4			
5				6			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2948-1
SDG Number: 03D2024091

Login Number: 2948
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.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2948-1
SDG Number: 03D2024091

Login Number: 2948
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/15/22 10:32 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 D

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	
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	
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: _____ Date: _____

Received by OCD: 10/12/2022 2:43:49 PM

L48 Spill Volume Estimate Form

Facility Name & Number:	Gadwall 35 #1 SWD Line
Asset Area:	Carlsbad, NM
Release Discovery Date & Time:	6/15/2022
Release Type:	
Provide any known details about the event:	Pinhole in line going to SWD

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	3.5	2.0	1.00	4	7.000	0.021	0.026	0.001	0.026
Rectangle B	3.5	2.0	1.00	4	7.000	0.021	0.026	0.001	0.026
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
								Total Volume Release:	0.052

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State of New Mexico
Oil Conservation Division

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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.

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State of New Mexico
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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: __10/11/2022_____

email: __Charles.R.Beauvais@conocophillips.com_____ Telephone: __575-988-2043_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: __10/12/2022____

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218129279
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Facility ID	
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Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

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

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

☒ Description of remediation activities

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

Printed Name: Charles Beauvais Title: Senior Environmental Engineer

Signature: Charles R. Beauvais II Date: 10/11/2022

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

OCD Only

Received by: Jocelyn Harimon Date: 10/12/2022

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: 10/25/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

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

Action 150518

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 150518
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	10/25/2022