



December 3, 2025

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
Pygmy 27 State Com 003H
Incident Number nAPP2509329614
Lea County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request* for the Pygmy 27 State Com 003H (Site). This *Closure Request* details assessment activities completed at the Site in response to the denial by the New Mexico Oil Conservation Division (NMOCD) of a previously submitted *Revised Deferral Request*. In the denial, NMOCD expressed remediation of impacted soil will not require major facility deconstruction. The *Revised Deferral Request* originally combined two separate release incidents (nAPP2509329614 and nAPP2509657158). Since the releases occurred on different portions of the lined containment and exhibited different analytical results, this report focuses solely on Incident Number nAPP2509329614, which did not have any soil exceedances. A separate report will be prepared and submitted for Incident Number nAPP2509657158, which did exhibit exceedances, in response to the denial by the NMOCD. Based on assessment activities and soil sample laboratory analytical results, COG is submitting this *Closure Request*, describing Site assessment activities that have occurred and requesting closure for Incident Number nAPP2509329614.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 27, Township 21 South, Range 33 East, in Lea County, New Mexico (32.4564°, -103.5577°) and is associated with oil and gas exploration and production operations on private land owned by Merchant Livestock Company.

On March 29, 2025, equipment failure resulted in the release of approximately 5 barrels (bbls) of crude oil into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 5 bbls of released crude oil were recovered from within the lined containment. The lined containment was then power washed to remove any residual staining and/or standing fluids. COG reported the release to the NMOCD and submitted a Release Notification Form C-141 (Form C-141) on April 3, 2025. The release was assigned Incident Number nAPP2509329614. A 48-hour advance notice of liner inspection was provided to the NMOCD on April 29, 2025. A liner integrity inspection was conducted by COG personnel following fluid recovery on May 2, 2025. Upon inspection, the liner was determined to be insufficient.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below and potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is 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 CP-01349-POD 1, located approximately 0.5 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 573 feet bgs and a total depth of 1,188 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1 and the associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 0.97 miles northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

Between May 9, 2025, and July 29, 2025, Ensolum personnel visited the Site to evaluate the release extent and conduct delineation activities. One borehole (DS01) was advanced via hand auger to a depth of 1-foot bgs within the location of the tear in the liner to assess the vertical extent of impacted soil following the March 29, 2025, crude oil release (Incident Number nAPP2509329614). Two boreholes (DS02 and DS06) were advanced via hand auger within the location of tears in the liner resulting from a second release that occurred on April 6, 2025 (Incident Number nAPP2509657158), in the southern portion of the lined containment. Additionally, eight boreholes (DS03 through DS05, and DS07 through DS10) were advanced via hand auger around the containment to confirm the lateral extent of the release. Discrete delineation soil samples were collected from each borehole at depths ranging from 0.5 feet to 3 feet bgs.

Soil from the boreholes was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the boreholes were documented on lithologic soil sampling logs, which are included on lithologic soil sampling logs, which are included as Appendix B. The boreholes were backfilled with the soil removed and COG repaired the tear in the liner. The release extents for both

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releases and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix C.

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 constituents of concern (COCs): 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

Laboratory analytical results for delineation soil samples collected from borehole DS01 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and successfully confirmed the absence of impacted soil for Incident Number nAPP2509329614. Additionally, delineation soil samples collected from the remaining boreholes DS03 through DS05, and DS07 through DS10, indicated all COC concentrations were compliant with the Closure Criteria, confirming the release remained fully contained within the lined containment.

In contrast, laboratory analytical results from boreholes associated with Incident Number nAPP2509657158, indicated soil exceedances. Laboratory analytical results for delineation soil samples collected from borehole DS06, indicated all COC concentrations were compliant with the Closure Criteria. Laboratory analytical results for delineation soil sample collected from DS02 at 0.5 feet bgs indicated TPH-GRO/TPH-DRO concentrations exceeded the Closure Criteria. Laboratory analytical results for delineation soil sample collected from DS02 at 3 feet bgs indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria, successfully defining the vertical extent of the release. Laboratory analytical results are summarized in Table 1 and the laboratory analytical reports are included in Appendix D.

CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to address the March 29, 2025, crude oil release. Laboratory analytical results for the delineation soil samples associated with the release indicated all COC concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. COG patched the tear in the liner following the completion of delineation activities.

Delineation of potential impacts at this Site determined no soil that exceeded the Closure Criteria was located below the northern portion of the lined containment. Additional details regarding the April 6, 2025 release (Incident Number nAPP2509657158) will be provided in a separate report.

Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. COG believes these remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number nAPP2509329614.

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

Sincerely,
Ensolum, LLC

A handwritten signature in black ink that reads "Hadlie Green".

Hadlie Green
Project Geologist

A handwritten signature in black ink that reads "Kalei Jennings".

Kalei Jennings
Senior Managing Scientist

cc: Jacob Laird, ConocoPhillips Company
Merchant Livestock Company

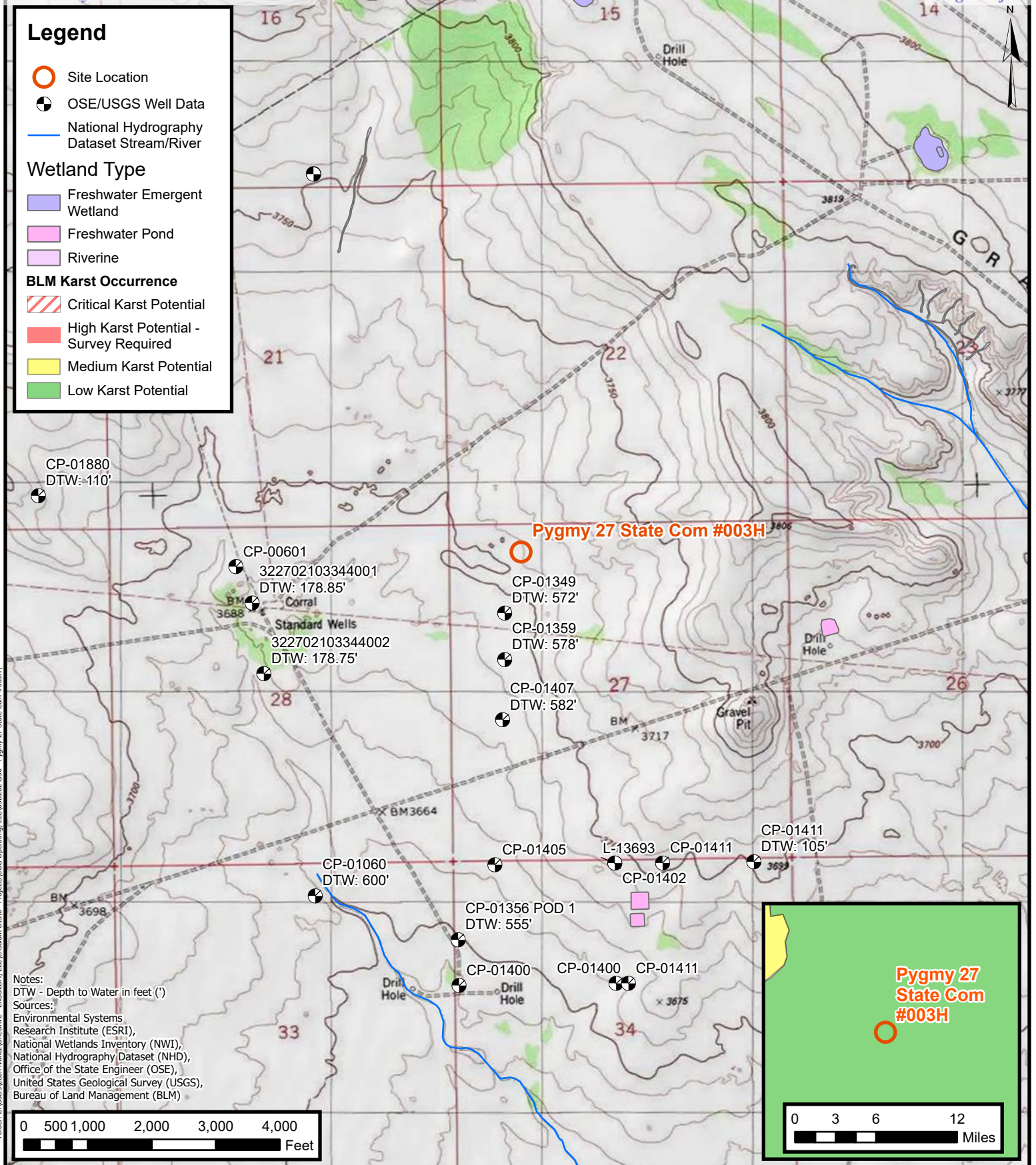
Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain of Custody Documentation

Attachment I September 15, 2025, *Revised Deferral Request*



FIGURES



Site Receptor Map

COG Operating, LLC

Pygmy 27 State Com 003H

Incident Numbers:

NAPP2509329614, NAPP2509657158

Unit B, Section 27, T 21S, R 33E

Lea County, New Mexico

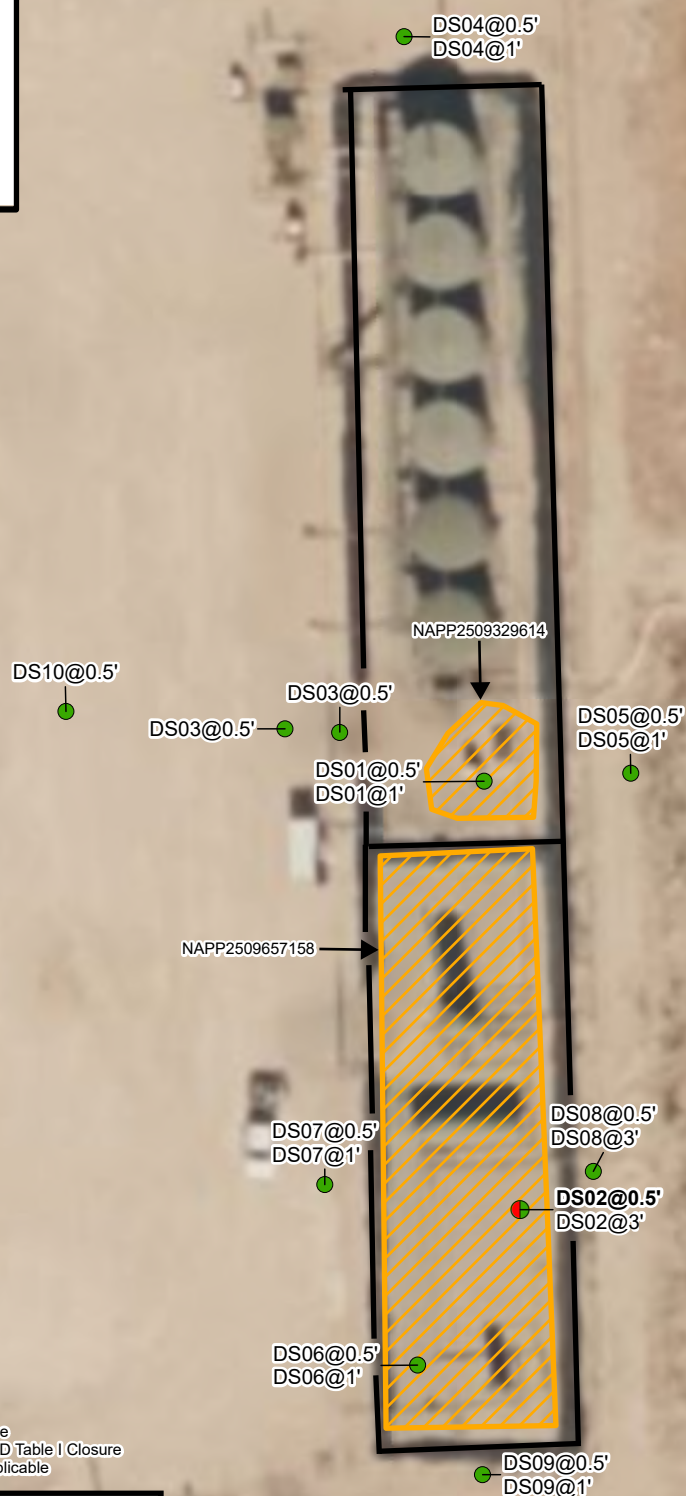
FIGURE

1

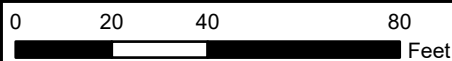


Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- ▨ Release Extent
- Lined Containment

**Notes:**

Sample ID @ Depth Below Ground Surface
 Concentrations in **bold** exceed the NMOC Table I Closure Criteria or reclamation standard where applicable



Sources: Environmental Systems Research Institute (ESRI)

**Delineation Soil Sample Locations**

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 Incident Numbers:
 NAPP2509329614, NAPP2509657158
 Unit B, Section 27, T 21S, R 33E
 Lea County, New Mexico

FIGURE**2**



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Pygmy 27 State Com 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 I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
DS01	05/09/2025	0.5	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	104
DS01	05/09/2025	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	89.7
DS02*	05/09/2025	0.5	0.193	5.00	256	1,460	<49.8	1,716	1,720	127
DS02*	05/09/2025	3	<0.00199	<0.00398	<49.9	56.9	<49.9	56.9	56.9	127
DS03	05/09/2025	0.5	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	601
DS03	06/05/2025	0.5	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	273
DS04	05/09/2025	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	99.2
DS04	05/09/2025	1	<0.00201	0.00412	<49.8	<49.8	<49.8	<49.8	<49.8	79.1
DS05	05/09/2025	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	281
DS05	05/09/2025	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	366
DS06*	05/09/2025	0.5	<0.00199	0.00636	<49.8	<49.8	<49.8	<49.8	<49.8	589
DS06*	05/09/2025	1	0.00224	0.00870	<49.9	<49.9	<49.9	<49.9	<49.9	760
DS07	05/09/2025	0.5	<0.00201	0.00483	<50.0	<50.0	<50.0	<50.0	<50.0	92.8
DS07	06/05/2025	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	107
DS08	05/09/2025	0.5	0.00223	0.00931	<49.8	<49.8	<49.8	<49.8	<49.8	204
DS08	05/09/2025	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	137
DS09	06/05/2025	0.5	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	<49.7	107
DS09	06/05/2025	1	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	<50.3	121
DS10	07/29/2025	0.5	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	196

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

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 I Closure Criteria or reclamation standard where applicable.

*Soil sample was collected to confirm the vertical extent of impacted soil resulting from Incident
 Number nAPP2509657158



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
SANTA FE, N.M.



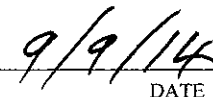
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1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP-1349 (Tyler #1) *** REVISED 09/09/14 ***				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) Merchants/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) 575-398-2424			
	WELL OWNER MAILING ADDRESS P. O. Box 692				CITY Tatum		STATE NM	ZIP 88267
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 27	SECONDS 11.3 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
LONGITUDE 103 33 57.7 W DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE1/4SW1/4NW1/4 Section 27, Township 21 South, Range 33 East on Merchants Livestock Land								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421		NAME OF LICENSED DRILLER Corky Glenn			NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.		
	DRILLING STARTED 07/12/14	DRILLING ENDED 07/18/14	DEPTH OF COMPLETED WELL (FT) 1,188'		BORE HOLE DEPTH (FT) 1,188'	DEPTH WATER FIRST ENCOUNTERED (FT) 990'		
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 572'		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input checked="" type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0'	40'	20"	16"	None	15 1/2"	.250	
	0'	754'	14 3/4"	9 5/8"	Thread & Collar	8.921"	36 lbs.	none
	721'	1,188'	8 3/4"	7" (467' Total)	Thread & Collar	6.366"	23 lbs.	1/8"
			259.93' perforated					
			on bottom of liner					
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0'	40'	20"	Cemented	2 yds.	Top Pour		
	0	754'	14 3/4"	Float and shoe cemented to surface	777	Circulated		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	Exp1	21S. 33E. 27. 132			PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	4'	4'	Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	4'	19'	15'	Caliche	<input type="radio"/> Y <input checked="" type="radio"/> N	
	19'	35'	16'	Sand & Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	35'	122'	87'	Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	122'	145'	23'	Sandy Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	145'	417'	272'	Red & Brown Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	417'	720'	303'	Brown & Red Shale (some clay)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	720'	742'	22'	Red, Brown & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	742'	753'	11'	Brown Shale & Brown Sandrock	<input type="radio"/> Y <input checked="" type="radio"/> N	
	753'	805'	52'	Red & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	805'	837'	32'	Brown & Red Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	837'	885'	48'	Brown Sandrock & Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
	885'	990'	105'	Red & Brown Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	990'	1188'	198'	Watersand (Brown Sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP					TOTAL ESTIMATED	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: 0' to 754' drilled with mud. 754' to 1,188' drilled with air and foam.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 					
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	215.33E.27.132				PAGE 2 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us


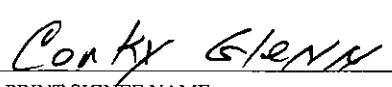
STATE ENGINEER OFFICE
POSBELL, NEW MEXICO
2014 AUG -4 AM 10:48

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP - 1349 (Tyler #1)				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) Merchants Livestock/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) (575)398-2424			
	WELL OWNER MAILING ADDRESS P.O. Box 692				CITY Tatum		STATE NM	ZIP 88267
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 27	SECONDS 11.3	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	33	37.7	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE/SW/NW Sec. 27, T21S, R33E on Merchants Livestock Land								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421		NAME OF LICENSED DRILLER Corky Glenn			NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.		
	DRILLING STARTED 7/12/14	DRILLING ENDED 7/18/14	DEPTH OF COMPLETED WELL (FT) 1188'	BORE HOLE DEPTH (FT) 1188'	DEPTH WATER FIRST ENCOUNTERED (FT) 990'			
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT)		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0'	40'	20"	16"	none	15 1/2'	.250	
	0'	754'	14 3/4"	9 5/8"	Thread and collar	.352	36 lbs.	none
	721'	1188'	8 3/4"	7"	Thread and collar	6.5"	23 lbs.	1/8"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0'	40'	20"	Cemented	2 yds.	Top Pour		
	0'	754'	14 3/4"	Float and shoe cemented to surface	740	Circulated		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	21S.33E.27.231				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0'	4'	4'	Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	4'	19'	15'	Caleche	<input type="radio"/> Y <input checked="" type="radio"/> N	
	19'	35'	16'	Sand & Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	35'	122'	87'	Red Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	122'	145'	23'	Sandy Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	145'	417'	272'	Red & Brown Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	417'	720'	303'	Brown & Red Shale (some clay)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	720'	742'	22'	Red, Brown & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	742'	753'	11'	Brown Shale & Brown Sandrock	<input type="radio"/> Y <input checked="" type="radio"/> N	
	753'	805'	52'	Red & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	805'	837'	32'	Brown & Red Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	837'	885'	48'	Brown Sandrock & Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
	855'	990'	105'	Red & Brown Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	990'	1188'	198'	Watersand(Brown sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm): 50	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						
5. TEST, RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	0' to 754' drilled with mud. 754' to 1188' drilled with air and foam.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	<div style="display: flex; justify-content: space-between;"> <div>  SIGNATURE OF DRILLER / PRINT SIGNEE NAME </div> <div>  DATE </div> </div>					

FOR OSE INTERNAL USE


WR-20 WELL RECORD & LOG (Version 06/08/2012)


FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548479
LOCATION	215. 33E. 27. 231				PAGE 2 OF 2




APPENDIX B


Lithologic Soil Sampling Logs


								Sample Name: DS01		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456427, -103.557747								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	9.7	N	DS01	0.5	0.5	CCHE	Caliche, well graded, some hydrocarbon odor			
M	<162.4	1.2	N	DS01	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			


								Sample Name: DS02		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456181, -103.557727								Hole Diameter: 4"		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	804.3	N	DS02	0.5	0.5	CCHE	Caliche, well graded, strong hydrocarbon odor			
M	<162.4	109.3	N			1	CCHE	Caliche, well graded, strong hydrocarbon odor.			
M	<162.4	21.0	N	DS02	2	2	SP	Red/brown sand, fine grained, strong hydrocarbon odor.			
								Total Depth 2'			


ENSOLUM								Sample Name: DS03		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456518, -103.557880								Hole Diameter: 4"		Total Depth: 0.5'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	364	0.0	N	DS03	0.5	0.5	CCHE	Caliche, well graded, no odor			
						1	CCHE	Refusal at 1'			
						Total Depth 0.5'					
Empty rows for data entry											

								Sample Name: DS04		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456854, -103.557795								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS04	0.5	0.5	CCHE	Caliche, well graded, no odor.			
D	<162.4	0.0	N	DS04	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			

								Sample Name: DS05		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456432, -103.557648								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	235.2	0.0	N	DS05	0.5	0.5	SW	Brown sand, well graded, no odor.			
D	162.4	0.0	N	DS05	1	1	SW	Brown sand, well graded, no odor.			
								Total Depth 1'			

								Sample Name: DS06		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456027, -103.557759								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	414.4	0.0	N	DS06	0.5	0.5	CCHE	Caliche, well graded, no odor.			
D	515.2	0.0	N	DS06	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			

								Sample Name: DS07		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456196, -103.557857								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS07	0.5	0.5	CCHE	Caliche, well graded, no odor.			
								Refusal at 1'			
								Total Depth 0.5'			

								Sample Name: DS08		Date: 5/9/2025	
								Site Name: Pygmy 27 State Com 003H			
								Incident Number: NAPP2509329614/NAPP2509657158			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456202, -103.557678								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS08	0.5	0.5	SW	Light brown sand, well graded, no odor.			
D	<162.4	0.0	N			1	SW	Light brown sand, well graded, no odor.			
D	<62.4	0.0	N			2	SW	Light brown sand, well graded, no odor.			
D	<162.4	0.0	N	DS08	3	3	SP	Red/brown sand, fine grained, no odor.			
								Total Depth 3'			



APPENDIX C

Photographic Log



Photographic Log
COG Operating, LLC
Pygmy 27 State Com 003H
Incident Number nAPP2509329614



Photograph: 1 Date: 05/02/2025
 Description: Well location sign
 View: Northeast



Photograph: 2 Date: 05/02/2025
 Description: Liner inspection activities
 View: Northeast



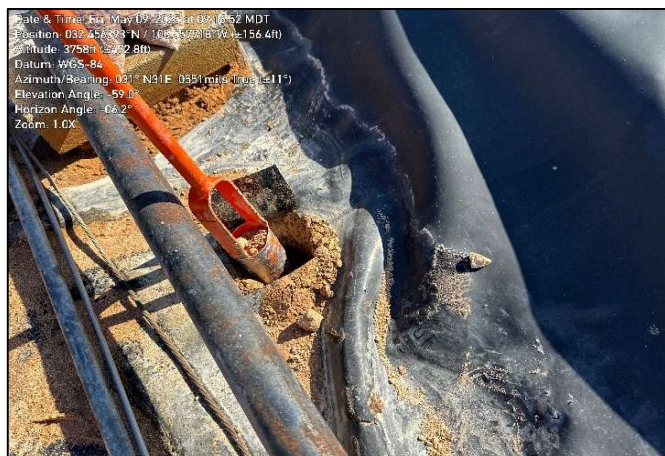
Photograph: 3 Date: 05/02/2025
 Description: Liner inspection activities
 View: Northwest



Photograph: 4 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southeast



Photographic Log
 COG Operating, LLC
 Pygmy 27 State Com 003H
 Incident Number nAPP2509329614



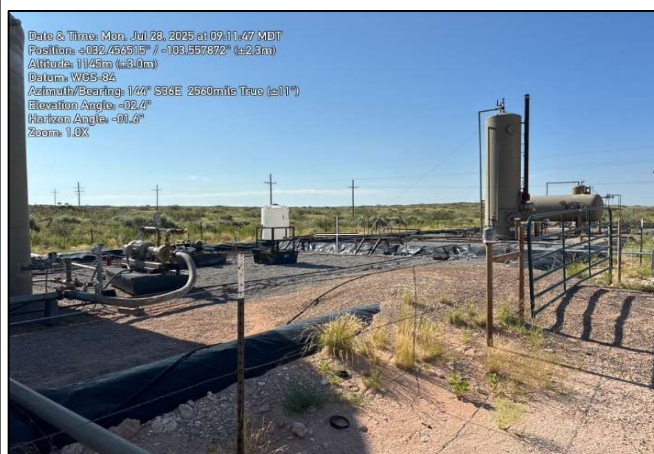
Photograph: 5 Date: 05/09/2025
 Description: Delineation Activities (DS01)
 View: Northeast



Photograph: 6 Date: 06/05/2025
 Description: Lateral delineation activities (DS03)
 View: Direct



Photograph: 7 Date: 07/28/2025
 Description: Restored containment
 View: Southwest



Photograph: 8 Date: 07/28/2025
 Description: Restored containment
 View: Southeast



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 5/14/2025 12:59:12 PM

JOB DESCRIPTION

Pygmy 27 State 3H
Lea County

JOB NUMBER

880-57988-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
5/14/2025 12:59:12 PM

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

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Laboratory Job ID: 880-57988-1
SDG: Lea County

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Definitions/Glossary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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: Pygmy 27 State 3H

Job ID: 880-57988-1

Job ID: 880-57988-1

Eurofins Midland

Job Narrative
880-57988-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/9/2025 4:57 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: DS01 (880-57988-1), DS01 (880-57988-2), DS02 (880-57988-3), DS02 (880-57988-4), DS03 (880-57988-5), DS04 (880-57988-6), DS04 (880-57988-7), DS05 (880-57988-8), DS05 (880-57988-9), DS06 (880-57988-10), DS06 (880-57988-11), DS07 (880-57988-12), DS08 (880-57988-13) and DS08 (880-57988-14).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109922 and analytical batch 880-109913 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS01 (880-57988-1), DS02 (880-57988-3) and (880-56959-A-16-F MDLV). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-109922 and analytical batch 880-109913 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS05 (880-57988-8), DS05 (880-57988-9) and DS06 (880-57988-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109926 and analytical batch 880-109915 was outside the control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109924 and analytical batch 880-109915 was outside the control limits.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-109926 and analytical batch 880-109915 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: DS02 (880-57988-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: DS01 (880-57988-1). Evidence of matrix interferences is not obvious.

Eurofins Midland

Case Narrative

Client: Ensolum
Project: Pygmy 27 State 3H

Job ID: 880-57988-1

Job ID: 880-57988-1 (Continued) Eurofins Midland

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: DS01 (880-57988-2), DS03 (880-57988-5), DS04 (880-57988-6), DS05 (880-57988-9), DS06 (880-57988-10), (880-57988-A-1-B MS) and (880-57988-A-1-C MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01

Lab Sample ID: 880-57988-1

Date Collected: 05/09/25 10:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/12/25 08:52	05/12/25 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130	05/12/25 08:52	05/12/25 12:26	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/12/25 08:52	05/12/25 12:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/12/25 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 11:38	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	05/12/25 07:59	05/13/25 11:38	1
o-Terphenyl	149	S1+	70 - 130	05/12/25 07:59	05/13/25 11:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		9.98	mg/Kg			05/12/25 16:00	1

Client Sample ID: DS01

Lab Sample ID: 880-57988-2

Date Collected: 05/09/25 10:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 08:52	05/12/25 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/12/25 08:52	05/12/25 12:55	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01

Lab Sample ID: 880-57988-2

Date Collected: 05/09/25 10:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	117		70 - 130	05/12/25 08:52	05/12/25 12:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/12/25 12:55	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			05/13/25 12:23	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		05/12/25 07:59	05/13/25 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 12:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	05/12/25 07:59	05/13/25 12:23	1
o-Terphenyl	132	S1+	70 - 130	05/12/25 07:59	05/13/25 12:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.7		9.94	mg/Kg			05/12/25 16:15	1

Client Sample ID: DS02

Lab Sample ID: 880-57988-3

Date Collected: 05/09/25 10:30

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.193		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Toluene	1.60		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Ethylbenzene	0.575		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
m-Xylene & p-Xylene	1.95		0.101	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
o-Xylene	0.681		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Xylenes, Total	2.63		0.101	mg/Kg		05/12/25 08:52	05/12/25 15:59	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	05/12/25 08:52	05/12/25 15:59	25
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	05/12/25 08:52	05/12/25 15:59	25

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	5.00		0.101	mg/Kg			05/12/25 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1720		49.8	mg/Kg			05/13/25 12:37	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-3

Date Collected: 05/09/25 10:30

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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	256		49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Diesel Range Organics (Over C10-C28)	1460		49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			05/12/25 07:59	05/13/25 12:37	1
o-Terphenyl	151	S1+	70 - 130			05/12/25 07:59	05/13/25 12:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		10.1	mg/Kg			05/12/25 16:20	1

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

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		05/12/25 08:52	05/12/25 13:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130			05/12/25 08:52	05/12/25 13:16	1
1,4-Difluorobenzene (Surr)	110		70 - 130			05/12/25 08:52	05/12/25 13:16	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			05/12/25 13:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.9		49.9	mg/Kg			05/13/25 12:52	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		05/12/25 07:59	05/13/25 12:52	1
Diesel Range Organics (Over C10-C28)	56.9		49.9	mg/Kg		05/12/25 07:59	05/13/25 12:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 12:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			05/12/25 07:59	05/13/25 12:52	1
o-Terphenyl	130		70 - 130			05/12/25 07:59	05/13/25 12:52	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		10.0	mg/Kg			05/12/25 16:25	1

Client Sample ID: DS03

Lab Sample ID: 880-57988-5

Date Collected: 05/09/25 12:36

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 08:52	05/12/25 13:36	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			05/12/25 08:52	05/12/25 13:36	1
1,4-Difluorobenzene (Surr)	94		70 - 130			05/12/25 08:52	05/12/25 13:36	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			05/12/25 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			05/13/25 13:07	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	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			05/12/25 07:59	05/13/25 13:07	1
o-Terphenyl	131	S1+	70 - 130			05/12/25 07:59	05/13/25 13:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	601		9.98	mg/Kg			05/12/25 16:31	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-6

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
o-Xylene	0.00204		0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/12/25 09:27	05/12/25 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/12/25 09:27	05/12/25 22:46	1
1,4-Difluorobenzene (Surr)	80		70 - 130	05/12/25 09:27	05/12/25 22:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/12/25 22:46	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			05/13/25 13:22	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		05/12/25 07:59	05/13/25 13:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 13:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	05/12/25 07:59	05/13/25 13:22	1
o-Terphenyl	131	S1+	70 - 130	05/12/25 07:59	05/13/25 13:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.2		10.0	mg/Kg			05/12/25 16:46	1

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Ethylbenzene	0.00412		0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/12/25 23:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	05/12/25 09:27	05/12/25 23:06	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130	05/12/25 09:27	05/12/25 23:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00412		0.00402	mg/Kg			05/12/25 23:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 13:37	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			05/12/25 07:59	05/13/25 13:37	1
o-Terphenyl	127		70 - 130			05/12/25 07:59	05/13/25 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.1		9.98	mg/Kg			05/12/25 16:51	1

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Toluene	0.00217		0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/12/25 23:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	05/12/25 09:27	05/12/25 23:27	1
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130	05/12/25 09:27	05/12/25 23:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			05/12/25 23:27	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			05/13/25 13:52	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 07:59	05/13/25 13:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 13:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			05/12/25 07:59	05/13/25 13:52	1
o-Terphenyl	122		70 - 130			05/12/25 07:59	05/13/25 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	281		9.96	mg/Kg			05/12/25 16:57	1

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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		05/12/25 09:27	05/12/25 23:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Ethylbenzene	0.00394		0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			05/12/25 09:27	05/12/25 23:48	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130			05/12/25 09:27	05/12/25 23:48	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			05/12/25 23:48	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			05/13/25 14:07	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		05/12/25 07:59	05/13/25 14:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 14:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 14:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			05/12/25 07:59	05/13/25 14:07	1
o-Terphenyl	137	S1+	70 - 130			05/12/25 07:59	05/13/25 14:07	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	366		10.1	mg/Kg			05/12/25 17:02	1

Client Sample ID: DS06

Lab Sample ID: 880-57988-10

Date Collected: 05/09/25 10:55

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 09:27	05/13/25 00:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Ethylbenzene	0.00423		0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
o-Xylene	0.00213		0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			05/12/25 09:27	05/13/25 00:08	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130			05/12/25 09:27	05/13/25 00:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00636		0.00398	mg/Kg			05/13/25 00:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 14:22	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			05/12/25 07:59	05/13/25 14:22	1
o-Terphenyl	132	S1+	70 - 130			05/12/25 07:59	05/13/25 14:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	589		10.0	mg/Kg			05/12/25 17:07	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS06

Lab Sample ID: 880-57988-11

Date Collected: 05/09/25 11:00

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00224		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Ethylbenzene	0.00370		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
o-Xylene	0.00276		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/12/25 09:27	05/13/25 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/12/25 09:27	05/13/25 00:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130	05/12/25 09:27	05/13/25 00:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00870		0.00401	mg/Kg			05/13/25 00:29	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			05/13/25 14:52	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		05/12/25 07:59	05/13/25 14:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 14:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	05/12/25 07:59	05/13/25 14:52	1
o-Terphenyl	124		70 - 130	05/12/25 07:59	05/13/25 14:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	760		9.98	mg/Kg			05/12/25 17:12	1

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Ethylbenzene	0.00247		0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
o-Xylene	0.00236		0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/13/25 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	05/12/25 09:27	05/13/25 00:49	1

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Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	05/12/25 09:27	05/13/25 00:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00483		0.00402	mg/Kg			05/13/25 00:49	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			05/13/25 15:07	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		05/12/25 07:59	05/13/25 15:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 15:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 15:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			05/12/25 07:59	05/13/25 15:07	1
o-Terphenyl	117		70 - 130			05/12/25 07:59	05/13/25 15:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.8		10.1	mg/Kg			05/12/25 17:28	1

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00223		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Ethylbenzene	0.00354		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
o-Xylene	0.00354		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			05/12/25 09:27	05/13/25 01:10	1
1,4-Difluorobenzene (Surr)	76		70 - 130			05/12/25 09:27	05/13/25 01:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00931		0.00404	mg/Kg			05/13/25 01:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 15:22	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			05/12/25 07:59	05/13/25 15:22	1
o-Terphenyl	117		70 - 130			05/12/25 07:59	05/13/25 15:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		10.0	mg/Kg			05/12/25 17:33	1

Client Sample ID: DS08

Lab Sample ID: 880-57988-14

Date Collected: 05/09/25 11:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

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		05/12/25 09:27	05/13/25 03:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			05/12/25 09:27	05/13/25 03:25	1
1,4-Difluorobenzene (Surr)	70		70 - 130			05/12/25 09:27	05/13/25 03:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			05/13/25 03:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			05/13/25 15:38	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	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			05/12/25 07:59	05/13/25 15:38	1
o-Terphenyl	119		70 - 130			05/12/25 07:59	05/13/25 15:38	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08
Date Collected: 05/09/25 11:15
Date Received: 05/09/25 16:57
Sample Depth: 3'

Lab Sample ID: 880-57988-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	137		9.98	mg/Kg			05/12/25 17:49	1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-57988-1	DS01	156 S1+	95
880-57988-1 MS	DS01	107	98
880-57988-1 MSD	DS01	106	102
880-57988-2	DS01	101	117
880-57988-3	DS02	90	68 S1-
880-57988-4	DS02	123	110
880-57988-5	DS03	96	94
880-57988-6	DS04	102	80
880-57988-6 MS	DS04	110	92
880-57988-6 MSD	DS04	100	96
880-57988-7	DS04	90	70
880-57988-8	DS05	84	63 S1-
880-57988-9	DS05	89	65 S1-
880-57988-10	DS06	105	65 S1-
880-57988-11	DS06	100	72
880-57988-12	DS07	114	94
880-57988-13	DS08	94	76
880-57988-14	DS08	92	70
LCS 880-109922/1-A	Lab Control Sample	101	103
LCS 880-109926/1-A	Lab Control Sample	120	94
LCSD 880-109922/2-A	Lab Control Sample Dup	111	101
LCSD 880-109926/2-A	Lab Control Sample Dup	96	88
MB 880-109922/5-A	Method Blank	164 S1+	92
MB 880-109924/5-A	Method Blank	94	68 S1-
MB 880-109926/5-A	Method Blank	100	66 S1-

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	OTPH1
		(70-130)	(70-130)
880-57988-1	DS01	137 S1+	149 S1+
880-57988-1 MS	DS01	128	131 S1+
880-57988-1 MSD	DS01	128	131 S1+
880-57988-2	DS01	119	132 S1+
880-57988-3	DS02	118	151 S1+
880-57988-4	DS02	116	130
880-57988-5	DS03	120	131 S1+
880-57988-6	DS04	119	131 S1+
880-57988-7	DS04	116	127
880-57988-8	DS05	112	122
880-57988-9	DS05	128	137 S1+
880-57988-10	DS06	122	132 S1+
880-57988-11	DS06	115	124
880-57988-12	DS07	105	117

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Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-57988-13	DS08	106	117
880-57988-14	DS08	107	119
LCS 880-109910/2-A	Lab Control Sample	104	104
LCSD 880-109910/3-A	Lab Control Sample Dup	89	90
MB 880-109910/1-A	Method Blank	91	90
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-109922/5-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109922

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 08:52	05/12/25 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	05/12/25 08:52	05/12/25 12:00	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/12/25 08:52	05/12/25 12:00	1

Lab Sample ID: LCS 880-109922/1-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1010		mg/Kg		101	70 - 130
Toluene	0.100	0.08466		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09226		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.2094		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-109922/2-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1008		mg/Kg		101	70 - 130	0	35
Toluene	0.100	0.08734		mg/Kg		87	70 - 130	3	35
Ethylbenzene	0.100	0.09937		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	2	35
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.07406		mg/Kg		74	70 - 130
Toluene	<0.00202	U F1	0.100	0.06761	F1	mg/Kg		68	70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U F1	0.100	0.06838	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1504		mg/Kg		75	70 - 130
o-Xylene	<0.00202	U	0.100	0.07804		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08478		mg/Kg		85	70 - 130	13	35
Toluene	<0.00202	U F1	0.100	0.06593	F1	mg/Kg		66	70 - 130	3	35
Ethylbenzene	<0.00202	U F1	0.100	0.07972		mg/Kg		80	70 - 130	15	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1635		mg/Kg		82	70 - 130	8	35
o-Xylene	<0.00202	U	0.100	0.08430		mg/Kg		84	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-109924/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109924

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 09:18	05/12/25 11:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/12/25 09:18	05/12/25 11:26	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	05/12/25 09:18	05/12/25 11:26	1

Lab Sample ID: MB 880-109926/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 09:27	05/12/25 22:24	1

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: MB 880-109926/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 09:27	05/12/25 22:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/12/25 09:27	05/12/25 22:24	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	05/12/25 09:27	05/12/25 22:24	1

Lab Sample ID: LCS 880-109926/1-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09376		mg/Kg		94	70 - 130
Toluene	0.100	0.1268		mg/Kg		127	70 - 130
Ethylbenzene	0.100	0.1242		mg/Kg		124	70 - 130
m-Xylene & p-Xylene	0.200	0.2196		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1299		mg/Kg		130	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-109926/2-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09744		mg/Kg		97	70 - 130	4	35
Toluene	0.100	0.1079		mg/Kg		108	70 - 130	16	35
Ethylbenzene	0.100	0.1098		mg/Kg		110	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1824		mg/Kg		91	70 - 130	19	35
o-Xylene	0.100	0.1071		mg/Kg		107	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-57988-6 MS

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: DS04

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.08301		mg/Kg		83	70 - 130
Toluene	<0.00202	U F1	0.100	0.06417	F1	mg/Kg		64	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.09004		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1625		mg/Kg		81	70 - 130
o-Xylene	0.00204		0.100	0.09663		mg/Kg		95	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: 880-57988-6 MS

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: DS04

Prep Type: Total/NA

Prep Batch: 109926

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-57988-6 MSD

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: DS04

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08572		mg/Kg		86	70 - 130	3	35
Toluene	<0.00202	U F1	0.100	0.07309		mg/Kg		73	70 - 130	13	35
Ethylbenzene	<0.00202	U	0.100	0.08411		mg/Kg		84	70 - 130	7	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1511		mg/Kg		76	70 - 130	7	35
o-Xylene	0.00204		0.100	0.08832		mg/Kg		86	70 - 130	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-109910/1-A

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109910

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		05/12/25 07:59	05/13/25 09:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 09:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 09:25	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	91		70 - 130	05/12/25 07:59	05/13/25 09:25	1		
o-Terphenyl	90		70 - 130	05/12/25 07:59	05/13/25 09:25	1		

Lab Sample ID: LCS 880-109910/2-A

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	900.8		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	952.3		mg/Kg		95	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	104		70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-109910/3-A

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	766.7		mg/Kg		77	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	813.3		mg/Kg		81	70 - 130	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1023		mg/Kg		103	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	921.4		mg/Kg		90	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	131	S1+	70 - 130								

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109910

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	<49.8	U	998	1017		mg/Kg		102	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	930.0		mg/Kg		91	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	131	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-109985/1-A

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			05/12/25 15:44	1

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-109985/2-A

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.1		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-109985/3-A

Matrix: Solid

Analysis Batch: 109987

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	242.6		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	104		250	371.4		mg/Kg		107	90 - 110

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104		250	372.9		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-57988-11 MS

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS06

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	760		250	1004		mg/Kg		98	90 - 110

Lab Sample ID: 880-57988-11 MSD

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS06

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	760		250	1005		mg/Kg		98	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC VOA

Analysis Batch: 109913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8021B	109922
880-57988-2	DS01	Total/NA	Solid	8021B	109922
880-57988-3	DS02	Total/NA	Solid	8021B	109922
880-57988-4	DS02	Total/NA	Solid	8021B	109922
880-57988-5	DS03	Total/NA	Solid	8021B	109922
MB 880-109922/5-A	Method Blank	Total/NA	Solid	8021B	109922
LCS 880-109922/1-A	Lab Control Sample	Total/NA	Solid	8021B	109922
LCSD 880-109922/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	109922
880-57988-1 MS	DS01	Total/NA	Solid	8021B	109922
880-57988-1 MSD	DS01	Total/NA	Solid	8021B	109922

Analysis Batch: 109915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-6	DS04	Total/NA	Solid	8021B	109926
880-57988-7	DS04	Total/NA	Solid	8021B	109926
880-57988-8	DS05	Total/NA	Solid	8021B	109926
880-57988-9	DS05	Total/NA	Solid	8021B	109926
880-57988-10	DS06	Total/NA	Solid	8021B	109926
880-57988-11	DS06	Total/NA	Solid	8021B	109926
880-57988-12	DS07	Total/NA	Solid	8021B	109926
880-57988-13	DS08	Total/NA	Solid	8021B	109926
880-57988-14	DS08	Total/NA	Solid	8021B	109926
MB 880-109924/5-A	Method Blank	Total/NA	Solid	8021B	109924
MB 880-109926/5-A	Method Blank	Total/NA	Solid	8021B	109926
LCS 880-109926/1-A	Lab Control Sample	Total/NA	Solid	8021B	109926
LCSD 880-109926/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	109926
880-57988-6 MS	DS04	Total/NA	Solid	8021B	109926
880-57988-6 MSD	DS04	Total/NA	Solid	8021B	109926

Prep Batch: 109922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	5035	
880-57988-2	DS01	Total/NA	Solid	5035	
880-57988-3	DS02	Total/NA	Solid	5035	
880-57988-4	DS02	Total/NA	Solid	5035	
880-57988-5	DS03	Total/NA	Solid	5035	
MB 880-109922/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-109922/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-109922/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-57988-1 MS	DS01	Total/NA	Solid	5035	
880-57988-1 MSD	DS01	Total/NA	Solid	5035	

Prep Batch: 109924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-109924/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 109926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-6	DS04	Total/NA	Solid	5035	
880-57988-7	DS04	Total/NA	Solid	5035	
880-57988-8	DS05	Total/NA	Solid	5035	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC VOA (Continued)

Prep Batch: 109926 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-9	DS05	Total/NA	Solid	5035	
880-57988-10	DS06	Total/NA	Solid	5035	
880-57988-11	DS06	Total/NA	Solid	5035	
880-57988-12	DS07	Total/NA	Solid	5035	
880-57988-13	DS08	Total/NA	Solid	5035	
880-57988-14	DS08	Total/NA	Solid	5035	
MB 880-109926/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-109926/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-109926/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-57988-6 MS	DS04	Total/NA	Solid	5035	
880-57988-6 MSD	DS04	Total/NA	Solid	5035	

Analysis Batch: 109995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	Total BTEX	
880-57988-2	DS01	Total/NA	Solid	Total BTEX	
880-57988-3	DS02	Total/NA	Solid	Total BTEX	
880-57988-4	DS02	Total/NA	Solid	Total BTEX	
880-57988-5	DS03	Total/NA	Solid	Total BTEX	
880-57988-6	DS04	Total/NA	Solid	Total BTEX	
880-57988-7	DS04	Total/NA	Solid	Total BTEX	
880-57988-8	DS05	Total/NA	Solid	Total BTEX	
880-57988-9	DS05	Total/NA	Solid	Total BTEX	
880-57988-10	DS06	Total/NA	Solid	Total BTEX	
880-57988-11	DS06	Total/NA	Solid	Total BTEX	
880-57988-12	DS07	Total/NA	Solid	Total BTEX	
880-57988-13	DS08	Total/NA	Solid	Total BTEX	
880-57988-14	DS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 109910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015NM Prep	
880-57988-2	DS01	Total/NA	Solid	8015NM Prep	
880-57988-3	DS02	Total/NA	Solid	8015NM Prep	
880-57988-4	DS02	Total/NA	Solid	8015NM Prep	
880-57988-5	DS03	Total/NA	Solid	8015NM Prep	
880-57988-6	DS04	Total/NA	Solid	8015NM Prep	
880-57988-7	DS04	Total/NA	Solid	8015NM Prep	
880-57988-8	DS05	Total/NA	Solid	8015NM Prep	
880-57988-9	DS05	Total/NA	Solid	8015NM Prep	
880-57988-10	DS06	Total/NA	Solid	8015NM Prep	
880-57988-11	DS06	Total/NA	Solid	8015NM Prep	
880-57988-12	DS07	Total/NA	Solid	8015NM Prep	
880-57988-13	DS08	Total/NA	Solid	8015NM Prep	
880-57988-14	DS08	Total/NA	Solid	8015NM Prep	
MB 880-109910/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-109910/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-109910/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-57988-1 MS	DS01	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 109910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1 MSD	DS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 110022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015B NM	109910
880-57988-2	DS01	Total/NA	Solid	8015B NM	109910
880-57988-3	DS02	Total/NA	Solid	8015B NM	109910
880-57988-4	DS02	Total/NA	Solid	8015B NM	109910
880-57988-5	DS03	Total/NA	Solid	8015B NM	109910
880-57988-6	DS04	Total/NA	Solid	8015B NM	109910
880-57988-7	DS04	Total/NA	Solid	8015B NM	109910
880-57988-8	DS05	Total/NA	Solid	8015B NM	109910
880-57988-9	DS05	Total/NA	Solid	8015B NM	109910
880-57988-10	DS06	Total/NA	Solid	8015B NM	109910
880-57988-11	DS06	Total/NA	Solid	8015B NM	109910
880-57988-12	DS07	Total/NA	Solid	8015B NM	109910
880-57988-13	DS08	Total/NA	Solid	8015B NM	109910
880-57988-14	DS08	Total/NA	Solid	8015B NM	109910
MB 880-109910/1-A	Method Blank	Total/NA	Solid	8015B NM	109910
LCS 880-109910/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	109910
LCSD 880-109910/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	109910
880-57988-1 MS	DS01	Total/NA	Solid	8015B NM	109910
880-57988-1 MSD	DS01	Total/NA	Solid	8015B NM	109910

Analysis Batch: 110127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015 NM	
880-57988-2	DS01	Total/NA	Solid	8015 NM	
880-57988-3	DS02	Total/NA	Solid	8015 NM	
880-57988-4	DS02	Total/NA	Solid	8015 NM	
880-57988-5	DS03	Total/NA	Solid	8015 NM	
880-57988-6	DS04	Total/NA	Solid	8015 NM	
880-57988-7	DS04	Total/NA	Solid	8015 NM	
880-57988-8	DS05	Total/NA	Solid	8015 NM	
880-57988-9	DS05	Total/NA	Solid	8015 NM	
880-57988-10	DS06	Total/NA	Solid	8015 NM	
880-57988-11	DS06	Total/NA	Solid	8015 NM	
880-57988-12	DS07	Total/NA	Solid	8015 NM	
880-57988-13	DS08	Total/NA	Solid	8015 NM	
880-57988-14	DS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 109985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Soluble	Solid	DI Leach	
880-57988-2	DS01	Soluble	Solid	DI Leach	
880-57988-3	DS02	Soluble	Solid	DI Leach	
880-57988-4	DS02	Soluble	Solid	DI Leach	
880-57988-5	DS03	Soluble	Solid	DI Leach	
880-57988-6	DS04	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

HPLC/IC (Continued)

Leach Batch: 109985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-7	DS04	Soluble	Solid	DI Leach	
880-57988-8	DS05	Soluble	Solid	DI Leach	
880-57988-9	DS05	Soluble	Solid	DI Leach	
880-57988-10	DS06	Soluble	Solid	DI Leach	
880-57988-11	DS06	Soluble	Solid	DI Leach	
880-57988-12	DS07	Soluble	Solid	DI Leach	
880-57988-13	DS08	Soluble	Solid	DI Leach	
880-57988-14	DS08	Soluble	Solid	DI Leach	
MB 880-109985/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-109985/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-109985/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-57988-1 MS	DS01	Soluble	Solid	DI Leach	
880-57988-1 MSD	DS01	Soluble	Solid	DI Leach	
880-57988-11 MS	DS06	Soluble	Solid	DI Leach	
880-57988-11 MSD	DS06	Soluble	Solid	DI Leach	

Analysis Batch: 109987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Soluble	Solid	300.0	109985
880-57988-2	DS01	Soluble	Solid	300.0	109985
880-57988-3	DS02	Soluble	Solid	300.0	109985
880-57988-4	DS02	Soluble	Solid	300.0	109985
880-57988-5	DS03	Soluble	Solid	300.0	109985
880-57988-6	DS04	Soluble	Solid	300.0	109985
880-57988-7	DS04	Soluble	Solid	300.0	109985
880-57988-8	DS05	Soluble	Solid	300.0	109985
880-57988-9	DS05	Soluble	Solid	300.0	109985
880-57988-10	DS06	Soluble	Solid	300.0	109985
880-57988-11	DS06	Soluble	Solid	300.0	109985
880-57988-12	DS07	Soluble	Solid	300.0	109985
880-57988-13	DS08	Soluble	Solid	300.0	109985
880-57988-14	DS08	Soluble	Solid	300.0	109985
MB 880-109985/1-A	Method Blank	Soluble	Solid	300.0	109985
LCS 880-109985/2-A	Lab Control Sample	Soluble	Solid	300.0	109985
LCSD 880-109985/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	109985
880-57988-1 MS	DS01	Soluble	Solid	300.0	109985
880-57988-1 MSD	DS01	Soluble	Solid	300.0	109985
880-57988-11 MS	DS06	Soluble	Solid	300.0	109985
880-57988-11 MSD	DS06	Soluble	Solid	300.0	109985

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01
Date Collected: 05/09/25 10:10
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 12:26
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 12:26
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 11:38
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 11:38
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:00

Client Sample ID: DS01
Date Collected: 05/09/25 10:15
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 12:55
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 12:55
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:23
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:23
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:15

Client Sample ID: DS02
Date Collected: 05/09/25 10:30
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		25	109913	MNR	EET MID	05/12/25 15:59
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 15:59
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:37
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:37
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:20

Client Sample ID: DS02
Date Collected: 05/09/25 11:20
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 13:16
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 13:16

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:25

Client Sample ID: DS03

Lab Sample ID: 880-57988-5

Date Collected: 05/09/25 12:36

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 13:36
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 13:36
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:31

Client Sample ID: DS04

Lab Sample ID: 880-57988-6

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 22:46
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 22:46
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:46

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:06
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:06
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:37
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:37

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:51

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:27
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:27
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:57

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:48
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:48
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:02

Client Sample ID: DS06

Lab Sample ID: 880-57988-10

Date Collected: 05/09/25 10:55

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:08
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:08
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:07

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS06

Lab Sample ID: 880-57988-11

Date Collected: 05/09/25 11:00

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:29
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:29
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:12

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:49
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:49
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:28

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 01:10
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 01:10
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:33

Client Sample ID: DS08

Lab Sample ID: 880-57988-14

Date Collected: 05/09/25 11:15

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 03:25
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 03:25

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08
Date Collected: 05/09/25 11:15
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:38
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:38
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:49

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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	06-30-25
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: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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	EPA	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
- EPA = US Environmental Protection Agency
- 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: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-57988-1	DS01	Solid	05/09/25 10:10	05/09/25 16:57	0.5'
880-57988-2	DS01	Solid	05/09/25 10:15	05/09/25 16:57	1'
880-57988-3	DS02	Solid	05/09/25 10:30	05/09/25 16:57	0.5'
880-57988-4	DS02	Solid	05/09/25 11:20	05/09/25 16:57	3'
880-57988-5	DS03	Solid	05/09/25 12:36	05/09/25 16:57	0.5'
880-57988-6	DS04	Solid	05/09/25 11:20	05/09/25 16:57	0.5'
880-57988-7	DS04	Solid	05/09/25 11:25	05/09/25 16:57	1'
880-57988-8	DS05	Solid	05/09/25 12:05	05/09/25 16:57	0.5'
880-57988-9	DS05	Solid	05/09/25 12:10	05/09/25 16:57	1'
880-57988-10	DS06	Solid	05/09/25 10:55	05/09/25 16:57	0.5'
880-57988-11	DS06	Solid	05/09/25 11:00	05/09/25 16:57	1'
880-57988-12	DS07	Solid	05/09/25 12:40	05/09/25 16:57	0.5'
880-57988-13	DS08	Solid	05/09/25 11:10	05/09/25 16:57	0.5'
880-57988-14	DS08	Solid	05/09/25 11:15	05/09/25 16:57	3'

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-57988-1

SDG Number: Lea County

Login Number: 57988

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 6/11/2025 9:29:57 AM

JOB DESCRIPTION

Pygmy 27 State 3H

Lea County

JOB NUMBER

880-59027-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
6/11/2025 9:29:57 AM

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

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Laboratory Job ID: 880-59027-1
SDG: Lea County

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Definitions/Glossary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
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
SQL	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: Pygmy 27 State 3H

Job ID: 880-59027-1

Job ID: 880-59027-1

Eurofins Midland

Job Narrative 880-59027-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/5/2025 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

GC VOA

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

Diesel Range Organics

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-111712 and analytical batch 880-111762 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS03

Lab Sample ID: 880-59027-1

Date Collected: 06/05/25 09:38

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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		06/06/25 09:08	06/06/25 14:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 14:30	1
1,4-Difluorobenzene (Surr)	93		70 - 130			06/06/25 09:08	06/06/25 14:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			06/06/25 14:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			06/07/25 03:21	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	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			06/05/25 15:34	06/07/25 03:21	1
o-Terphenyl	122		70 - 130			06/05/25 15:34	06/07/25 03:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273	F1	10.0	mg/Kg			06/10/25 14:35	1

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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		06/06/25 09:08	06/06/25 14:50	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 14:50	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	06/06/25 09:08	06/06/25 14:50	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			06/06/25 14:50	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			06/07/25 03:35	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		06/05/25 15:34	06/07/25 03:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 03:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			06/05/25 15:34	06/07/25 03:35	1
o-Terphenyl	123		70 - 130			06/05/25 15:34	06/07/25 03:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		10.1	mg/Kg			06/10/25 14:56	1

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		06/06/25 09:08	06/06/25 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/06/25 09:08	06/06/25 15:11	1
1,4-Difluorobenzene (Surr)	98		70 - 130	06/06/25 09:08	06/06/25 15:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			06/06/25 15:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			06/07/25 04:06	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			06/05/25 15:34	06/07/25 04:06	1
o-Terphenyl	119		70 - 130			06/05/25 15:34	06/07/25 04:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		10.0	mg/Kg			06/10/25 15:03	1

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 16:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130			06/06/25 09:08	06/06/25 16:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			06/06/25 16:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			06/07/25 04:23	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	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			06/05/25 15:34	06/07/25 04:23	1
o-Terphenyl	119		70 - 130			06/05/25 15:34	06/07/25 04:23	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09
Date Collected: 06/05/25 09:44
Date Received: 06/05/25 15:30
Sample Depth: 1'

Lab Sample ID: 880-59027-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	121		10.0	mg/Kg			06/10/25 15:24	1	

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- 2
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- 14

Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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)
880-59027-1	DS03	102	93
880-59027-2	DS07	102	95
880-59027-3	DS09	99	98
880-59027-4	DS09	102	98
LCS 880-111647/1-A	Lab Control Sample	92	90
LCSD 880-111647/2-A	Lab Control Sample Dup	93	93
MB 880-111647/5-A	Method Blank	93	97
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)
880-59027-1	DS03	115	122
880-59027-2	DS07	116	123
880-59027-3	DS09	114	119
880-59027-4	DS09	112	119
LCS 880-111637/2-A	Lab Control Sample	101	98
LCSD 880-111637/3-A	Lab Control Sample Dup	103	99
MB 880-111637/1-A	Method Blank	83	87
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-111647/5-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111647

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 11:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/06/25 09:08	06/06/25 11:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/06/25 09:08	06/06/25 11:46	1

Lab Sample ID: LCS 880-111647/1-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08728		mg/Kg		87	70 - 130
Toluene	0.100	0.08127		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08595		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1730		mg/Kg		87	70 - 130
o-Xylene	0.100	0.08822		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-111647/2-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111647

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1070		mg/Kg		107	70 - 130	20	35
Toluene	0.100	0.09750		mg/Kg		98	70 - 130	18	35
Ethylbenzene	0.100	0.1050		mg/Kg		105	70 - 130	20	35
m-Xylene & p-Xylene	0.200	0.2098		mg/Kg		105	70 - 130	19	35
o-Xylene	0.100	0.1052		mg/Kg		105	70 - 130	18	35

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

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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

Lab Sample ID: MB 880-111637/1-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111637

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		06/05/25 15:34	06/07/25 00:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 00:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 00:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			06/05/25 15:34	06/07/25 00:04	1
o-Terphenyl	87		70 - 130			06/05/25 15:34	06/07/25 00:04	1

Lab Sample ID: LCS 880-111637/2-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	981.5		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	866.0		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	98		70 - 130				

Lab Sample ID: LCSD 880-111637/3-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111637

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	999.9		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	878.3		mg/Kg		88	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	99		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-111712/1-A

Matrix: Solid

Analysis Batch: 111762

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			06/09/25 21:22	1

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-111712/2-A				Client Sample ID: Lab Control Sample							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 111762											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.5		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-111712/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 111762											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.6		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-59027-1 MS				Client Sample ID: DS03							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 111762											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	273	F1	250	559.5	F1	mg/Kg		114	90 - 110		

Lab Sample ID: 880-59027-1 MSD				Client Sample ID: DS03							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 111762											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	273	F1	250	560.7	F1	mg/Kg		115	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

GC VOA

Analysis Batch: 111641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8021B	111647
880-59027-2	DS07	Total/NA	Solid	8021B	111647
880-59027-3	DS09	Total/NA	Solid	8021B	111647
880-59027-4	DS09	Total/NA	Solid	8021B	111647
MB 880-111647/5-A	Method Blank	Total/NA	Solid	8021B	111647
LCS 880-111647/1-A	Lab Control Sample	Total/NA	Solid	8021B	111647
LCSD 880-111647/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111647

Prep Batch: 111647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	5035	
880-59027-2	DS07	Total/NA	Solid	5035	
880-59027-3	DS09	Total/NA	Solid	5035	
880-59027-4	DS09	Total/NA	Solid	5035	
MB 880-111647/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111647/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111647/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 111813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	Total BTEX	
880-59027-2	DS07	Total/NA	Solid	Total BTEX	
880-59027-3	DS09	Total/NA	Solid	Total BTEX	
880-59027-4	DS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 111637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015NM Prep	
880-59027-2	DS07	Total/NA	Solid	8015NM Prep	
880-59027-3	DS09	Total/NA	Solid	8015NM Prep	
880-59027-4	DS09	Total/NA	Solid	8015NM Prep	
MB 880-111637/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-111637/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-111637/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 111716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015B NM	111637
880-59027-2	DS07	Total/NA	Solid	8015B NM	111637
880-59027-3	DS09	Total/NA	Solid	8015B NM	111637
880-59027-4	DS09	Total/NA	Solid	8015B NM	111637
MB 880-111637/1-A	Method Blank	Total/NA	Solid	8015B NM	111637
LCS 880-111637/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	111637
LCSD 880-111637/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	111637

Analysis Batch: 111806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015 NM	
880-59027-2	DS07	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

GC Semi VOA (Continued)

Analysis Batch: 111806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-3	DS09	Total/NA	Solid	8015 NM	
880-59027-4	DS09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 111712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Soluble	Solid	DI Leach	
880-59027-2	DS07	Soluble	Solid	DI Leach	
880-59027-3	DS09	Soluble	Solid	DI Leach	
880-59027-4	DS09	Soluble	Solid	DI Leach	
MB 880-111712/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-111712/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-111712/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-59027-1 MS	DS03	Soluble	Solid	DI Leach	
880-59027-1 MSD	DS03	Soluble	Solid	DI Leach	

Analysis Batch: 111762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Soluble	Solid	300.0	111712
880-59027-2	DS07	Soluble	Solid	300.0	111712
880-59027-3	DS09	Soluble	Solid	300.0	111712
880-59027-4	DS09	Soluble	Solid	300.0	111712
MB 880-111712/1-A	Method Blank	Soluble	Solid	300.0	111712
LCS 880-111712/2-A	Lab Control Sample	Soluble	Solid	300.0	111712
LCSD 880-111712/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	111712
880-59027-1 MS	DS03	Soluble	Solid	300.0	111712
880-59027-1 MSD	DS03	Soluble	Solid	300.0	111712

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS03

Lab Sample ID: 880-59027-1

Date Collected: 06/05/25 09:38

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 14:30
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 14:30
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 03:21
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 03:21
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 14:35

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 14:50
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 14:50
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 03:35
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 03:35
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 14:56

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 15:11
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 15:11
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 04:06
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 04:06
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 15:03

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 16:33
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 16:33

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 04:23
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 04:23
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 15:24

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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	06-30-25
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: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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	EPA	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
- EPA = US Environmental Protection Agency
- 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: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-59027-1	DS03	Solid	06/05/25 09:38	06/05/25 15:30	0.5'
880-59027-2	DS07	Solid	06/05/25 09:40	06/05/25 15:30	1'
880-59027-3	DS09	Solid	06/05/25 09:42	06/05/25 15:30	0.5'
880-59027-4	DS09	Solid	06/05/25 09:44	06/05/25 15:30	1'

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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

Environment Testing

Xenco



880-59027 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager: Hadlie Green
Company Name: Ensco
Address: 601 N Marienfeld St. Ste 400
City, State ZIP: Midland, TX 79701
Phone: (432) 557-8895
Email: hgreen@ensco.com / hgreen@ensco.com

Bill to: (if different)
Company Name:
Address:
City, State ZIP:

Turn Around
☒ Routine ☐ Rush
Due Date:

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

Temp Blank: Yes ☒ No ☐
Thermometer ID: 10-8
Correction Factor: -0.1
Temperature Reading: 2.3
Corrected Temperature: 2.2

Temp Blank: Yes ☒ No ☐
Thermometer ID: 10-8
Correction Factor: -0.1
Temperature Reading: 2.3
Corrected Temperature: 2.2

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:

ANALYSIS REQUEST				Preservative Codes				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code
DS03	S	6/5/25	0938	0.5'	G	1	BTC K 8021 TPH 8015 Chlorides 300	None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC
DS07	S	6/5/25	0940	1'	G	1		
DS09	S	6/5/25	0942	0.5'	G	1		
DS09	S	6/5/25	0944	1'	G	1		
NFE								
6/5/25								
ZNG								

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 SiO₂ Na Sr Ti 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 Ti 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
<u>Hadlie Green</u>	<u>hgreen@ensco.com</u>	6/5/25 1530			

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-59027-1

SDG Number: Lea County

Login Number: 59027

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
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JOB DESCRIPTION

Pygmy 27 State Com 3H
Lea County, NM

JOB NUMBER

880-60921-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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: Pygmy 27 State Com 3H

Laboratory Job ID: 880-60921-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
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
SQL	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: Pygmy 27 State Com 3H

Job ID: 880-60921-1

Job ID: 880-60921-1

Eurofins Midland

Job Narrative 880-60921-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 7/30/2025 8:03 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C.

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-115368/5-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics

Method 8015MOD_NM: Though the laboratory control sample duplicate (LCSD) did run, a report for the analysis did not generate. The matrix spike/matrix spike duplicate (MS/MSD) meet acceptance criteria and are thereby used to validate the batch.

(LCS 880-115578/2-A)

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-115426 and analytical batch 880-115439 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

Client Sample ID: DS10

Lab Sample ID: 880-60921-1

Date Collected: 07/29/25 11:00

Matrix: Solid

Date Received: 07/30/25 08:03

Sample Depth: 0.5'

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		07/30/25 10:50	07/30/25 16:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/30/25 10:50	07/30/25 16:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/30/25 10:50	07/30/25 16:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/30/25 10:50	07/30/25 16:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/30/25 10:50	07/30/25 16:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/30/25 10:50	07/30/25 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	07/30/25 10:50	07/30/25 16:37	1
1,4-Difluorobenzene (Surr)	113		70 - 130	07/30/25 10:50	07/30/25 16:37	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			07/30/25 16:37	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			08/01/25 14:40	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		08/01/25 10:42	08/01/25 14:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/25 10:42	08/01/25 14:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/25 10:42	08/01/25 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	08/01/25 10:42	08/01/25 14:40	1
o-Terphenyl	95		70 - 130	08/01/25 10:42	08/01/25 14:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	196		10.0	mg/Kg			07/31/25 05:52	1

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Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
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)
880-60921-1	DS10	122	113
LCS 880-115368/1-A	Lab Control Sample	101	106
LCSD 880-115368/2-A	Lab Control Sample Dup	111	107
MB 880-115368/5-A	Method Blank	181 S1+	103
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)
880-60921-1	DS10	99	95
LCS 880-115578/2-A	Lab Control Sample	118	118
MB 880-115578/1-A	Method Blank	97	108
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-115368/5-A

Matrix: Solid

Analysis Batch: 115360

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 115368

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/30/25 09:22	07/30/25 14:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/30/25 09:22	07/30/25 14:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/30/25 09:22	07/30/25 14:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/30/25 09:22	07/30/25 14:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/30/25 09:22	07/30/25 14:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/30/25 09:22	07/30/25 14:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	181	S1+	70 - 130	07/30/25 09:22	07/30/25 14:26	1
1,4-Difluorobenzene (Surr)	103		70 - 130	07/30/25 09:22	07/30/25 14:26	1

Lab Sample ID: LCS 880-115368/1-A

Matrix: Solid

Analysis Batch: 115360

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115368

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09275		mg/Kg		93	70 - 130
Toluene	0.100	0.08378		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.09092		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1682		mg/Kg		84	70 - 130
o-Xylene	0.100	0.09429		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-115368/2-A

Matrix: Solid

Analysis Batch: 115360

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 115368

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1008		mg/Kg		101	70 - 130	8	35
Toluene	0.100	0.09412		mg/Kg		94	70 - 130	12	35
Ethylbenzene	0.100	0.09669		mg/Kg		97	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1780		mg/Kg		89	70 - 130	6	35
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-115578/1-A

Matrix: Solid

Analysis Batch: 115584

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 115578

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		08/01/25 10:41	08/01/25 09:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/25 10:41	08/01/25 09:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/25 10:41	08/01/25 09:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			08/01/25 10:41	08/01/25 09:27	1
o-Terphenyl	108		70 - 130			08/01/25 10:41	08/01/25 09:27	1

Lab Sample ID: LCS 880-115578/2-A

Matrix: Solid

Analysis Batch: 115584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1017		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	886.4		mg/Kg		89	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	118		70 - 130				
o-Terphenyl	118		70 - 130				

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-115426/1-A

Matrix: Solid

Analysis Batch: 115439

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			07/31/25 02:03	1

Lab Sample ID: LCS 880-115426/2-A

Matrix: Solid

Analysis Batch: 115439

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.5		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-115426/3-A

Matrix: Solid

Analysis Batch: 115439

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	248.4		mg/Kg		99	90 - 110	1	20

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QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 115360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	8021B	115368
MB 880-115368/5-A	Method Blank	Total/NA	Solid	8021B	115368
LCS 880-115368/1-A	Lab Control Sample	Total/NA	Solid	8021B	115368
LCSD 880-115368/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	115368

Prep Batch: 115368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	5035	
MB 880-115368/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-115368/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-115368/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 115511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 115578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	8015NM Prep	
MB 880-115578/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-115578/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

Analysis Batch: 115584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	8015B NM	115578
MB 880-115578/1-A	Method Blank	Total/NA	Solid	8015B NM	115578
LCS 880-115578/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	115578

Analysis Batch: 115615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 115426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Soluble	Solid	DI Leach	
MB 880-115426/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-115426/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-115426/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 115439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-60921-1	DS10	Soluble	Solid	300.0	115426
MB 880-115426/1-A	Method Blank	Soluble	Solid	300.0	115426
LCS 880-115426/2-A	Lab Control Sample	Soluble	Solid	300.0	115426
LCSD 880-115426/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	115426

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

Client Sample ID: DS10
Date Collected: 07/29/25 11:00
Date Received: 07/30/25 08:03

Lab Sample ID: 880-60921-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			115368	MNR	EET MID	07/30/25 10:50
Total/NA	Analysis	8021B		1	115360	MNR	EET MID	07/30/25 16:37
Total/NA	Analysis	Total BTEX		1	115511	SA	EET MID	07/30/25 16:37
Total/NA	Analysis	8015 NM		1	115615	SA	EET MID	08/01/25 14:40
Total/NA	Prep	8015NM Prep			115578	TKC	EET MID	08/01/25 10:42
Total/NA	Analysis	8015B NM		1	115584	TKC	EET MID	08/01/25 14:40
Soluble	Leach	DI Leach			115426	SMC	EET MID	07/30/25 13:58
Soluble	Analysis	300.0		1	115439	CS	EET MID	07/31/25 05:52

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pygmy 27 State Com 3H

Job ID: 880-60921-1
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	06-30-26
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: Pygmy 27 State Com 3H

Job ID: 880-60921-1
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	EPA	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

EPA = US Environmental Protection Agency

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: Pygmy 27 State Com 3H

Job ID: 880-60921-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-60921-1	DS10	Solid	07/29/25 11:00	07/30/25 08:03	0.5'

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- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

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



Environment Testing
 Xenco



880-60921 Chain of Custody

Project Manager:	Hadlie Green	Bill to: (if different)	Hadlie Green
Company Name:	Ernsdum LLC	Company Name:	
Address:	601 N Martinefeld St. Suite 402	Address:	
City, State ZIP:	Midland TX 79701	City, State ZIP:	
Phone:	432-557-8895	Email:	hgreen@erndum.com

Project Name:	Param 27 State Can 3H	Turn Around	
Project Number:	03161024350/0302024351	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Leandra Garcia	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	0302024350/0302024351		

SAMPLE RECEIPT				Parameters				ANALYSIS REQUEST				Preservative Codes				
Samples Received Intact:	Temp Blank:	Yes/No	Wet Ice:	Yes/No	Grab/Comp	Depth	Time Sampled	Date Sampled	Matrix	Sample Identification						
Cooler Custody Seals:	Yes/No	N/A	Thermometer ID:	4.2												
Sample Custody Seals:	Yes/No	N/A	Correction Factor:	4.2												
Total Containers:			Temperature Reading:	4.2												
			Corrected Temperature:	4.2												

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 Ti 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 Ti 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]	7/30/15 08:03			
3. [Signature]					
5. [Signature]					

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-60921-1
SDG Number: Lea County, NM

Login Number: 60921

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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	



Attachment I

September 15, 2025,
Revised Deferral Request



September 15, 2025

New Mexico Oil Conservation Division

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

**Re: Revised Deferral Request
Pygmy 27 State Com #003H
Incident Numbers NAPP2509329614 & NAPP2509657158
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared the following *Revised Deferral Request* for the Pygmy 27 State Com #003H (Site). This *Revised Deferral Request* includes the additional information requested in a denial by the New Mexico Oil Conservation Division (NMOCD) of a previously submitted *Deferral Request* submitted on July 1, 2025. In the denial, NMOCD stated remediation of releases at the Site does not require major facility deconstruction. Based on an evaluation of soil type and review of safe excavation distances from structures, COG is providing additional site-specific information for NMOCD to consider in its evaluation of major facility deconstruction and again requesting deferral of final remediation for Incident Numbers NAPP2509329614 and NAPP2509657158 until the Site is reconstructed, and/or the well pad is abandoned.

BACKGROUND

The Site is located in Unit B, Section 27, Township 21 South, Range 33 East, in Lea County, New Mexico (32.4564°, -103.5577°) and is associated with oil and gas exploration and production operations on private land owned by Merchant Livestock Company.

NAPP2509329614

On March 29, 2025, equipment failure resulted in the release of approximately 5 barrels (bbls) of crude oil into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 5 bbls of released crude oil were recovered from within the lined containment. The lined containment was then power washed to remove any residual staining and or standing fluids. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a Release Notification Form C-141 (Form C-141) on April 3, 2025. The release was assigned Incident Number NAPP2509329614. A 48-hour advance notice of liner inspection was provided to the NMOCD on April 29, 2025. A liner integrity inspection was conducted by COG personnel following fluid recovery on May 2, 2025. Upon inspection, the liner was determined to be insufficient.

NAPP2509657158

On April 6, 2025, equipment failure resulted in the release of approximately 48 bbls of crude oil into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover free-

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standing fluids; approximately 23 bbls of released crude oil were recovered from within the lined containment. The lined containment was then power washed to remove any residual staining and or standing fluids. COG reported the release to the NMOCD and submitted a Form C-141 on April 6, 2025. The release was assigned Incident Number NAPP2509657158. A 48-hour advance notice of liner inspection was provided to the NMOCD on April 29, 2025. A liner integrity inspection was conducted by COG personnel following fluid recovery on May 2, 2025. Upon inspection, the liner was determined to be insufficient.

Ensolum conducted delineation soil sampling within and around the lined containment and results were presented in a *Deferral Request* submitted to the NMOCD on July 1, 2025. The *Deferral Request* proposed leaving remaining impacted soil within the lined containment due to the presence of active production equipment and surface pipelines.

The *Deferral Request* detailed Site characterization according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, (19.15.29) of the New Mexico Administrative Code (NMAC). The Site characterization results were included in the previously submitted *Deferral Request* prepared for Incident Numbers NAPP2509329614 & NAPP2509657158. The *Deferral Request* report is included in Appendix A. Based on the results of the Site characterization, the following NMOCD Table I Closure Criteria applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 2,500 mg/kg
- Chloride: 20,000 mg/kg

As documented in the *Deferral Request*, impacted soil was left in place beneath the liner. The impacted soil remaining beneath the liner was delineated vertically by delineation soil samples from boreholes DS01, DS02, and delineation soil sample DS06, collected at a depth of 3 feet below ground surface (bgs) and laterally by delineation soil samples from boreholes DS03 through DS05 and DS07 through DS09. A maximum of 460 cubic yards of TPH-impacted soil remain in place beneath the liner assuming a 3-foot depth based on the delineation soil samples listed above that were compliant with the strictest Closure Criteria.

On July 11, 2025, NMOCD denied the *Deferral Request* for Incident Numbers NAPP2509329614 and NAPP2509657158.

DENIAL RESPONSES

Below is a list of deficiencies listed by NMOCD and applicable responses to those deficiencies in order to address concerns raised by NMOCD.

1. *This application has been rejected because the C-141 is incomplete. The submitted application indicates a conflict between the questions answered and the attachments that have been submitted. For example, the answer "Yes" was selected to "requesting a remediation closure approval with this submission"; however, your attachments indicate that your intent is to request a deferral approval. If requesting a deferral, a "Yes" must first be selected to "Requesting a deferral of the remediation closure due date with the approval of this submission" and then a "No" selected to "Requesting a remediation closure approval with this submission". Please review the Dec 1, 2023, Public Notice titled Implementation of Digital C-141 and New Incident Statuses found on the OCD website and submit a new C-141 answering the appropriate questions for your circumstance.*

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Pygmy 27 State Com #003H

COG acknowledges the NMOCD comment and has resubmitted the form to confirm proper documentation as advised in the December 1, 2023 Public Notice.

2. *To the question “Was this release entirely contained within a lined containment area?” you answered “yes”. Because it was compromised, the answer must be changed to “No” for both incidents upon C-141 resubmission, otherwise the system thinks it’s a liner report being submitted.*

COG acknowledges the NMOCD comment and has made the appropriate changes.

3. *Under the Site Characterization portion of the C-141 application the minimum distance to the following is incorrect and requires update upon application resubmission and in report resubmittal: any lakebed, sinkhole, or playa lake (1-5 miles NE as seen on Figure 1).*

COG acknowledges the NMOCD comment and identified a playa lake located approximately 2.58 miles northeast of the Site. The Site Characterization portion of the C-141 has been updated accordingly. Based on the new distance included in the Site Characterization, the Closure Criteria does not change the closure requirements for the Site included in the original *Deferral Request* and therefore 19.15.29.12C(4) continues to be met. See Figure 1.

4. *On pg. 2 of report: “Three boreholes (DS01, DS02, and DS06w) were advanced via hand auger within the location of tears in the liner to assess the vertical extent of impacted soil.” Show the location of DS06w on Figure 3.*

In reviewing the original *Deferral Request*, it appears a typo was included when listing delineation soil sample DS06, which included a “w” that was inadvertently included. As described in the remaining text, depicted on Figure 2, listed in Table 1, logged in the lithologic / soil sampling log, and provided in the laboratory report from May 9, 2025, only delineation soil sample location DS06 is present at the Site. A total of two soil samples were collected and submitted for laboratory analysis; one sample was submitted from 0.5 feet below ground surface (bgs) and the second, representing the terminus of the borehole, was submitted from 1-foot bgs. The text of the original *Deferral Request*, included as Appendix A, has been revised to reflect the correct sample location name.

5. *Referring to pg. 3: “Laboratory analytical results for the delineation soil sample collected from DS03 at 0.5 feet bgs indicated a chloride concentration of 601 mg/kg which initially exceeded the most stringent Table I Closure Criteria. Delineation soil sample DS03 was recollected, homogenized, and analyzed following the same procedure described above. Laboratory analytical results for DS03, recollected at 0.5 feet bgs indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria.” Explain. OCD does not accept a rehomogenized recollected delineation sample. If a horizontal delineation sample is above the standards of 19.15.29.13 NMAC, you must step out to collect a new sample further from the release to complete horizontal delineation until laboratory results show contaminants are below reclamation standards.*

To clarify the resampling effort, on June 5, 2025, Ensolum was on Site to step out a few inches west from the original DS03 sample point. The minimal step out was warranted based on the original sample exceeding the most stringent of Table I Closure Criteria by 1 mg/kg. The minor adjustment cannot be detected by a GPS and is not visible at the scale presented on the site map; therefore, Ensolum did not relabel the sample. The requested step out was completed and appropriate for the minimal exceedance originally observed. The word homogenized was in reference to the laboratory homogenizing the jarred sample. The sample was a discrete sample and does not represent mixing of soil from different depths or other samples. Laboratory analytical results for DS03 at 0.5 feet bgs

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3122 National Parks Highway | Carlsbad, NM 88220 | ensolum.com

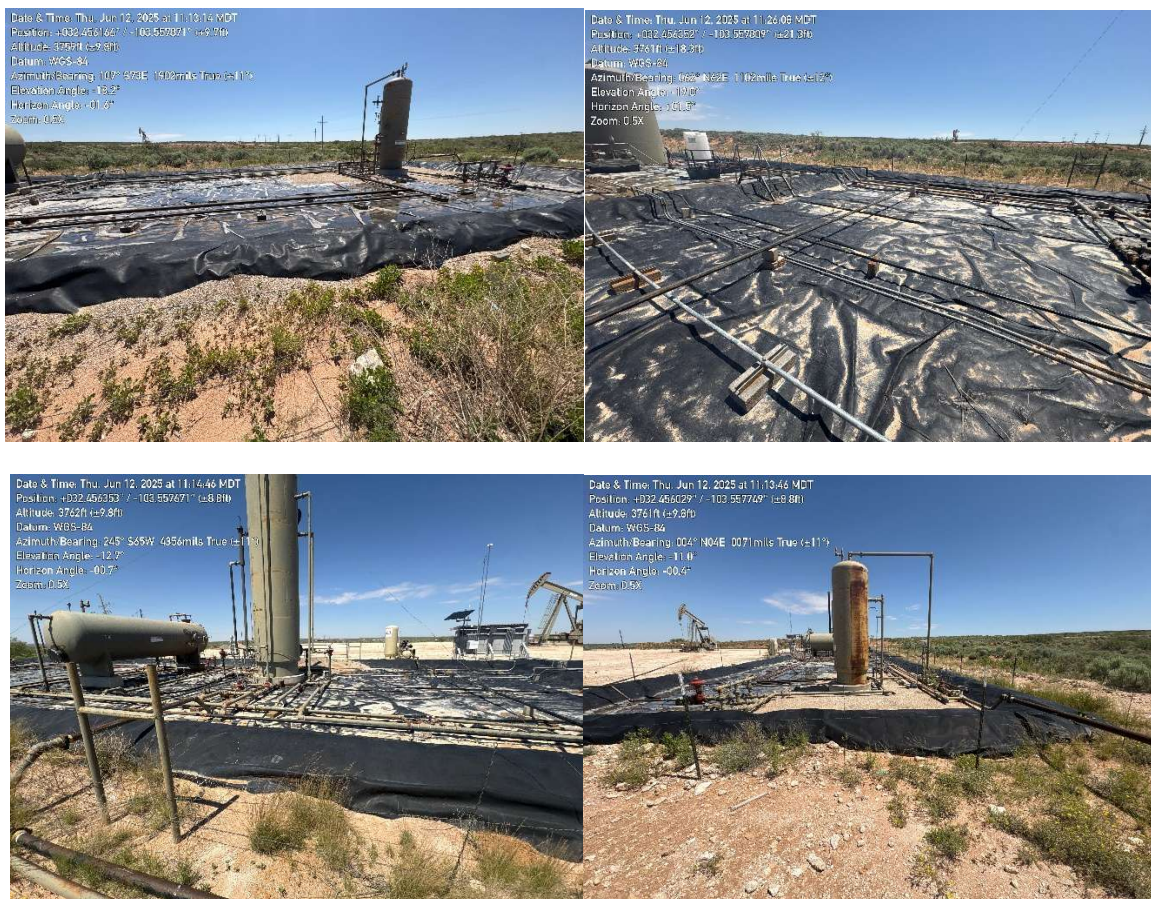
COG Operating, LLC
Revised Deferral Request
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indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria, confirming the lateral extent of the release.

6. Major facility deconstruction typically involves concrete poured pads, structures, engineered designed facilities that include automation/electrical lines, sprayed in lines, etc. After review, OCD does not consider the remediation of the releases at the Pygmy 27 St 3H Battery to require a major facility deconstruction. A deferral for this release will not be granted until every effort has been made to remediate this release using hand tools, hydrovac, etc. to the maximum extent practicable. Submit updated report to OCD by 10/9/2025.

Impacted soil beneath the lined containment has been documented by soil sample DS02 at 0.5 feet bgs (1,716 mg/kg total TPH). The original DS03 at 0.5 feet bgs contained 1 mg/kg of potential waste-containing soil and a sample immediately adjacent did not. The 1 mg/kg of chloride detected at DS03 is not representative of the release extending outside containment, as DS01, at the source, meets the most stringent chloride Table I Closure Criteria.

COG recognizes the limitations of deferral as it relates to soil impacts in the vicinity of production equipment and piping on-pad only. The limitations of soil removal within the containment include an intact liner with production equipment and piping directly above. Photographs below illustrate the current condition of the deferred location to provide context why deferral appears to be appropriate for these releases.



Along with the limitations of physically accessing soil directly beneath and around production equipment and piping, there is a safety aspect to consider. As such, potential excavation was assessed by a person

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trained in Occupational Safety and Health Administration (OSHA) excavation and trench safety (Competent Person) under the consultation of a Registered Professional Engineer (RPE) licensed in the State of New Mexico.

The proposed excavation area entails a polygon with maximum dimensions of 143 feet by 48 feet directly adjacent to and beneath a lined containment containing production equipment and active pipelines as shown on Figure 2 in the *Excavation Guidance Document*, included as Appendix B. Along the southern portion of the proposed excavation area are multiple production pipelines lying on supports of varying dimensions and a vertical separator supported by a circular concrete base. The production pipelines range in diameter from 1.25 inches to 4 inches. The vertical separator measures 4 feet in diameter with a height of 10 feet. The central portion of the proposed excavation area consists of multiple production pipelines supported by footings of varying dimensions and a horizontal separator supported by a concrete foundation. The production pipelines range in diameter from 1.25 inches to 4 inches. The horizontal separator measures 6 feet wide by 20 feet long. Along the northern portion of the proposed excavation area are multiple production pipelines supported by footings of varying dimensions and a heater treater supported by a circular concrete footer. The production pipelines range in diameter from 1.25 inches to 3.5 inches. The vertical separator measures 6 feet in diameter with a height of 20 feet. The production pipeline supports throughout the entire proposed excavation area range in dimensions of three inches wide by seven inches long up to 15 inches wide by 15 inches long.

Based on the dimensions of the requested excavation, observed soil type at the Site, and presence of adjacent structures, there is inadequate structure support to conduct excavation of the identified impacted soil in a manner that both protects personnel health and equipment stability without major facility deconstruction. The equipment would need to be removed, even for hydro-excavation or manual soil removal. A detailed description of the review and calculations is included in the *Excavation Guidance Document* in Appendix B. The *Excavation Guidance Document* is stamped by an RPE licensed in the state of New Mexico.

The limited documented impacts left in place until major reconstruction occurs will be protective of human health, the environment, and groundwater due to the presence of a liner that provides a barrier between human and wildlife contact to the residual COCs. The liner will also act as a retardant for the vertical migration of impacts via precipitation percolating through soil driving downward and impacting more soil. Groundwater has been reasonably determined to be greater than 100 feet bgs beneath the Site, a distance that is sufficient to protect groundwater, especially with the liner retarding vertical migration of COCs.

Based on the low concentrations of COCs beneath the liner, the protection of human health and integrity of the existing structures, the environment, and groundwater with the presence of the liner, and the engineering logistics and safety concerns to dig directly next to and/or beneath the active production equipment and pipelines, leaving the residual impacts in place until a major Site reconstruction or the facility is decommissioned and the area is accessible appears to be an appropriate application of 19.15.29.12.C(2).

CLOSURE REQUEST

COG believes deficiencies outlined in by the NMOCD in the July 2025 denial have been adequately addressed in this *Revised Deferral Request*. Inadvertent check boxes in the C-141 portal, a typo in the text of the original *Deferral Request*, and corrected distance to a playa in the Site Characterization have not affected the overall request. While the satellite imagery appears to depict an open area inside the containment to work with hand tools, the reality of the Site does not allow of safe and effective removal of low level impacts beneath a repaired liner without major facility destruction. Deferring impacts until

COG Operating, LLC
Revised Deferral Request
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there is a major Site reconstruction or when the facility is decommissioned and equipment and piping are removed to allow access will be protective of human health, the environment, and groundwater. As such, COG respectfully requests the NMOCD to reconsider deferral approval for Incident Numbers NAPP2509329614 and NAPP2509657158.

If you have any questions or comments, please contact Ms. Hadlie Green at (432) 557-8895 or hgreen@ensolum.com.

Sincerely,
Ensolum, LLC



Tabitha Guadian
Staff Geologist



Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist

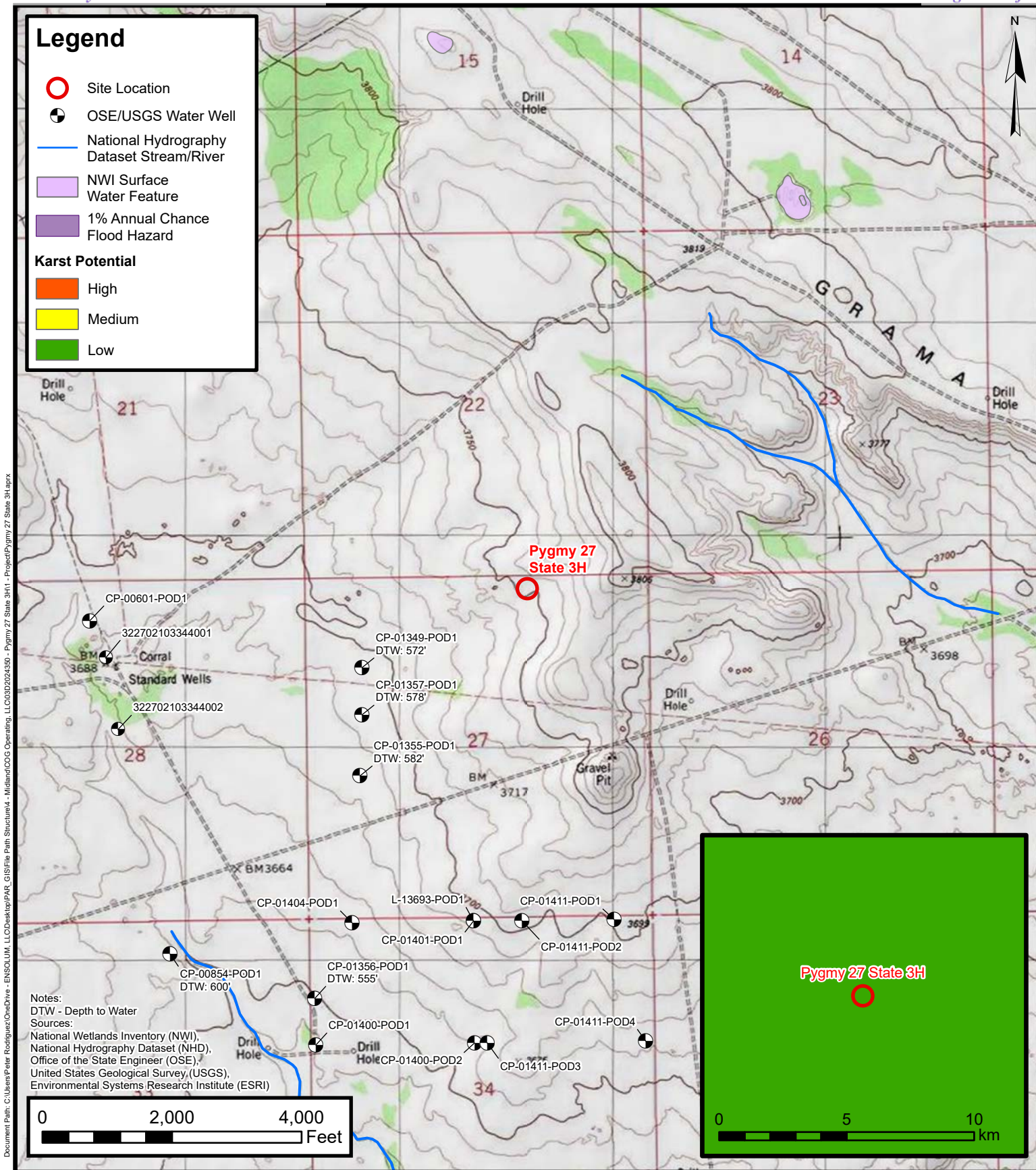
cc: Jacob Laird, ConocoPhillips Company
Merchant Livestock Company

Appendices:

Figure 1: Site Receptor Map
Figure 2: Delineation Soil Sample Location
Figure 3: Deferral Location
Appendix A June 20, 2025, *Deferral Request Report*
Appendix B Excavation Guidance Document



FIGURES



Site Receptor Map

COG Operating, LLC

Pygmy 27 State 3H

Incident Number: NAPP2509329614-NAPP2509657158

Unit B, Section 27, T21S, R33E
Lea County, New Mexico

FIGURE

1

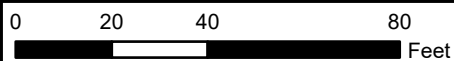


Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- ▨ Release Extent

**Notes:**

Sample ID @ Depth Below Ground Surface
Concentrations in **bold** exceed the NMOC Table I Closure Criteria or reclamation standard where applicable



Sources: Environmental Systems Research Institute (ESRI)

**Delineation Soil Sample Locations**

COG Operating, LLC
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Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico

FIGURE
2



Deferral Location

COG Operating, LLC
Pygmy 27 State Com #003H
Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico



APPENDIX A

June 20,2025 Deferral Request



June 20, 2025

New Mexico Oil Conservation Division

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

**Re: Deferral Request
Pygmy 27 State Com #003H
Incident Numbers NAPP2509329614 & NAPP2509657158
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Deferral Request* to document assessment and soil sampling activities at the Pygmy 27 State Com #003H (Site). The purpose of the Site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following two releases of crude oil within the lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, COG is submitting this *Deferral Request*, describing Site assessment activities that have occurred and requesting deferral of final remediation for Incident Numbers NAPP2509329614 and NAPP2509657158 until the Site is reconstructed, and/or the well pad is abandoned.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 27, Township 21 South, Range 33 East, in Lea County, New Mexico (32.4564°, -103.5577°) and is associated with oil and gas exploration and production operations on private land owned by Merchant Livestock Company.

NAPP2509329614

On March 29, 2025, equipment failure resulted in the release of approximately 5 barrels (bbls) of crude oil into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 5 bbls of released crude oil were recovered from within the lined containment. The lined containment was then power washed to remove any residual staining and or standing fluids. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a Release Notification Form C-141 (Form C-141) on April 3, 2025. The release was assigned Incident Number NAPP2509329614. A 48-hour advance notice of liner inspection was provided to the NMOCD on April 29, 2025. A liner integrity inspection was conducted by COG personnel following fluid recovery on May 2, 2025. Upon inspection, the liner was determined to be insufficient.

COG Operating, LLC
Deferral Request
Pygmy 27 State Com #003H



NAPP2509657158

On April 6, 2025, equipment failure resulted in the release of approximately 48 bbls of crude oil into the lined secondary containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 23 bbls of released crude oil were recovered from within the lined containment. The lined containment was then power washed to remove any residual staining and or standing fluids. COG reported the release to the NMOCD and submitted a Form C-141 on April 6, 2025. The release was assigned Incident Number NAPP2509657158. A 48-hour advance notice of liner inspection was provided to the NMOCD on April 29, 2025. A liner integrity inspection was conducted by COG personnel following fluid recovery on May 2, 2025. Upon inspection, the liner was determined to be insufficient.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization are summarized below and detailed in the NMOCD permitting portal Form C-141 Site Characterization section. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is 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) permitted well CP-01349-POD 1, located approximately 0.5 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 573 feet bgs and a total depth of 1,188 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1 and the associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 0.97 miles northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On May 9, 2025 and June 5, 2025, Ensolum personnel visited the Site to evaluate the release extent and conduct Site assessment activities. Three boreholes (DS01, DS02, and DS06w) were advanced via

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hand auger within the location of tears in the liner to assess the vertical extent of impacted soil. Delineation soil samples were collected from each borehole at depths ranging from 0.5 feet to 3 feet bgs. Hand auger refusal was encountered at 1-foot bgs while advancing borehole DS06. Six additional boreholes (DS03 through DS05 and DS07 through DS09) were advanced via hand auger around the lined containment to confirm the lateral extent of the release. Discrete delineation soil samples were collected from each borehole at depths ranging from 0.5 feet to 3 feet bgs. Hand auger refusal was encountered at 0.5 feet bgs while advancing borehole DS03. Soil from the boreholes was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the boreholes were documented on lithologic soil sampling logs, which are included as Appendix B. The boreholes were backfilled with the soil removed and COG repaired the tear in the liner. The delineation soil sample locations are depicted on Figure 2. Photographic documentation is included in Appendix C.

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 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

Laboratory analytical results for the delineation soil samples collected from boreholes DS01 and DS06 indicated all COC concentrations were in compliance with the Site Closure Criteria. Laboratory analytical results for delineation soil samples collected from borehole DS02 indicated TPH-DRO/TPH-GRO concentrations exceeded the Closure Criteria at 0.5 feet bgs, directly beneath the tear in the liner. Subsequent delineation sample DS02, collected at 3 feet bgs, indicated all COC concentrations were compliant with the Closure Criteria.

Laboratory analytical results for the delineation soil sample collected from DS03 at 0.5 feet bgs indicated a chloride concentration of 601 mg/kg which initially exceeded the most stringent Table I Closure Criteria. Delineation soil sample DS03 was recollected, homogenized, and analyzed following the same procedure described above. Laboratory analytical results for DS03, recollected at 0.5 feet bgs indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results for delineation soil samples collected from boreholes DS04, DS05, and DS07 through DS09 indicated all COC concentrations were in compliance with the Closure Criteria and strictest Closure Criteria, successfully defining the lateral extent of the release. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

DEFERRAL REQUEST

COG is requesting deferral of final remediation due to the presence of active production equipment and surface pipelines within the lined containment. The impacted soil is limited to the area immediately beneath the lined containment and active production equipment, where remediation would require a major facility deconstruction.

The impacted soil remaining in place beneath the liner is delineated vertically by delineation soil samples from boreholes DS01, DS06, and delineation soil sample DS02 collected at 3 feet bgs and laterally by delineation soil samples from boreholes DS03 through DS05 and DS07 through DS09. A maximum of 460 cubic yards of TPH-impacted soil remains in place beneath the liner assuming a maximum 3-foot depth based on the delineation soil samples listed above that were compliant with the Closure Criteria.

COG Operating, LLC
Deferral Request
Pygmy 27 State Com #003H



COG does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was estimated to be greater than 100 feet bgs, the release was contained laterally by the lined containment, and the impacted soil remaining in place is limited to the area immediately beneath the liner. The liner has been repaired by COG and will restrict future vertical migration of residual impacts.

Based on the presence of active production equipment within the release area and the complete lateral and vertical delineation of impacted soil remaining in place, COG requests deferral of final remediation for Incident Numbers NAPP2509329614 and NAPP2509657158 until final reclamation of the well pad or major construction, whichever comes first.

If you have any questions or comments, please contact Ms. Hadlie Green at (432) 557-8895 or hgreen@ensolum.com.

Sincerely,
Ensolum, LLC

A handwritten signature in black ink that reads "Hadlie Green".

Hadlie Green
Project Geologist

A handwritten signature in black ink that reads "Daniel R. Moir".

Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist

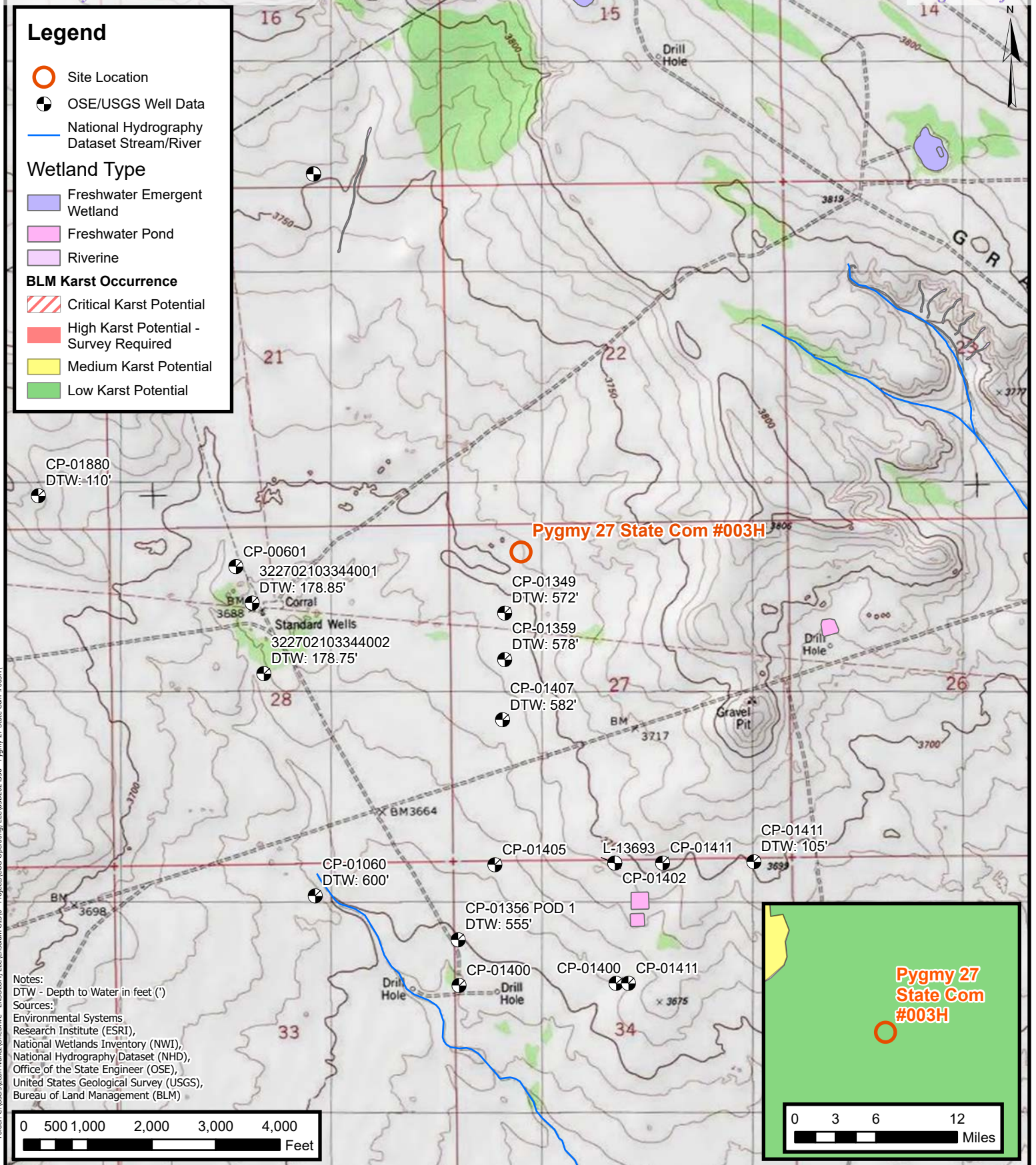
cc: Jacob Laird, ConocoPhillips Company
Merchant Livestock Company

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Deferral Location
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



FIGURES



Site Receptor Map

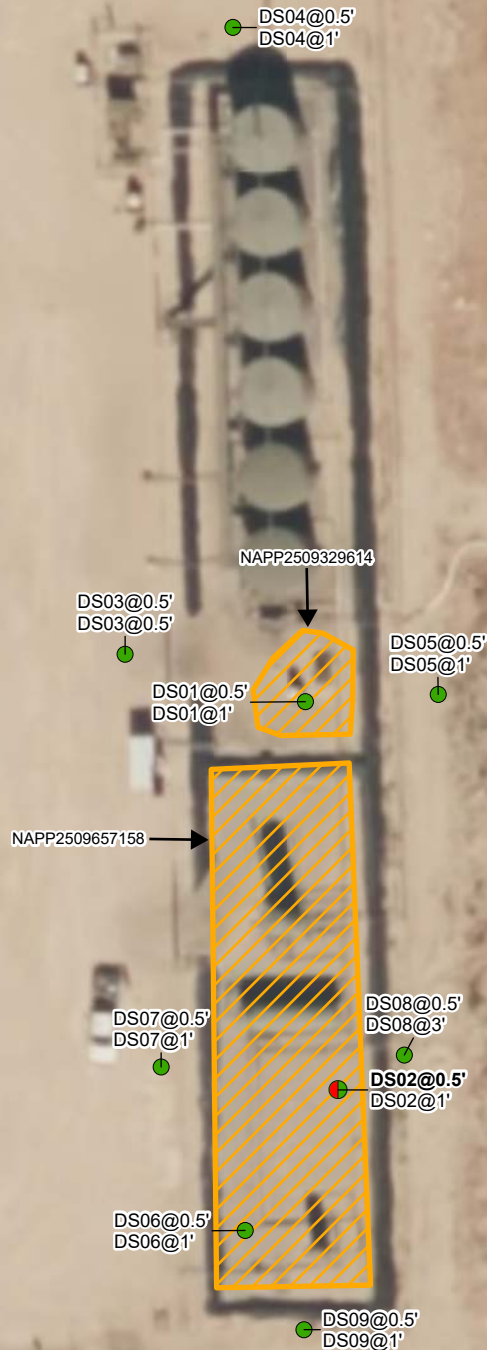
COG Operating, LLC
Pygmy 27 State Com #003H
Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico

FIGURE

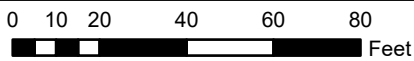
1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- ▨ Release Extent

**Notes:**

Sample ID @ Depth Below Ground Surface
Concentrations in **bold** exceed the NMOC Table I Closure Criteria or reclamation standard where applicable

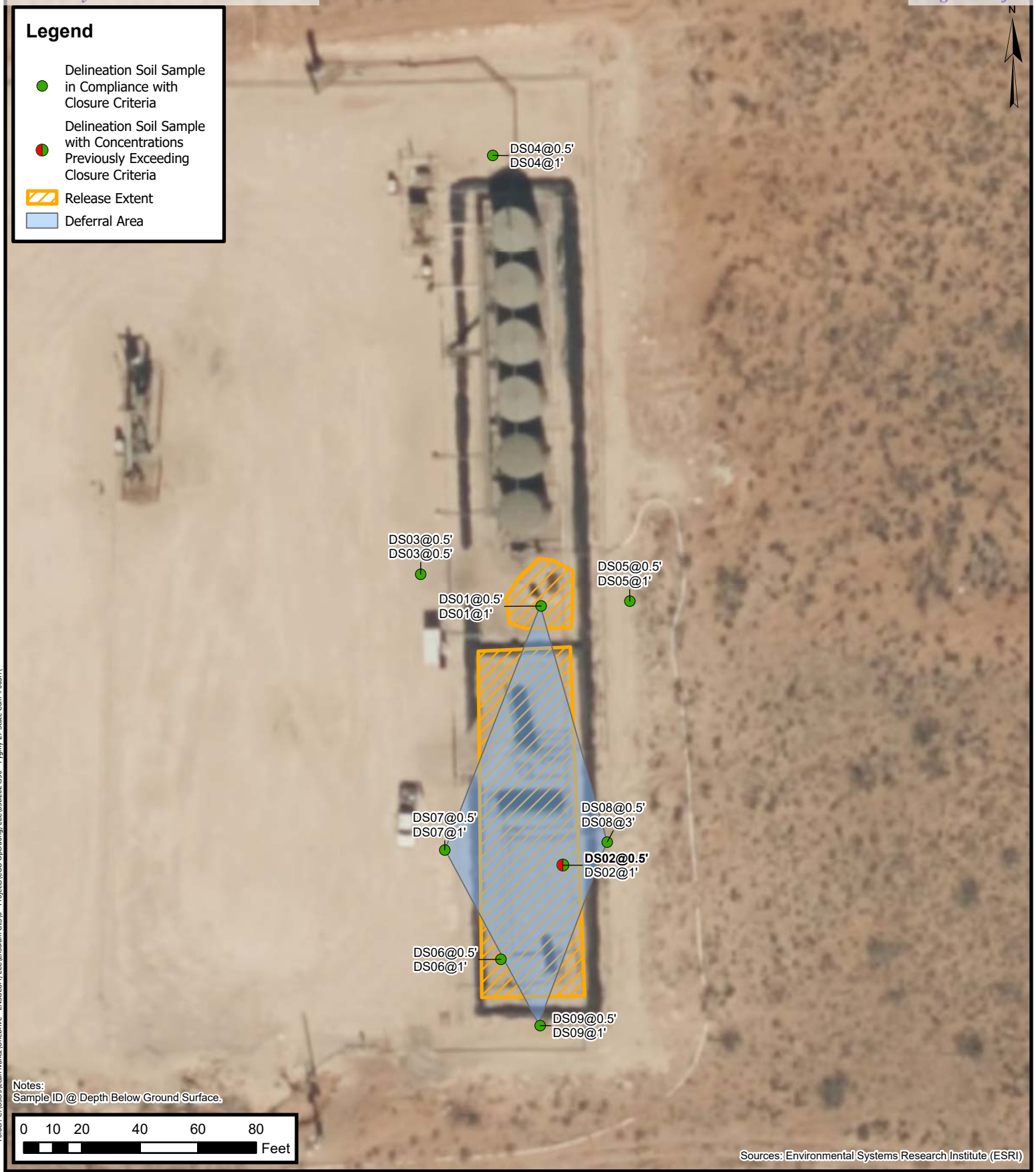


Sources: Environmental Systems Research Institute (ESRI)

Delineation Soil Sample Locations

COG Operating, LLC
Pygmy 27 State Com #003H
Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico

FIGURE**2**



Deferral Location

COG Operating, LLC
Pygmy 27 State Com #003H
Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico

FIGURE
3



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Pygmy 27 State Com #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 I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
DS01	05/09/2025	0.5	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	104
DS01	05/09/2025	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	89.7
DS02	05/09/2025	0.5	0.193	5.00	256	1,460	<49.8	1,716	1,716	127
DS02	05/09/2025	3	<0.00199	<0.00398	<49.9	56.9	<49.9	56.9	56.9	127
DS03*	05/09/2025	0.5	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	601
DS03	06/05/2025	0.5	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	273
DS04	05/09/2025	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	99.2
DS04	05/09/2025	1	<0.00201	0.00412	<49.8	<49.8	<49.8	<49.8	<49.8	79.1
DS05	05/09/2025	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	281
DS05	05/09/2025	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	366
DS06	05/09/2025	0.5	<0.00199	0.00636	<49.8	<49.8	<49.8	<49.8	<49.8	589
DS06	05/09/2025	1	0.00224	0.00870	<49.9	<49.9	<49.9	<49.9	<49.9	760
DS07	05/09/2025	0.5	<0.00201	0.00483	<50.0	<50.0	<50.0	<50.0	<50.0	92.8
DS07	06/05/2025	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	107
DS08	05/09/2025	0.5	0.00223	0.00931	<49.8	<49.8	<49.8	<49.8	<49.8	204
DS08	05/09/2025	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	137
DS09	06/05/2025	0.5	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	<49.7	107
DS09	06/05/2025	1	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	<50.3	121

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

SUCA: Surface Use and Compensation Agreement

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 I Closure Criteria or reclamation standard where applicable.

*indicates sample was recollected and rehomogenized



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
SANTA FE, N.M.



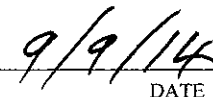
2014 SEP 10 PM 2:15

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP-1349 (Tyler #1) *** REVISED 09/09/14 ***				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) Merchants/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) 575-398-2424			
	WELL OWNER MAILING ADDRESS P. O. Box 692				CITY Tatum		STATE NM	ZIP 88267
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 27	SECONDS 11.3 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE1/4SW1/4NW1/4 Section 27, Township 21 South, Range 33 East on Merchants Livestock Land								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421		NAME OF LICENSED DRILLER Corky Glenn			NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.		
	DRILLING STARTED 07/12/14	DRILLING ENDED 07/18/14	DEPTH OF COMPLETED WELL (FT) 1,188'		BORE HOLE DEPTH (FT) 1,188'	DEPTH WATER FIRST ENCOUNTERED (FT) 990'		
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 572'		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input checked="" type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0'	40'	20"	16"	None	15 1/2"	.250	
	0'	754'	14 3/4"	9 5/8"	Thread & Collar	8.921"	36 lbs.	none
	721'	1,188'	8 3/4"	7" (467' Total)	Thread & Collar	6.366"	23 lbs.	1/8"
			259.93' perforated					
			on bottom of liner					
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0'	40'	20"	Cemented	2 yds.	Top Pour		
	0	754'	14 3/4"	Float and shoe cemented to surface	777	Circulated		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	Exp1	21S. 33E. 27. 132			PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	4'	4'	Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	4'	19'	15'	Caliche	<input type="radio"/> Y <input checked="" type="radio"/> N	
	19'	35'	16'	Sand & Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	35'	122'	87'	Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	122'	145'	23'	Sandy Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	145'	417'	272'	Red & Brown Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	417'	720'	303'	Brown & Red Shale (some clay)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	720'	742'	22'	Red, Brown & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	742'	753'	11'	Brown Shale & Brown Sandrock	<input type="radio"/> Y <input checked="" type="radio"/> N	
	753'	805'	52'	Red & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	805'	837'	32'	Brown & Red Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	837'	885'	48'	Brown Sandrock & Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
	885'	990'	105'	Red & Brown Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	990'	1188'	198'	Watersand (Brown Sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP					TOTAL ESTIMATED	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:					WELL YIELD (gpm):	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: 0' to 754' drilled with mud. 754' to 1,188' drilled with air and foam.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 					
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	215.33E.27.132				PAGE 2 OF 2



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us


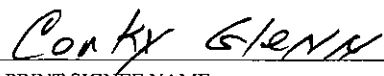
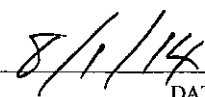
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2014 AUG -4 AM 10:48

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) CP - 1349 (Tyler #1)				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S) Merchants Livestock/Glenn's Water Well Service, Inc.				PHONE (OPTIONAL) (575)398-2424			
	WELL OWNER MAILING ADDRESS P.O. Box 692				CITY Tatum		STATE NM	ZIP 88267
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 27	SECONDS 11.3 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
	LONGITUDE 103	33	37.7 W					
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NE/SW/NW Sec. 27, T21S, R33E on Merchants Livestock Land								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD 421		NAME OF LICENSED DRILLER Corky Glenn		NAME OF WELL DRILLING COMPANY Glenn's Water Well Service, Inc.			
	DRILLING STARTED 7/12/14	DRILLING ENDED 7/18/14	DEPTH OF COMPLETED WELL (FT) 1188'	BORE HOLE DEPTH (FT) 1188'	DEPTH WATER FIRST ENCOUNTERED (FT) 990'			
	COMPLETED WELL IS: <input checked="" type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT)			
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0'	40'	20"	16"	none	15 1/2'	.250	
	0'	754'	14 3/4"	9 5/8"	Thread and collar	.352	36 lbs.	none
	721'	1188'	8 3/4"	7"	Thread and collar	6.5"	23 lbs.	1/8"
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0'	40'	20"	Cemented	2 yds.	Top Pour		
	0'	754'	14 3/4"	Float and shoe cemented to surface	740	Circulated		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548679
LOCATION	21S.33E.27.231				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0'	4'	4'	Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	4'	19'	15'	Caleche	<input type="radio"/> Y <input checked="" type="radio"/> N	
	19'	35'	16'	Sand & Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	35'	122'	87'	Red Sand	<input type="radio"/> Y <input checked="" type="radio"/> N	
	122'	145'	23'	Sandy Red Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	145'	417'	272'	Red & Brown Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	417'	720'	303'	Brown & Red Shale (some clay)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	720'	742'	22'	Red, Brown & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	742'	753'	11'	Brown Shale & Brown Sandrock	<input type="radio"/> Y <input checked="" type="radio"/> N	
	753'	805'	52'	Red & Blue Clay	<input type="radio"/> Y <input checked="" type="radio"/> N	
	805'	837'	32'	Brown & Red Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	837'	885'	48'	Brown Sandrock & Shale	<input type="radio"/> Y <input checked="" type="radio"/> N	
	855'	990'	105'	Red & Brown Shale (some sandrock)	<input type="radio"/> Y <input checked="" type="radio"/> N	
	990'	1188'	198'	Watersand(Brown sandrock)	<input checked="" type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
					<input type="radio"/> Y <input type="radio"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm): 50	
<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						
5. TEST, RIG SUPERVISION	WELL TEST TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION: 0' to 754' drilled with mud. 754' to 1188' drilled with air and foam.					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	   SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE					

FOR OSE INTERNAL USE


WR-20 WELL RECORD & LOG (Version 06/08/2012)


FILE NUMBER	CP-1349	POD NUMBER	1	TRN NUMBER	548479
LOCATION	215. 33E. 27. 231				PAGE 2 OF 2




APPENDIX B


Lithologic Soil Sampling Logs


								Sample Name: DS01		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456427, -103.557747								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	9.7	N	DS01	0.5	0.5	CCHE	Caliche, well graded, some hydrocarbon odor			
M	<162.4	1.2	N	DS01	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			


 ENSOLUM								Sample Name: DS02		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456181, -103.557727								Hole Diameter: 4"		Total Depth: 2'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	804.3	N	DS02	0.5	0.5	CCHE	Caliche, well graded, strong hydrocarbon odor			
M	<162.4	109.3	N			1	CCHE	Caliche, well graded, strong hydrocarbon odor.			
M	<162.4	21.0	N	DS02	2	2	SP	Red/brown sand, fine grained, strong hydrocarbon odor.			
								Total Depth 2'			


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								Sample Name: DS04		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456854, -103.557795								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS04	0.5	0.5	CCHE	Caliche, well graded, no odor.			
D	<162.4	0.0	N	DS04	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			

								Sample Name: DS05	Date: 5/9/2025
								Site Name: Pygmy 27 State 3H	
								Incident Number: NAPP2509329614	
								Job Number: 03D2024350	
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian	Method: Hand Auger
Coordinates: 32.456432, -103.557648								Hole Diameter: 4"	Total Depth: 1'
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
D	235.2	0.0	N	DS05	0.5	0.5	SW	Brown sand, well graded, no odor.	
D	162.4	0.0	N	DS05	1	1	SW	Brown sand, well graded, no odor.	
								Total Depth 1'	

								Sample Name: DS06		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456027, -103.557759								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	414.4	0.0	N	DS06	0.5	0.5	CCHE	Caliche, well graded, no odor.			
D	515.2	0.0	N	DS06	1	1	CCHE	Caliche, well graded, no odor.			
								Total Depth 1'			

								Sample Name: DS07		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456196, -103.557857								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS07	0.5	0.5	CCHE	Caliche, well graded, no odor.			
								Refusal at 1'			
								Total Depth 0.5'			

								Sample Name: DS08		Date: 5/9/2025	
								Site Name: Pygmy 27 State 3H			
								Incident Number: NAPP2509329614			
								Job Number: 03D2024350			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Tabitha Guadian		Method: Hand Auger	
Coordinates: 32.456202, -103.557678								Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% Correction factor included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
D	<162.4	0.0	N	DS08	0.5	0.5	SW	Light brown sand, well graded, no odor.			
D	<162.4	0.0	N			1	SW	Light brown sand, well graded, no odor.			
D	<62.4	0.0	N			2	SW	Light brown sand, well graded, no odor.			
D	<162.4	0.0	N	DS08	3	3	SP	Red/brown sand, fine grained, no odor.			
								Total Depth 3'			



APPENDIX C

Photographic Log



Photographic Log
COG Operating, LLC
Pygmy 27 State Com #003H
NAPP2509329614 & NAPP2509657158



Photograph: 1 Date: 05/02/2025
 Description: Well location sign
 View: Northeast



Photograph: 2 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southeast



Photograph: 3 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southwest



Photograph: 4 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southeast



Photographic Log
 COG Operating, LLC
 Pygmy 27 State Com #003H
 NAPP2509329614 & NAPP2509657158



Photograph: 5 Date: 05/02/2025
 Description: Compromised liner
 View: Southeast



Photograph: 6 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southeast



Photograph: 7 Date: 05/02/2025
 Description: Compromised liner
 View: Northwest



Photograph: 8 Date: 05/02/2025
 Description: Liner inspection activities
 View: Southeast



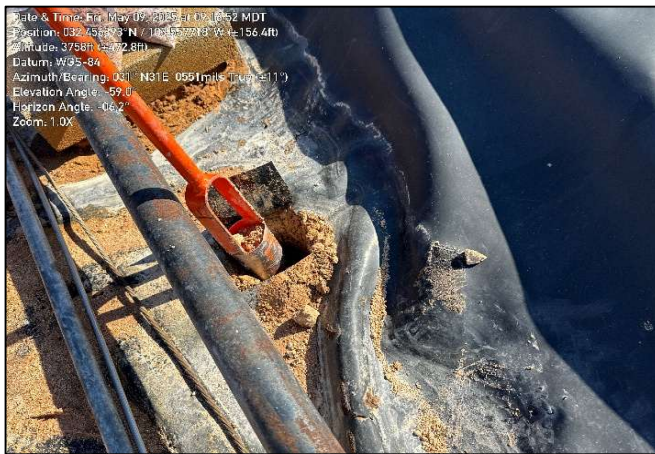
Photographic Log
 COG Operating, LLC
 Pygmy 27 State Com #003H
 NAPP2509329614 & NAPP2509657158



Photograph: 9 Date: 05/09/2025
 Description: Liner delineation activities
 View: Southeast



Photograph: 10 Date: 05/09/2025
 Description: Liner delineation activities
 View: Southeast



Photograph: 11 Date: 05/09/2025
 Description: Liner delineation activities
 View: Northeast



Photograph: 12 Date: 05/09/2025
 Description: Delineation activities
 View: Southeast



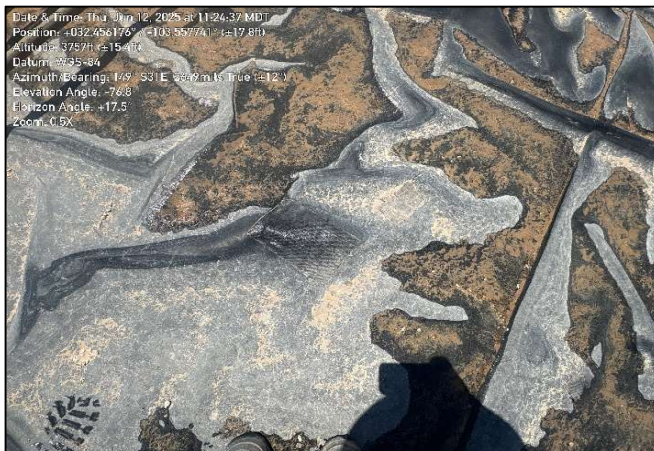
Photographic Log
 COG Operating, LLC
 Pygmy 27 State Com #003H
 NAPP2509329614 & NAPP2509657158



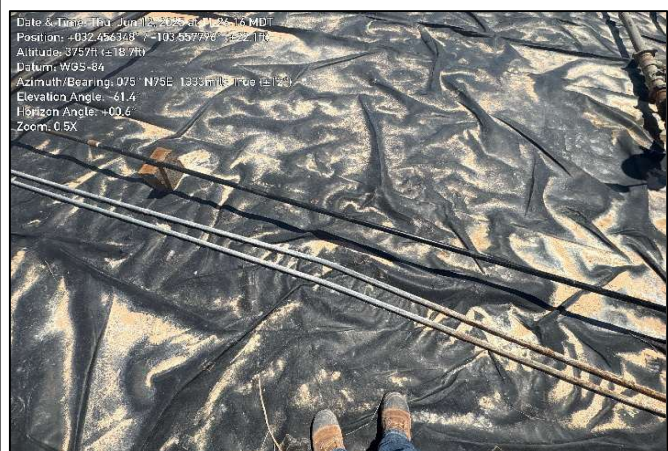
Photograph: 13 Date: 06/05/2025
 Description: Delineation activities
 View: Northeast



Photograph: 14 Date: 06/12/2025
 Description: Patched liner
 View: Southeast



Photograph: 15 Date: 06/12/2025
 Description: Patched liner
 View: Southeast



Photograph: 16 Date: 06/12/2025
 Description: Patched liner
 View: Northeast



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 5/14/2025 12:59:12 PM

JOB DESCRIPTION

Pygmy 27 State 3H

Lea County

JOB NUMBER

880-57988-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
5/14/2025 12:59:12 PM

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

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Laboratory Job ID: 880-57988-1
SDG: Lea County

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Definitions/Glossary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
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: Pygmy 27 State 3H

Job ID: 880-57988-1

Job ID: 880-57988-1

Eurofins Midland

Job Narrative
880-57988-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 5/9/2025 4:57 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.5°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: DS01 (880-57988-1), DS01 (880-57988-2), DS02 (880-57988-3), DS02 (880-57988-4), DS03 (880-57988-5), DS04 (880-57988-6), DS04 (880-57988-7), DS05 (880-57988-8), DS05 (880-57988-9), DS06 (880-57988-10), DS06 (880-57988-11), DS07 (880-57988-12), DS08 (880-57988-13) and DS08 (880-57988-14).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109922 and analytical batch 880-109913 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS01 (880-57988-1), DS02 (880-57988-3) and (880-56959-A-16-F MDLV). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-109922 and analytical batch 880-109913 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: DS05 (880-57988-8), DS05 (880-57988-9) and DS06 (880-57988-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109926 and analytical batch 880-109915 was outside the control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-109924 and analytical batch 880-109915 was outside the control limits.

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-109926 and analytical batch 880-109915 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: DS02 (880-57988-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: DS01 (880-57988-1). Evidence of matrix interferences is not obvious.

Eurofins Midland

Case Narrative

Client: Ensolum
Project: Pygmy 27 State 3H

Job ID: 880-57988-1

Job ID: 880-57988-1 (Continued) Eurofins Midland

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: DS01 (880-57988-2), DS03 (880-57988-5), DS04 (880-57988-6), DS05 (880-57988-9), DS06 (880-57988-10), (880-57988-A-1-B MS) and (880-57988-A-1-C MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01

Lab Sample ID: 880-57988-1

Date Collected: 05/09/25 10:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/12/25 08:52	05/12/25 12:26	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/12/25 08:52	05/12/25 12:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130	05/12/25 08:52	05/12/25 12:26	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/12/25 08:52	05/12/25 12:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/12/25 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 11:38	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	05/12/25 07:59	05/13/25 11:38	1
o-Terphenyl	149	S1+	70 - 130	05/12/25 07:59	05/13/25 11:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		9.98	mg/Kg			05/12/25 16:00	1

Client Sample ID: DS01

Lab Sample ID: 880-57988-2

Date Collected: 05/09/25 10:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/12/25 08:52	05/12/25 12:55	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 08:52	05/12/25 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	05/12/25 08:52	05/12/25 12:55	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01

Lab Sample ID: 880-57988-2

Date Collected: 05/09/25 10:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	117		70 - 130	05/12/25 08:52	05/12/25 12:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			05/12/25 12:55	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			05/13/25 12:23	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		05/12/25 07:59	05/13/25 12:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 12:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	05/12/25 07:59	05/13/25 12:23	1
o-Terphenyl	132	S1+	70 - 130	05/12/25 07:59	05/13/25 12:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.7		9.94	mg/Kg			05/12/25 16:15	1

Client Sample ID: DS02

Lab Sample ID: 880-57988-3

Date Collected: 05/09/25 10:30

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.193		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Toluene	1.60		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Ethylbenzene	0.575		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
m-Xylene & p-Xylene	1.95		0.101	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
o-Xylene	0.681		0.0505	mg/Kg		05/12/25 08:52	05/12/25 15:59	25
Xylenes, Total	2.63		0.101	mg/Kg		05/12/25 08:52	05/12/25 15:59	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	05/12/25 08:52	05/12/25 15:59	25
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130	05/12/25 08:52	05/12/25 15:59	25

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	5.00		0.101	mg/Kg			05/12/25 15:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1720		49.8	mg/Kg			05/13/25 12:37	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-3

Date Collected: 05/09/25 10:30

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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	256		49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Diesel Range Organics (Over C10-C28)	1460		49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 12:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130			05/12/25 07:59	05/13/25 12:37	1
o-Terphenyl	151	S1+	70 - 130			05/12/25 07:59	05/13/25 12:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		10.1	mg/Kg			05/12/25 16:20	1

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

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		05/12/25 08:52	05/12/25 13:16	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130			05/12/25 08:52	05/12/25 13:16	1
1,4-Difluorobenzene (Surr)	110		70 - 130			05/12/25 08:52	05/12/25 13:16	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			05/12/25 13:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.9		49.9	mg/Kg			05/13/25 12:52	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		05/12/25 07:59	05/13/25 12:52	1
Diesel Range Organics (Over C10-C28)	56.9		49.9	mg/Kg		05/12/25 07:59	05/13/25 12:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 12:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			05/12/25 07:59	05/13/25 12:52	1
o-Terphenyl	130		70 - 130			05/12/25 07:59	05/13/25 12:52	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		10.0	mg/Kg			05/12/25 16:25	1

Client Sample ID: DS03

Lab Sample ID: 880-57988-5

Date Collected: 05/09/25 12:36

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 08:52	05/12/25 13:36	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 08:52	05/12/25 13:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			05/12/25 08:52	05/12/25 13:36	1
1,4-Difluorobenzene (Surr)	94		70 - 130			05/12/25 08:52	05/12/25 13:36	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			05/12/25 13:36	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			05/13/25 13:07	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	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 13:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130			05/12/25 07:59	05/13/25 13:07	1
o-Terphenyl	131	S1+	70 - 130			05/12/25 07:59	05/13/25 13:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	601		9.98	mg/Kg			05/12/25 16:31	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-6

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
o-Xylene	0.00204		0.00202	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		05/12/25 09:27	05/12/25 22:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			05/12/25 09:27	05/12/25 22:46	1
1,4-Difluorobenzene (Surr)	80		70 - 130			05/12/25 09:27	05/12/25 22:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			05/12/25 22:46	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			05/13/25 13:22	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		05/12/25 07:59	05/13/25 13:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 13:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 13:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			05/12/25 07:59	05/13/25 13:22	1
o-Terphenyl	131	S1+	70 - 130			05/12/25 07:59	05/13/25 13:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99.2		10.0	mg/Kg			05/12/25 16:46	1

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Ethylbenzene	0.00412		0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/12/25 23:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130			05/12/25 09:27	05/12/25 23:06	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130	05/12/25 09:27	05/12/25 23:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00412		0.00402	mg/Kg			05/12/25 23:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 13:37	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 13:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			05/12/25 07:59	05/13/25 13:37	1
o-Terphenyl	127		70 - 130			05/12/25 07:59	05/13/25 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.1		9.98	mg/Kg			05/12/25 16:51	1

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Toluene	0.00217		0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/12/25 23:27	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/12/25 23:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	05/12/25 09:27	05/12/25 23:27	1
1,4-Difluorobenzene (Surr)	63	S1-	70 - 130	05/12/25 09:27	05/12/25 23:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			05/12/25 23:27	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			05/13/25 13:52	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 07:59	05/13/25 13:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 13:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			05/12/25 07:59	05/13/25 13:52	1
o-Terphenyl	122		70 - 130			05/12/25 07:59	05/13/25 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	281		9.96	mg/Kg			05/12/25 16:57	1

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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		05/12/25 09:27	05/12/25 23:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Ethylbenzene	0.00394		0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/12/25 23:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			05/12/25 09:27	05/12/25 23:48	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130			05/12/25 09:27	05/12/25 23:48	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			05/12/25 23:48	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			05/13/25 14:07	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		05/12/25 07:59	05/13/25 14:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 14:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 14:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			05/12/25 07:59	05/13/25 14:07	1
o-Terphenyl	137	S1+	70 - 130			05/12/25 07:59	05/13/25 14:07	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	366		10.1	mg/Kg			05/12/25 17:02	1

Client Sample ID: DS06

Lab Sample ID: 880-57988-10

Date Collected: 05/09/25 10:55

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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		05/12/25 09:27	05/13/25 00:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Ethylbenzene	0.00423		0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
o-Xylene	0.00213		0.00199	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/12/25 09:27	05/13/25 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			05/12/25 09:27	05/13/25 00:08	1
1,4-Difluorobenzene (Surr)	65	S1-	70 - 130			05/12/25 09:27	05/13/25 00:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00636		0.00398	mg/Kg			05/13/25 00:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 14:22	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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			05/12/25 07:59	05/13/25 14:22	1
o-Terphenyl	132	S1+	70 - 130			05/12/25 07:59	05/13/25 14:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	589		10.0	mg/Kg			05/12/25 17:07	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS06

Lab Sample ID: 880-57988-11

Date Collected: 05/09/25 11:00

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00224		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Ethylbenzene	0.00370		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
o-Xylene	0.00276		0.00200	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		05/12/25 09:27	05/13/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			05/12/25 09:27	05/13/25 00:29	1
1,4-Difluorobenzene (Surr)	72		70 - 130			05/12/25 09:27	05/13/25 00:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00870		0.00401	mg/Kg			05/13/25 00:29	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			05/13/25 14:52	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		05/12/25 07:59	05/13/25 14:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 14:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/12/25 07:59	05/13/25 14:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			05/12/25 07:59	05/13/25 14:52	1
o-Terphenyl	124		70 - 130			05/12/25 07:59	05/13/25 14:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	760		9.98	mg/Kg			05/12/25 17:12	1

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Toluene	<0.00201	U	0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Ethylbenzene	0.00247		0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
o-Xylene	0.00236		0.00201	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		05/12/25 09:27	05/13/25 00:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130			05/12/25 09:27	05/13/25 00:49	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	05/12/25 09:27	05/13/25 00:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00483		0.00402	mg/Kg			05/13/25 00:49	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			05/13/25 15:07	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		05/12/25 07:59	05/13/25 15:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 15:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 15:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			05/12/25 07:59	05/13/25 15:07	1
o-Terphenyl	117		70 - 130			05/12/25 07:59	05/13/25 15:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.8		10.1	mg/Kg			05/12/25 17:28	1

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00223		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Toluene	<0.00202	U	0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Ethylbenzene	0.00354		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
o-Xylene	0.00354		0.00202	mg/Kg		05/12/25 09:27	05/13/25 01:10	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		05/12/25 09:27	05/13/25 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/12/25 09:27	05/13/25 01:10	1
1,4-Difluorobenzene (Surr)	76		70 - 130	05/12/25 09:27	05/13/25 01:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00931		0.00404	mg/Kg			05/13/25 01:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			05/13/25 15:22	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 0.5'

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	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		05/12/25 07:59	05/13/25 15:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130			05/12/25 07:59	05/13/25 15:22	1
o-Terphenyl	117		70 - 130			05/12/25 07:59	05/13/25 15:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		10.0	mg/Kg			05/12/25 17:33	1

Client Sample ID: DS08

Lab Sample ID: 880-57988-14

Date Collected: 05/09/25 11:15

Matrix: Solid

Date Received: 05/09/25 16:57

Sample Depth: 3'

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		05/12/25 09:27	05/13/25 03:25	1
Toluene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		05/12/25 09:27	05/13/25 03:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			05/12/25 09:27	05/13/25 03:25	1
1,4-Difluorobenzene (Surr)	70		70 - 130			05/12/25 09:27	05/13/25 03:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			05/13/25 03:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			05/13/25 15:38	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	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		05/12/25 07:59	05/13/25 15:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			05/12/25 07:59	05/13/25 15:38	1
o-Terphenyl	119		70 - 130			05/12/25 07:59	05/13/25 15:38	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08
Date Collected: 05/09/25 11:15
Date Received: 05/09/25 16:57
Sample Depth: 3'

Lab Sample ID: 880-57988-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	137		9.98	mg/Kg			05/12/25 17:49	1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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)
880-57988-1	DS01	156 S1+	95
880-57988-1 MS	DS01	107	98
880-57988-1 MSD	DS01	106	102
880-57988-2	DS01	101	117
880-57988-3	DS02	90	68 S1-
880-57988-4	DS02	123	110
880-57988-5	DS03	96	94
880-57988-6	DS04	102	80
880-57988-6 MS	DS04	110	92
880-57988-6 MSD	DS04	100	96
880-57988-7	DS04	90	70
880-57988-8	DS05	84	63 S1-
880-57988-9	DS05	89	65 S1-
880-57988-10	DS06	105	65 S1-
880-57988-11	DS06	100	72
880-57988-12	DS07	114	94
880-57988-13	DS08	94	76
880-57988-14	DS08	92	70
LCS 880-109922/1-A	Lab Control Sample	101	103
LCS 880-109926/1-A	Lab Control Sample	120	94
LCSD 880-109922/2-A	Lab Control Sample Dup	111	101
LCSD 880-109926/2-A	Lab Control Sample Dup	96	88
MB 880-109922/5-A	Method Blank	164 S1+	92
MB 880-109924/5-A	Method Blank	94	68 S1-
MB 880-109926/5-A	Method Blank	100	66 S1-

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)
880-57988-1	DS01	137 S1+	149 S1+
880-57988-1 MS	DS01	128	131 S1+
880-57988-1 MSD	DS01	128	131 S1+
880-57988-2	DS01	119	132 S1+
880-57988-3	DS02	118	151 S1+
880-57988-4	DS02	116	130
880-57988-5	DS03	120	131 S1+
880-57988-6	DS04	119	131 S1+
880-57988-7	DS04	116	127
880-57988-8	DS05	112	122
880-57988-9	DS05	128	137 S1+
880-57988-10	DS06	122	132 S1+
880-57988-11	DS06	115	124
880-57988-12	DS07	105	117

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Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-57988-13	DS08	106	117
880-57988-14	DS08	107	119
LCS 880-109910/2-A	Lab Control Sample	104	104
LCSD 880-109910/3-A	Lab Control Sample Dup	89	90
MB 880-109910/1-A	Method Blank	91	90
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-109922/5-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109922

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 08:52	05/12/25 12:00	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 08:52	05/12/25 12:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	05/12/25 08:52	05/12/25 12:00	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/12/25 08:52	05/12/25 12:00	1

Lab Sample ID: LCS 880-109922/1-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1010		mg/Kg		101	70 - 130
Toluene	0.100	0.08466		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09226		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.2094		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-109922/2-A

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1008		mg/Kg		101	70 - 130	0	35
Toluene	0.100	0.08734		mg/Kg		87	70 - 130	3	35
Ethylbenzene	0.100	0.09937		mg/Kg		99	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	2	35
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.07406		mg/Kg		74	70 - 130
Toluene	<0.00202	U F1	0.100	0.06761	F1	mg/Kg		68	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U F1	0.100	0.06838	F1	mg/Kg		68	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1504		mg/Kg		75	70 - 130
o-Xylene	<0.00202	U	0.100	0.07804		mg/Kg		78	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	107		70 - 130						
1,4-Difluorobenzene (Surr)	98		70 - 130						

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 109913

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109922

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08478		mg/Kg		85	70 - 130	13	35
Toluene	<0.00202	U F1	0.100	0.06593	F1	mg/Kg		66	70 - 130	3	35
Ethylbenzene	<0.00202	U F1	0.100	0.07972		mg/Kg		80	70 - 130	15	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1635		mg/Kg		82	70 - 130	8	35
o-Xylene	<0.00202	U	0.100	0.08430		mg/Kg		84	70 - 130	8	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	106		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

Lab Sample ID: MB 880-109924/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109924

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 09:18	05/12/25 11:26	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			05/12/25 09:18	05/12/25 11:26	1
1,4-Difluorobenzene (Surr)	68	S1-	70 - 130			05/12/25 09:18	05/12/25 11:26	1

Lab Sample ID: MB 880-109926/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/12/25 09:27	05/12/25 22:24	1

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: MB 880-109926/5-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 109926

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/12/25 09:27	05/12/25 22:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			05/12/25 09:27	05/12/25 22:24	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130			05/12/25 09:27	05/12/25 22:24	1

Lab Sample ID: LCS 880-109926/1-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09376		mg/Kg		94	70 - 130
Toluene	0.100	0.1268		mg/Kg		127	70 - 130
Ethylbenzene	0.100	0.1242		mg/Kg		124	70 - 130
m-Xylene & p-Xylene	0.200	0.2196		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1299		mg/Kg		130	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	120		70 - 130				
1,4-Difluorobenzene (Surr)	94		70 - 130				

Lab Sample ID: LCSD 880-109926/2-A

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09744		mg/Kg		97	70 - 130	4	35
Toluene	0.100	0.1079		mg/Kg		108	70 - 130	16	35
Ethylbenzene	0.100	0.1098		mg/Kg		110	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.1824		mg/Kg		91	70 - 130	19	35
o-Xylene	0.100	0.1071		mg/Kg		107	70 - 130	19	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	96		70 - 130						
1,4-Difluorobenzene (Surr)	88		70 - 130						

Lab Sample ID: 880-57988-6 MS

Matrix: Solid

Analysis Batch: 109915

Client Sample ID: DS04

Prep Type: Total/NA

Prep Batch: 109926

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.08301		mg/Kg		83	70 - 130
Toluene	<0.00202	U F1	0.100	0.06417	F1	mg/Kg		64	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.09004		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1625		mg/Kg		81	70 - 130
o-Xylene	0.00204		0.100	0.09663		mg/Kg		95	70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: 880-57988-6 MS
Matrix: Solid
Analysis Batch: 109915

Client Sample ID: DS04
Prep Type: Total/NA
Prep Batch: 109926

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-57988-6 MSD
Matrix: Solid
Analysis Batch: 109915

Client Sample ID: DS04
Prep Type: Total/NA
Prep Batch: 109926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.08572		mg/Kg		86	70 - 130	3	35
Toluene	<0.00202	U F1	0.100	0.07309		mg/Kg		73	70 - 130	13	35
Ethylbenzene	<0.00202	U	0.100	0.08411		mg/Kg		84	70 - 130	7	35
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1511		mg/Kg		76	70 - 130	7	35
o-Xylene	0.00204		0.100	0.08832		mg/Kg		86	70 - 130	9	35
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	100		70 - 130								
1,4-Difluorobenzene (Surr)	96		70 - 130								

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

Lab Sample ID: MB 880-109910/1-A
Matrix: Solid
Analysis Batch: 110022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 109910

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		05/12/25 07:59	05/13/25 09:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 09:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/12/25 07:59	05/13/25 09:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			05/12/25 07:59	05/13/25 09:25	1
o-Terphenyl	90		70 - 130			05/12/25 07:59	05/13/25 09:25	1

Lab Sample ID: LCS 880-109910/2-A
Matrix: Solid
Analysis Batch: 110022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 109910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	900.8		mg/Kg		90	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	952.3		mg/Kg		95	70 - 130	
Surrogate	%Recovery	Qualifier	Limits					
1-Chlorooctane	104		70 - 130					
o-Terphenyl	104		70 - 130					

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-109910/3-A

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 109910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	766.7		mg/Kg		77	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	813.3		mg/Kg		81	70 - 130	16	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	89		70 - 130						
o-Terphenyl	90		70 - 130						

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	1023		mg/Kg		103	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	998	921.4		mg/Kg		90	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	131	S1+	70 - 130								

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 110022

Client Sample ID: DS01

Prep Type: Total/NA

Prep Batch: 109910

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	<49.8	U	998	1017		mg/Kg		102	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	998	930.0		mg/Kg		91	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	128		70 - 130								
o-Terphenyl	131	S1+	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-109985/1-A

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			05/12/25 15:44	1

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QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-109985/2-A

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.1		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-109985/3-A

Matrix: Solid

Analysis Batch: 109987

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	242.6		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-57988-1 MS

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	104		250	371.4		mg/Kg		107	90 - 110

Lab Sample ID: 880-57988-1 MSD

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104		250	372.9		mg/Kg		108	90 - 110	0	20

Lab Sample ID: 880-57988-11 MS

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS06

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	760		250	1004		mg/Kg		98	90 - 110

Lab Sample ID: 880-57988-11 MSD

Matrix: Solid

Analysis Batch: 109987

Client Sample ID: DS06

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	760		250	1005		mg/Kg		98	90 - 110	0	20

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC VOA

Analysis Batch: 109913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8021B	109922
880-57988-2	DS01	Total/NA	Solid	8021B	109922
880-57988-3	DS02	Total/NA	Solid	8021B	109922
880-57988-4	DS02	Total/NA	Solid	8021B	109922
880-57988-5	DS03	Total/NA	Solid	8021B	109922
MB 880-109922/5-A	Method Blank	Total/NA	Solid	8021B	109922
LCS 880-109922/1-A	Lab Control Sample	Total/NA	Solid	8021B	109922
LCSD 880-109922/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	109922
880-57988-1 MS	DS01	Total/NA	Solid	8021B	109922
880-57988-1 MSD	DS01	Total/NA	Solid	8021B	109922

Analysis Batch: 109915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-6	DS04	Total/NA	Solid	8021B	109926
880-57988-7	DS04	Total/NA	Solid	8021B	109926
880-57988-8	DS05	Total/NA	Solid	8021B	109926
880-57988-9	DS05	Total/NA	Solid	8021B	109926
880-57988-10	DS06	Total/NA	Solid	8021B	109926
880-57988-11	DS06	Total/NA	Solid	8021B	109926
880-57988-12	DS07	Total/NA	Solid	8021B	109926
880-57988-13	DS08	Total/NA	Solid	8021B	109926
880-57988-14	DS08	Total/NA	Solid	8021B	109926
MB 880-109924/5-A	Method Blank	Total/NA	Solid	8021B	109924
MB 880-109926/5-A	Method Blank	Total/NA	Solid	8021B	109926
LCS 880-109926/1-A	Lab Control Sample	Total/NA	Solid	8021B	109926
LCSD 880-109926/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	109926
880-57988-6 MS	DS04	Total/NA	Solid	8021B	109926
880-57988-6 MSD	DS04	Total/NA	Solid	8021B	109926

Prep Batch: 109922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	5035	
880-57988-2	DS01	Total/NA	Solid	5035	
880-57988-3	DS02	Total/NA	Solid	5035	
880-57988-4	DS02	Total/NA	Solid	5035	
880-57988-5	DS03	Total/NA	Solid	5035	
MB 880-109922/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-109922/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-109922/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-57988-1 MS	DS01	Total/NA	Solid	5035	
880-57988-1 MSD	DS01	Total/NA	Solid	5035	

Prep Batch: 109924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-109924/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 109926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-6	DS04	Total/NA	Solid	5035	
880-57988-7	DS04	Total/NA	Solid	5035	
880-57988-8	DS05	Total/NA	Solid	5035	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC VOA (Continued)

Prep Batch: 109926 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-9	DS05	Total/NA	Solid	5035	
880-57988-10	DS06	Total/NA	Solid	5035	
880-57988-11	DS06	Total/NA	Solid	5035	
880-57988-12	DS07	Total/NA	Solid	5035	
880-57988-13	DS08	Total/NA	Solid	5035	
880-57988-14	DS08	Total/NA	Solid	5035	
MB 880-109926/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-109926/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-109926/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-57988-6 MS	DS04	Total/NA	Solid	5035	
880-57988-6 MSD	DS04	Total/NA	Solid	5035	

Analysis Batch: 109995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	Total BTEX	
880-57988-2	DS01	Total/NA	Solid	Total BTEX	
880-57988-3	DS02	Total/NA	Solid	Total BTEX	
880-57988-4	DS02	Total/NA	Solid	Total BTEX	
880-57988-5	DS03	Total/NA	Solid	Total BTEX	
880-57988-6	DS04	Total/NA	Solid	Total BTEX	
880-57988-7	DS04	Total/NA	Solid	Total BTEX	
880-57988-8	DS05	Total/NA	Solid	Total BTEX	
880-57988-9	DS05	Total/NA	Solid	Total BTEX	
880-57988-10	DS06	Total/NA	Solid	Total BTEX	
880-57988-11	DS06	Total/NA	Solid	Total BTEX	
880-57988-12	DS07	Total/NA	Solid	Total BTEX	
880-57988-13	DS08	Total/NA	Solid	Total BTEX	
880-57988-14	DS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 109910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015NM Prep	
880-57988-2	DS01	Total/NA	Solid	8015NM Prep	
880-57988-3	DS02	Total/NA	Solid	8015NM Prep	
880-57988-4	DS02	Total/NA	Solid	8015NM Prep	
880-57988-5	DS03	Total/NA	Solid	8015NM Prep	
880-57988-6	DS04	Total/NA	Solid	8015NM Prep	
880-57988-7	DS04	Total/NA	Solid	8015NM Prep	
880-57988-8	DS05	Total/NA	Solid	8015NM Prep	
880-57988-9	DS05	Total/NA	Solid	8015NM Prep	
880-57988-10	DS06	Total/NA	Solid	8015NM Prep	
880-57988-11	DS06	Total/NA	Solid	8015NM Prep	
880-57988-12	DS07	Total/NA	Solid	8015NM Prep	
880-57988-13	DS08	Total/NA	Solid	8015NM Prep	
880-57988-14	DS08	Total/NA	Solid	8015NM Prep	
MB 880-109910/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-109910/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-109910/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-57988-1 MS	DS01	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 109910 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1 MSD	DS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 110022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015B NM	109910
880-57988-2	DS01	Total/NA	Solid	8015B NM	109910
880-57988-3	DS02	Total/NA	Solid	8015B NM	109910
880-57988-4	DS02	Total/NA	Solid	8015B NM	109910
880-57988-5	DS03	Total/NA	Solid	8015B NM	109910
880-57988-6	DS04	Total/NA	Solid	8015B NM	109910
880-57988-7	DS04	Total/NA	Solid	8015B NM	109910
880-57988-8	DS05	Total/NA	Solid	8015B NM	109910
880-57988-9	DS05	Total/NA	Solid	8015B NM	109910
880-57988-10	DS06	Total/NA	Solid	8015B NM	109910
880-57988-11	DS06	Total/NA	Solid	8015B NM	109910
880-57988-12	DS07	Total/NA	Solid	8015B NM	109910
880-57988-13	DS08	Total/NA	Solid	8015B NM	109910
880-57988-14	DS08	Total/NA	Solid	8015B NM	109910
MB 880-109910/1-A	Method Blank	Total/NA	Solid	8015B NM	109910
LCS 880-109910/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	109910
LCSD 880-109910/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	109910
880-57988-1 MS	DS01	Total/NA	Solid	8015B NM	109910
880-57988-1 MSD	DS01	Total/NA	Solid	8015B NM	109910

Analysis Batch: 110127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Total/NA	Solid	8015 NM	
880-57988-2	DS01	Total/NA	Solid	8015 NM	
880-57988-3	DS02	Total/NA	Solid	8015 NM	
880-57988-4	DS02	Total/NA	Solid	8015 NM	
880-57988-5	DS03	Total/NA	Solid	8015 NM	
880-57988-6	DS04	Total/NA	Solid	8015 NM	
880-57988-7	DS04	Total/NA	Solid	8015 NM	
880-57988-8	DS05	Total/NA	Solid	8015 NM	
880-57988-9	DS05	Total/NA	Solid	8015 NM	
880-57988-10	DS06	Total/NA	Solid	8015 NM	
880-57988-11	DS06	Total/NA	Solid	8015 NM	
880-57988-12	DS07	Total/NA	Solid	8015 NM	
880-57988-13	DS08	Total/NA	Solid	8015 NM	
880-57988-14	DS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 109985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Soluble	Solid	DI Leach	
880-57988-2	DS01	Soluble	Solid	DI Leach	
880-57988-3	DS02	Soluble	Solid	DI Leach	
880-57988-4	DS02	Soluble	Solid	DI Leach	
880-57988-5	DS03	Soluble	Solid	DI Leach	
880-57988-6	DS04	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

HPLC/IC (Continued)

Leach Batch: 109985 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-7	DS04	Soluble	Solid	DI Leach	
880-57988-8	DS05	Soluble	Solid	DI Leach	
880-57988-9	DS05	Soluble	Solid	DI Leach	
880-57988-10	DS06	Soluble	Solid	DI Leach	
880-57988-11	DS06	Soluble	Solid	DI Leach	
880-57988-12	DS07	Soluble	Solid	DI Leach	
880-57988-13	DS08	Soluble	Solid	DI Leach	
880-57988-14	DS08	Soluble	Solid	DI Leach	
MB 880-109985/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-109985/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-109985/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-57988-1 MS	DS01	Soluble	Solid	DI Leach	
880-57988-1 MSD	DS01	Soluble	Solid	DI Leach	
880-57988-11 MS	DS06	Soluble	Solid	DI Leach	
880-57988-11 MSD	DS06	Soluble	Solid	DI Leach	

Analysis Batch: 109987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-57988-1	DS01	Soluble	Solid	300.0	109985
880-57988-2	DS01	Soluble	Solid	300.0	109985
880-57988-3	DS02	Soluble	Solid	300.0	109985
880-57988-4	DS02	Soluble	Solid	300.0	109985
880-57988-5	DS03	Soluble	Solid	300.0	109985
880-57988-6	DS04	Soluble	Solid	300.0	109985
880-57988-7	DS04	Soluble	Solid	300.0	109985
880-57988-8	DS05	Soluble	Solid	300.0	109985
880-57988-9	DS05	Soluble	Solid	300.0	109985
880-57988-10	DS06	Soluble	Solid	300.0	109985
880-57988-11	DS06	Soluble	Solid	300.0	109985
880-57988-12	DS07	Soluble	Solid	300.0	109985
880-57988-13	DS08	Soluble	Solid	300.0	109985
880-57988-14	DS08	Soluble	Solid	300.0	109985
MB 880-109985/1-A	Method Blank	Soluble	Solid	300.0	109985
LCS 880-109985/2-A	Lab Control Sample	Soluble	Solid	300.0	109985
LCSD 880-109985/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	109985
880-57988-1 MS	DS01	Soluble	Solid	300.0	109985
880-57988-1 MSD	DS01	Soluble	Solid	300.0	109985
880-57988-11 MS	DS06	Soluble	Solid	300.0	109985
880-57988-11 MSD	DS06	Soluble	Solid	300.0	109985

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS01

Lab Sample ID: 880-57988-1

Date Collected: 05/09/25 10:10

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 12:26
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 12:26
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 11:38
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 11:38
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:00

Client Sample ID: DS01

Lab Sample ID: 880-57988-2

Date Collected: 05/09/25 10:15

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 12:55
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 12:55
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:23
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:23
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:15

Client Sample ID: DS02

Lab Sample ID: 880-57988-3

Date Collected: 05/09/25 10:30

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		25	109913	MNR	EET MID	05/12/25 15:59
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 15:59
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:37
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:37
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:20

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 13:16
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 13:16

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS02

Lab Sample ID: 880-57988-4

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 12:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 12:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:25

Client Sample ID: DS03

Lab Sample ID: 880-57988-5

Date Collected: 05/09/25 12:36

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109922	MNR	EET MID	05/12/25 08:52
Total/NA	Analysis	8021B		1	109913	MNR	EET MID	05/12/25 13:36
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 13:36
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:31

Client Sample ID: DS04

Lab Sample ID: 880-57988-6

Date Collected: 05/09/25 11:20

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 22:46
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 22:46
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:46

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:06
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:06
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:37
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:37

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS04

Lab Sample ID: 880-57988-7

Date Collected: 05/09/25 11:25

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:51

Client Sample ID: DS05

Lab Sample ID: 880-57988-8

Date Collected: 05/09/25 12:05

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:27
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:27
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 13:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 13:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 16:57

Client Sample ID: DS05

Lab Sample ID: 880-57988-9

Date Collected: 05/09/25 12:10

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/12/25 23:48
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/12/25 23:48
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:02

Client Sample ID: DS06

Lab Sample ID: 880-57988-10

Date Collected: 05/09/25 10:55

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:08
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:08
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:07

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS06

Lab Sample ID: 880-57988-11

Date Collected: 05/09/25 11:00

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:29
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:29
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 14:52
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 14:52
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:12

Client Sample ID: DS07

Lab Sample ID: 880-57988-12

Date Collected: 05/09/25 12:40

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 00:49
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 00:49
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:07
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:07
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:28

Client Sample ID: DS08

Lab Sample ID: 880-57988-13

Date Collected: 05/09/25 11:10

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 01:10
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 01:10
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:22
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:22
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:33

Client Sample ID: DS08

Lab Sample ID: 880-57988-14

Date Collected: 05/09/25 11:15

Matrix: Solid

Date Received: 05/09/25 16:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			109926	MNR	EET MID	05/12/25 09:27
Total/NA	Analysis	8021B		1	109915	MNR	EET MID	05/13/25 03:25
Total/NA	Analysis	Total BTEX		1	109995	SM	EET MID	05/13/25 03:25

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Client Sample ID: DS08
Date Collected: 05/09/25 11:15
Date Received: 05/09/25 16:57

Lab Sample ID: 880-57988-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	110127	SM	EET MID	05/13/25 15:38
Total/NA	Prep	8015NM Prep			109910	EL	EET MID	05/12/25 07:59
Total/NA	Analysis	8015B NM		1	110022	TKC	EET MID	05/13/25 15:38
Soluble	Leach	DI Leach			109985	SI	EET MID	05/12/25 14:21
Soluble	Analysis	300.0		1	109987	CH	EET MID	05/12/25 17:49

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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	06-30-25
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

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Method Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

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	EPA	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
- EPA = US Environmental Protection Agency
- 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: Pygmy 27 State 3H

Job ID: 880-57988-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-57988-1	DS01	Solid	05/09/25 10:10	05/09/25 16:57	0.5'
880-57988-2	DS01	Solid	05/09/25 10:15	05/09/25 16:57	1'
880-57988-3	DS02	Solid	05/09/25 10:30	05/09/25 16:57	0.5'
880-57988-4	DS02	Solid	05/09/25 11:20	05/09/25 16:57	3'
880-57988-5	DS03	Solid	05/09/25 12:36	05/09/25 16:57	0.5'
880-57988-6	DS04	Solid	05/09/25 11:20	05/09/25 16:57	0.5'
880-57988-7	DS04	Solid	05/09/25 11:25	05/09/25 16:57	1'
880-57988-8	DS05	Solid	05/09/25 12:05	05/09/25 16:57	0.5'
880-57988-9	DS05	Solid	05/09/25 12:10	05/09/25 16:57	1'
880-57988-10	DS06	Solid	05/09/25 10:55	05/09/25 16:57	0.5'
880-57988-11	DS06	Solid	05/09/25 11:00	05/09/25 16:57	1'
880-57988-12	DS07	Solid	05/09/25 12:40	05/09/25 16:57	0.5'
880-57988-13	DS08	Solid	05/09/25 11:10	05/09/25 16:57	0.5'
880-57988-14	DS08	Solid	05/09/25 11:15	05/09/25 16:57	3'

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-57988-1

SDG Number: Lea County

Login Number: 57988

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 6/11/2025 9:29:57 AM

JOB DESCRIPTION

Pygmy 27 State 3H
Lea County

JOB NUMBER

880-59027-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
6/11/2025 9:29:57 AM

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

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Laboratory Job ID: 880-59027-1
SDG: Lea County

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Definitions/Glossary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
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
SQL	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: Pygmy 27 State 3H

Job ID: 880-59027-1

Job ID: 880-59027-1

Eurofins Midland

Job Narrative 880-59027-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/5/2025 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

GC VOA

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

Diesel Range Organics

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-111712 and analytical batch 880-111762 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS03

Lab Sample ID: 880-59027-1

Date Collected: 06/05/25 09:38

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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		06/06/25 09:08	06/06/25 14:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 14:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 14:30	1
1,4-Difluorobenzene (Surr)	93		70 - 130			06/06/25 09:08	06/06/25 14:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			06/06/25 14:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			06/07/25 03:21	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	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130			06/05/25 15:34	06/07/25 03:21	1
o-Terphenyl	122		70 - 130			06/05/25 15:34	06/07/25 03:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273	F1	10.0	mg/Kg			06/10/25 14:35	1

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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		06/06/25 09:08	06/06/25 14:50	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/06/25 09:08	06/06/25 14:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 14:50	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	06/06/25 09:08	06/06/25 14:50	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			06/06/25 14:50	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			06/07/25 03:35	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		06/05/25 15:34	06/07/25 03:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 03:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 03:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			06/05/25 15:34	06/07/25 03:35	1
o-Terphenyl	123		70 - 130			06/05/25 15:34	06/07/25 03:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		10.1	mg/Kg			06/10/25 14:56	1

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 15:11	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		06/06/25 09:08	06/06/25 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/06/25 09:08	06/06/25 15:11	1
1,4-Difluorobenzene (Surr)	98		70 - 130	06/06/25 09:08	06/06/25 15:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			06/06/25 15:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			06/07/25 04:06	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 0.5'

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	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		06/05/25 15:34	06/07/25 04:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			06/05/25 15:34	06/07/25 04:06	1
o-Terphenyl	119		70 - 130			06/05/25 15:34	06/07/25 04:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		10.0	mg/Kg			06/10/25 15:03	1

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/06/25 09:08	06/06/25 16:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			06/06/25 09:08	06/06/25 16:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130			06/06/25 09:08	06/06/25 16:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			06/06/25 16:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			06/07/25 04:23	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	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		06/05/25 15:34	06/07/25 04:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130			06/05/25 15:34	06/07/25 04:23	1
o-Terphenyl	119		70 - 130			06/05/25 15:34	06/07/25 04:23	1

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09
Date Collected: 06/05/25 09:44
Date Received: 06/05/25 15:30
Sample Depth: 1'

Lab Sample ID: 880-59027-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	121		10.0	mg/Kg			06/10/25 15:24	1	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Surrogate Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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)
880-59027-1	DS03	102	93
880-59027-2	DS07	102	95
880-59027-3	DS09	99	98
880-59027-4	DS09	102	98
LCS 880-111647/1-A	Lab Control Sample	92	90
LCSD 880-111647/2-A	Lab Control Sample Dup	93	93
MB 880-111647/5-A	Method Blank	93	97
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)
880-59027-1	DS03	115	122
880-59027-2	DS07	116	123
880-59027-3	DS09	114	119
880-59027-4	DS09	112	119
LCS 880-111637/2-A	Lab Control Sample	101	98
LCSD 880-111637/3-A	Lab Control Sample Dup	103	99
MB 880-111637/1-A	Method Blank	83	87
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-111647/5-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111647

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/06/25 09:08	06/06/25 11:46	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/06/25 09:08	06/06/25 11:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/06/25 09:08	06/06/25 11:46	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/06/25 09:08	06/06/25 11:46	1

Lab Sample ID: LCS 880-111647/1-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08728		mg/Kg		87	70 - 130
Toluene	0.100	0.08127		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08595		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1730		mg/Kg		87	70 - 130
o-Xylene	0.100	0.08822		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: LCSD 880-111647/2-A

Matrix: Solid

Analysis Batch: 111641

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111647

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1070		mg/Kg		107	70 - 130	20	35
Toluene	0.100	0.09750		mg/Kg		98	70 - 130	18	35
Ethylbenzene	0.100	0.1050		mg/Kg		105	70 - 130	20	35
m-Xylene & p-Xylene	0.200	0.2098		mg/Kg		105	70 - 130	19	35
o-Xylene	0.100	0.1052		mg/Kg		105	70 - 130	18	35

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

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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

Lab Sample ID: MB 880-111637/1-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111637

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		06/05/25 15:34	06/07/25 00:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 00:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/05/25 15:34	06/07/25 00:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			06/05/25 15:34	06/07/25 00:04	1
o-Terphenyl	87		70 - 130			06/05/25 15:34	06/07/25 00:04	1

Lab Sample ID: LCS 880-111637/2-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	981.5		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	866.0		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	98		70 - 130				

Lab Sample ID: LCSD 880-111637/3-A

Matrix: Solid

Analysis Batch: 111716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111637

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	999.9		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	878.3		mg/Kg		88	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	103		70 - 130						
o-Terphenyl	99		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-111712/1-A

Matrix: Solid

Analysis Batch: 111762

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			06/09/25 21:22	1

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-111712/2-A						Client Sample ID: Lab Control Sample					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 111762											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.5		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-111712/3-A						Client Sample ID: Lab Control Sample Dup					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 111762											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.6		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-59027-1 MS						Client Sample ID: DS03					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 111762											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	273	F1	250	559.5	F1	mg/Kg		114	90 - 110		

Lab Sample ID: 880-59027-1 MSD						Client Sample ID: DS03					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 111762											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	273	F1	250	560.7	F1	mg/Kg		115	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

GC VOA

Analysis Batch: 111641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8021B	111647
880-59027-2	DS07	Total/NA	Solid	8021B	111647
880-59027-3	DS09	Total/NA	Solid	8021B	111647
880-59027-4	DS09	Total/NA	Solid	8021B	111647
MB 880-111647/5-A	Method Blank	Total/NA	Solid	8021B	111647
LCS 880-111647/1-A	Lab Control Sample	Total/NA	Solid	8021B	111647
LCSD 880-111647/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111647

Prep Batch: 111647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	5035	
880-59027-2	DS07	Total/NA	Solid	5035	
880-59027-3	DS09	Total/NA	Solid	5035	
880-59027-4	DS09	Total/NA	Solid	5035	
MB 880-111647/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111647/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111647/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 111813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	Total BTEX	
880-59027-2	DS07	Total/NA	Solid	Total BTEX	
880-59027-3	DS09	Total/NA	Solid	Total BTEX	
880-59027-4	DS09	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 111637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015NM Prep	
880-59027-2	DS07	Total/NA	Solid	8015NM Prep	
880-59027-3	DS09	Total/NA	Solid	8015NM Prep	
880-59027-4	DS09	Total/NA	Solid	8015NM Prep	
MB 880-111637/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-111637/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-111637/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 111716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015B NM	111637
880-59027-2	DS07	Total/NA	Solid	8015B NM	111637
880-59027-3	DS09	Total/NA	Solid	8015B NM	111637
880-59027-4	DS09	Total/NA	Solid	8015B NM	111637
MB 880-111637/1-A	Method Blank	Total/NA	Solid	8015B NM	111637
LCS 880-111637/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	111637
LCSD 880-111637/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	111637

Analysis Batch: 111806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Total/NA	Solid	8015 NM	
880-59027-2	DS07	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

GC Semi VOA (Continued)

Analysis Batch: 111806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-3	DS09	Total/NA	Solid	8015 NM	
880-59027-4	DS09	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 111712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Soluble	Solid	DI Leach	
880-59027-2	DS07	Soluble	Solid	DI Leach	
880-59027-3	DS09	Soluble	Solid	DI Leach	
880-59027-4	DS09	Soluble	Solid	DI Leach	
MB 880-111712/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-111712/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-111712/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-59027-1 MS	DS03	Soluble	Solid	DI Leach	
880-59027-1 MSD	DS03	Soluble	Solid	DI Leach	

Analysis Batch: 111762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-59027-1	DS03	Soluble	Solid	300.0	111712
880-59027-2	DS07	Soluble	Solid	300.0	111712
880-59027-3	DS09	Soluble	Solid	300.0	111712
880-59027-4	DS09	Soluble	Solid	300.0	111712
MB 880-111712/1-A	Method Blank	Soluble	Solid	300.0	111712
LCS 880-111712/2-A	Lab Control Sample	Soluble	Solid	300.0	111712
LCSD 880-111712/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	111712
880-59027-1 MS	DS03	Soluble	Solid	300.0	111712
880-59027-1 MSD	DS03	Soluble	Solid	300.0	111712

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS03

Lab Sample ID: 880-59027-1

Date Collected: 06/05/25 09:38

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 14:30
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 14:30
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 03:21
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 03:21
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 14:35

Client Sample ID: DS07

Lab Sample ID: 880-59027-2

Date Collected: 06/05/25 09:40

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 14:50
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 14:50
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 03:35
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 03:35
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 14:56

Client Sample ID: DS09

Lab Sample ID: 880-59027-3

Date Collected: 06/05/25 09:42

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 15:11
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 15:11
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 04:06
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 04:06
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 15:03

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			111647	AA	EET MID	06/06/25 09:08
Total/NA	Analysis	8021B		1	111641	MNR	EET MID	06/06/25 16:33
Total/NA	Analysis	Total BTEX		1	111813	SM	EET MID	06/06/25 16:33

Eurofins Midland

Lab Chronicle

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Client Sample ID: DS09

Lab Sample ID: 880-59027-4

Date Collected: 06/05/25 09:44

Matrix: Solid

Date Received: 06/05/25 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 NM		1	111806	SM	EET MID	06/07/25 04:23
Total/NA	Prep	8015NM Prep			111637	FC	EET MID	06/05/25 15:34
Total/NA	Analysis	8015B NM		1	111716	TKC	EET MID	06/07/25 04:23
Soluble	Leach	DI Leach			111712	SMC	EET MID	06/06/25 15:48
Soluble	Analysis	300.0		1	111762	CH	EET MID	06/10/25 15:24

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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	06-30-25
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: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

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	EPA	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
- EPA = US Environmental Protection Agency
- 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: Pygmy 27 State 3H

Job ID: 880-59027-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-59027-1	DS03	Solid	06/05/25 09:38	06/05/25 15:30	0.5'
880-59027-2	DS07	Solid	06/05/25 09:40	06/05/25 15:30	1'
880-59027-3	DS09	Solid	06/05/25 09:42	06/05/25 15:30	0.5'
880-59027-4	DS09	Solid	06/05/25 09:44	06/05/25 15:30	1'

- 1
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- 14

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

Environment Testing

Xenco



880-59027 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Hadlie Green	Bill to: (if different)	Enselum/Hadlie Green
Company Name:	Enselum LLC	Company Name:	
Address:	601 N Marienfeld St. Ste 400	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	(432) 557-8895	Email:	hgreen@enselum.com / hgreen@enselum.com

Project Name:	Pygmy 27 State 3H	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:	08D2024350	Due Date:			
Project Location:	Lea County	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Tribitha Guadian				
P.O. #:	08D2024350				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
DS03	S	6/5/25	0938	0.5'	G	1	BTC K 8021			None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	
DS07	S	6/5/25	0940	1'	G	1	XXXX Chlorides 300				
DS09	S	6/5/25	0942	0.5'	G	1	XXXX TPH 8015				
DS09	S	6/5/25	0944	1'	G	1	XXXX				
NFE											
6/5/25											

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 Ti 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 Ti 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 <i>Tat</i>		6/5/25 1530			
3					
5					

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-59027-1

SDG Number: Lea County

Login Number: 59027

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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	



APPENDIX B

Excavation Guidance Document



August 20, 2025

New Mexico Oil Conservation Division

1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: Excavation Guidance Document
Pygmy 27 State Com #003H
Incident Numbers NAPP2509329614 & NAPP2509657158
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum) has prepared this document on behalf of COG Operating, LLC (COG), to provide guidance on safety precautions related to the proposed excavation near existing production equipment and lined containment. This guidance applies to the proposed excavation and applies only to the Pygmy 27 State Com #003H (Site), for which a Proposed Deferral Area Map is attached as Figure 1.

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Excavation Standard 29 Code of Federal Regulations (CFR) Part 1926 Sub-part P Section 1926.652(i) and 1926.652(j) and under the consultation of a Registered Professional Engineer (RPE). The document includes a review of the stability of adjacent structures and protection of employees from loose rocks, soil, and equipment and analysis of the following parameters:

- Soil types and conditions leading to cave-ins;
- Stability of engineered facility equipment with requested excavation;
- Protection of employees from materials and equipment that could fall or roll into an excavation; and
- Other hazardous conditions, including confined spaces.

This guidance document must be reviewed before starting any proposed excavation activities and kept on site if excavation activities are occurring. In addition, a copy of the OSHA Excavation Standard 29 CFR Part 1926 Sub-part P will be kept on site.

Review of OSHA Excavation Standards indicates the following guidance for general excavation activities:

- The walls of any excavated areas must be sloped to a maximum 1 horizontal to 1 vertical for Type B soils.
- OSHA Excavation Standard 29 CFR Part 1926 Sub-part P indicates the following:
 - Excavation below the level of the base or footing of any foundation or retaining wall poses a reasonable hazard to employees and should not be conducted without the removal of equipment adjacent to the proposed excavation and/or installation of physical safety measures such as shoring or other protective structures to prevent structural failure of the equipment foundation and to ensure safety to employees working near the proposed excavation.

COG Operating, LLC
Excavation Guidance Document
Pygmy 27 State Com #003H

- Employees shall be protected from excavated or other materials or equipment that could pose a hazard by falling or rolling into any excavation. Protection shall be provided by placing and keeping such materials or equipment at least two feet (.61 m) from the edge of excavations, or by the use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or by a combination of both if necessary.
- When surcharge loads from stored material or equipment, operating equipment, or traffic are present, a Competent Person shall determine the degree to which the actual slope must be reduced below the maximum allowable slope and shall assure that such a reduction is achieved. Surcharge loads from adjacent structures shall be evaluated in accordance with § 1926.651(i).

EXCAVATION ANALYSIS PARAMETERS

The following findings were observed at the Site:

- Type B soil was observed during the Site visit. Type B soil will be utilized for determining excavation slopes and excavation setbacks. A competent person will inspect the site daily and note any changes in soil type during excavation activities. If type A or type C soil is identified, the excavation slope and excavation setback will be modified to account for this change.
- The proposed excavation area entails a polygon with maximum dimensions of 143 feet by 48 feet directly adjacent to and beneath a lined containment containing production equipment and active pipelines as shown on Figure 2.
- Along the southern portion of the proposed excavation area are multiple production pipelines lying on supports of varying dimensions and a vertical separator supported by a circular concrete base. The production pipelines range in diameter from 1.25 inches to 4 inches. The vertical separator measures 4 feet in diameter with a height of 10 feet.
- The central portion of the proposed excavation area consists of multiple production pipelines supported by footings of varying dimensions and a horizontal separator supported by a concrete foundation. The production pipelines range in diameter from 1.25 inches to 4 inches. The horizontal separator measures 6 feet wide by 20 feet long.
- Along the northern portion of the proposed excavation area are multiple production pipelines supported by footings of varying dimensions and a heater treater supported by a circular concrete footer. The production pipelines range in diameter from 1.25 inches to 3.5 inches. The vertical separator measures 6 feet in diameter with a height of 20 feet.
- The production pipeline supports throughout the entire proposed excavation area range in dimensions of three inches wide by seven inches long up to fifteen inches wide by fifteen inches long.

ENGINEER RECOMMENDATIONS

Review of the above-mentioned parameters, OSHA regulations, and Site conditions observed during Site visits were completed and the following RPE recommendations were reached:

- The production pipelines that the proposed excavation area are supported by footings of varying dimensions. The beginning of the slope should be limited to beginning no less than two feet from the edge of any pipeline support per above stated OSHA guidelines. Review of the potential pipe stress and deflection during an excavation directly below pipelines, the pipelines can experience increased tension and compression causing increased hoop stress. Even if additional supports are installed in the process of excavation, the brief time they remain unsupported can cause pipe fatigue and eventually pipe failure. It is reasonable to assume that an increase in hoop stress

COG Operating, LLC
Excavation Guidance Document
Pygmy 27 State Com #003H

and increase of pipe fatigue on the pipeline system can exceed the engineered parameters and lead to pipeline failure resulting in an additional release. It is not recommended to excavate directly below any of the pipelines.

- Using the southern vertical separator structure bearing capacity in Boussinesq's circular footing equation, the bearing capacity would be undermined with slopes beginning less than two times the radius of the footing. The beginning of the slope should be limited to beginning no less than 4.6 feet from the edge of the vertical separator structure footing without substantial supports added to the structure.
- Using the central horizontal separator structure bearing capacity in Terzaghi's bearing capacity equation, the bearing capacity would be undermined with slopes of 30 degrees beginning less than 1 times the depth of requested excavation or 1 times the length of the skid, whichever is greater. The beginning of the slope should be limited to beginning no less than 20 feet from the edge of the horizontal separator structure footing without substantial supports added to the structures. This assumes cohesive soils with no shallow groundwater.
- Using the northern heater treater structure bearing capacity in Boussinesq's circular footing equation, the bearing capacity would be undermined with slopes beginning less than 2 times the radius of the footing. The beginning of the slope should be limited to beginning no less than 7.5 feet from the edge of the heater treater structure footing without substantial supports added to the structure.
- Due to the presence of production equipment and lined containment, excavation directly below any of the current lined containment area is not recommended and would require substantial deconstruction and/or additional support for equipment with the exception of the areas identified in Figure 2. These areas do lie directly below an engineered lined containment and excavation of the identified areas may result in loss of effectiveness or competency of the lined containment.

CONCLUSIONS

Based on the dimensions of the requested excavation and presence of adjacent structures, there is inadequate structure support to conduct excavation of the identified impacted soil in a manner that both protects personnel health and equipment stability with the exception of the areas identified in Figure 2.

Sincerely,

Ensolum, LLC

Brian Sulzberger
08/20/2025



Brian Sulzberger, PE
Associate Principal

cc: , COP
, COP

Appendices:

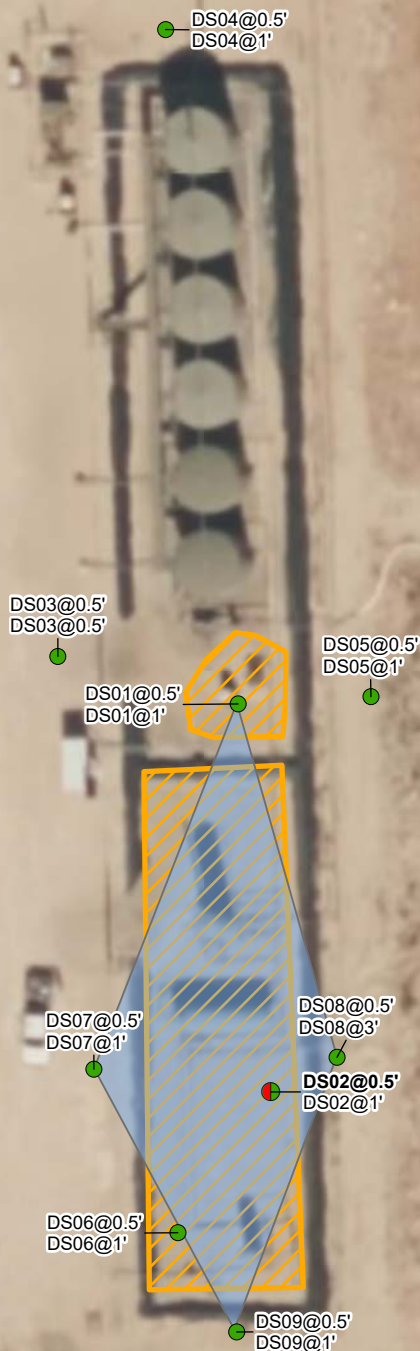
Figure 1 Deferral Location
Figure 2 Area of Interest Diagram
Appendix A Engineering Models



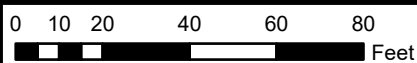
FIGURES

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
- ▨ Release Extent
- ▨ Deferral Area



Notes:
Sample ID @ Depth Below Ground Surface.

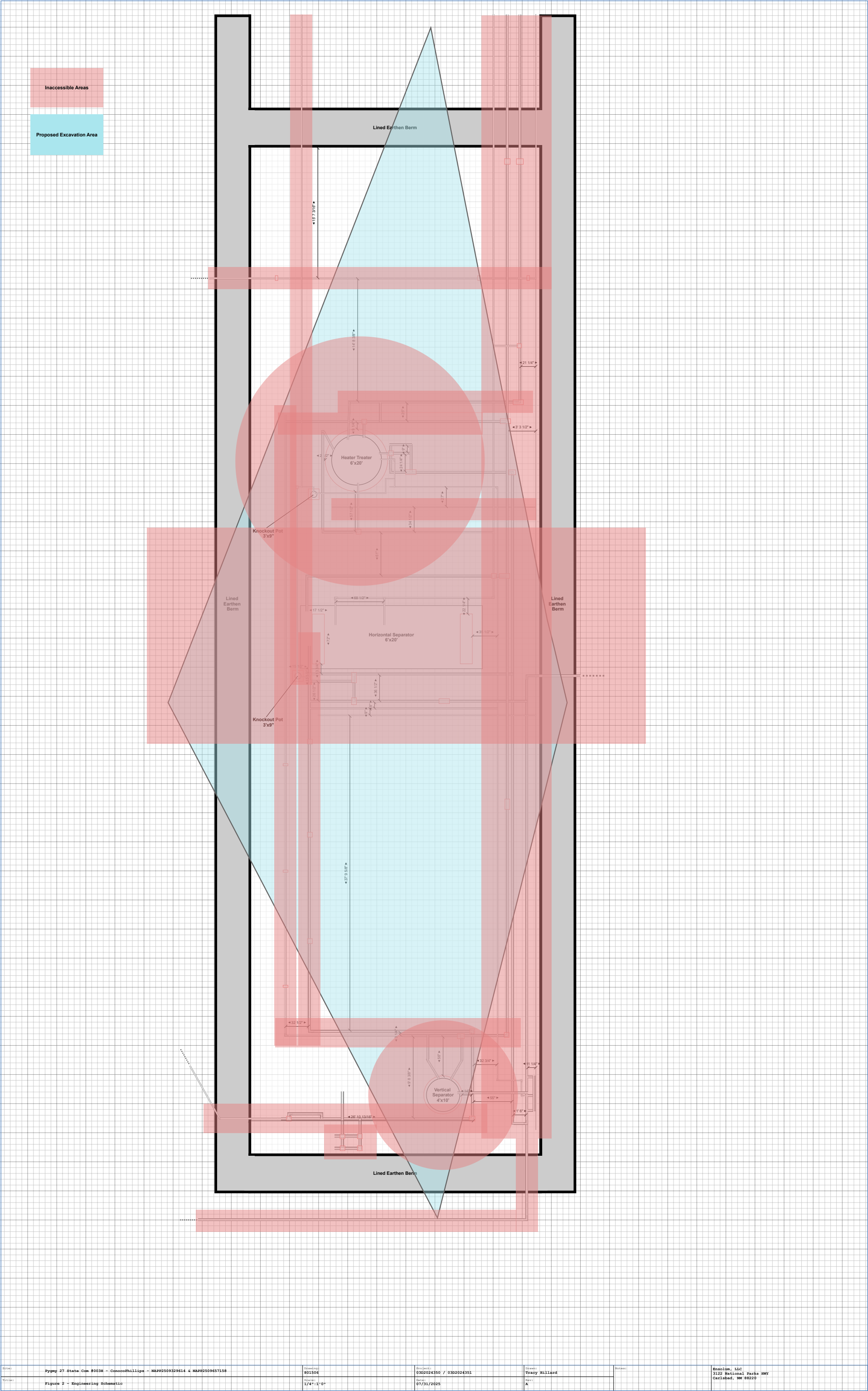


Sources: Environmental Systems Research Institute (ESRI)

**Deferral Location**

COG Operating, LLC
Pygmy 27 State Com #003H
Incident Numbers:
NAPP2509329614, NAPP2509657158
Unit B, Section 27, T 21S, R 33E
Lea County, New Mexico

FIGURE
1





Appendix A Engineering Models

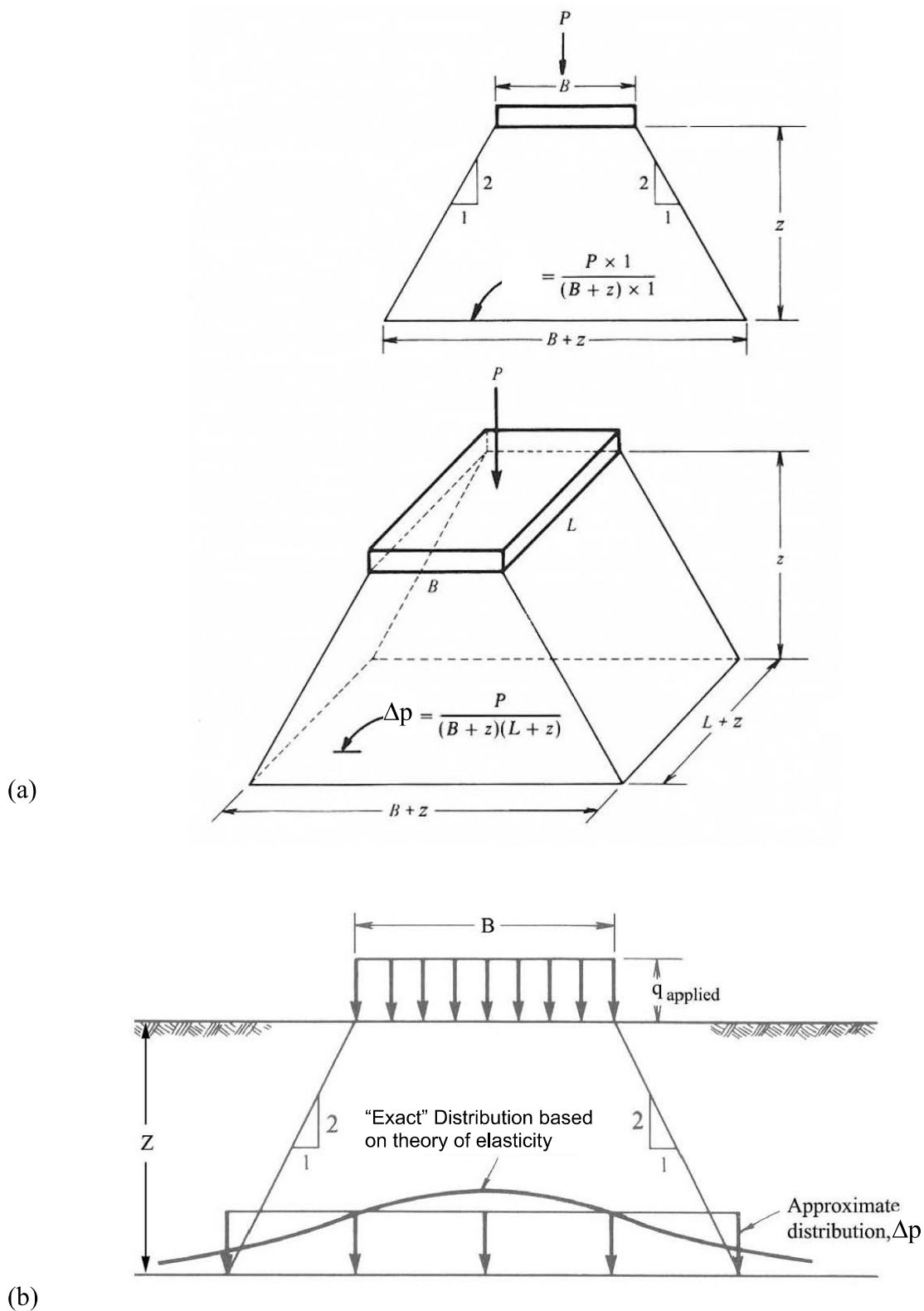


Figure 2-10. Distribution of vertical stress by the 2:1 method (after Perloff and Baron, 1976).

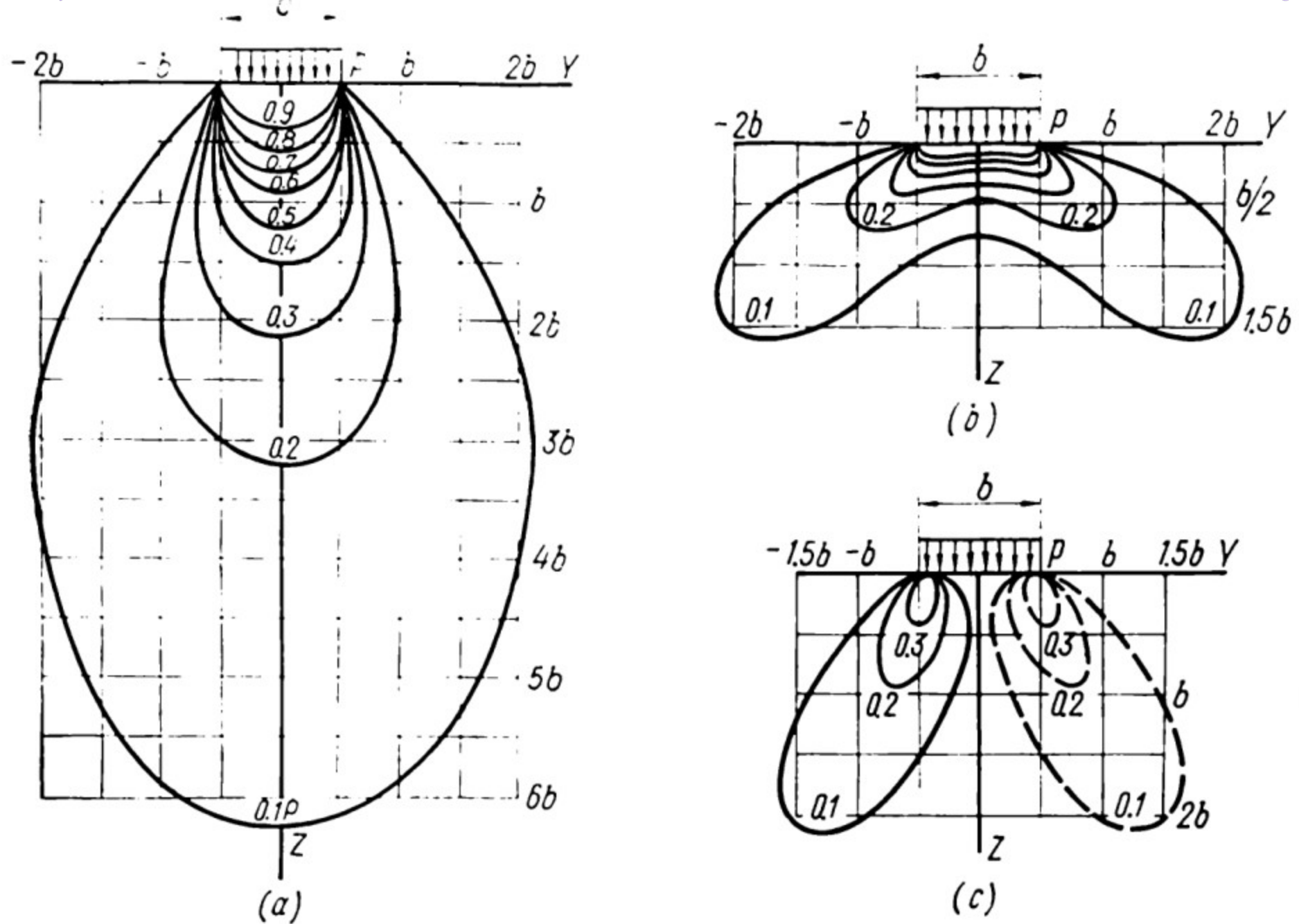
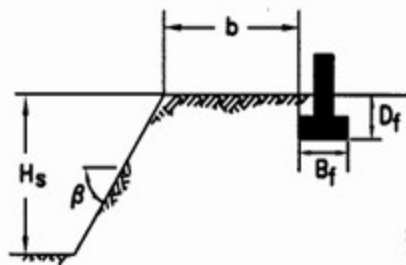


Fig. 49. Lines of equal stresses in a linearly deformable massif for the planar problem

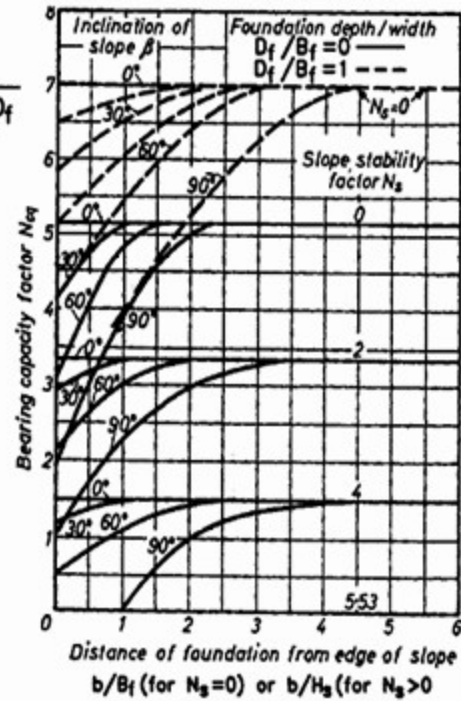
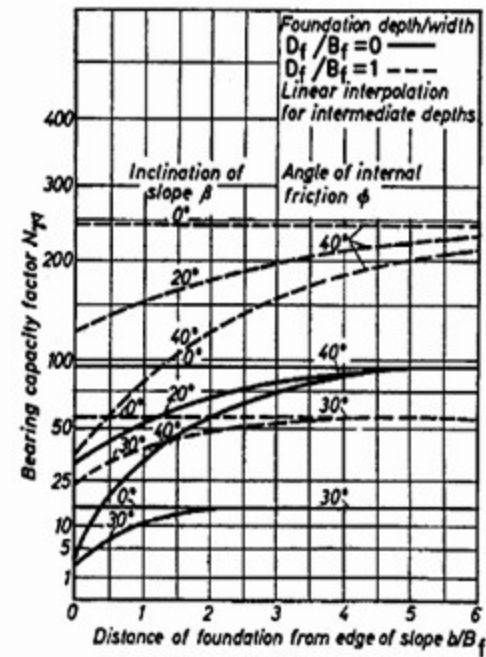
(a) isobars σ_z ; (b) lateral pressure σ_y ; (c) shears τ_{zx}



$$N_s = 0 \text{ (FOR } B_f < H_s)$$

$$N_s = \frac{\gamma H_s}{c} \text{ (FOR } B_f \geq H_s)$$

(d) Geometry

(e) Cohesive Soil ($\phi=0$)(f) Cohesionless Soil ($c=0$)

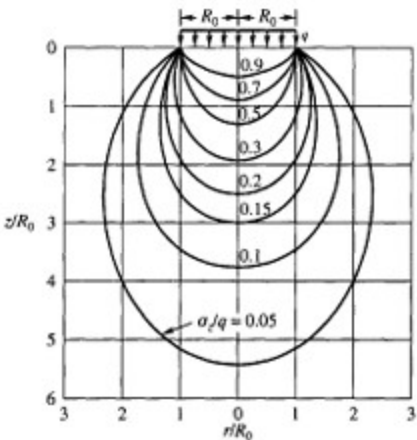


Figure 6.22 Pressure isobars based on Boussinesq equation for uniformly loaded circular footings

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QUESTIONS

Action 531769

QUESTIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2509329614
Incident Name	NAPP2509329614 PYGMY 27 STATE COM 003H @ FAPP2203851379
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Facility	[fAPP2203851379] Pygmy 27 St 3H Battery

Location of Release Source*Please answer all the questions in this group.*

Site Name	PYGMY 27 STATE COM 003H
Date Release Discovered	03/29/2025
Surface Owner	Private

Incident Details*Please answer all the questions in this group.*

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release*Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	Cause: Equipment Failure Valve Crude Oil Released: 5 BBL Recovered: 5 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 531769

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	More info needed to determine if this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: Jacob Laird Title: Environmental Engineer Email: jacob.laird@conocophillips.com Date: 12/04/2025
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QUESTIONS, Page 3

Action 531769

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 500 and 1000 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	601
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	03/29/2025
On what date will (or did) the final sampling or liner inspection occur	07/29/2025
On what date will (or was) the remediation complete(d)	07/29/2025
What is the estimated surface area (in square feet) that will be reclaimed	200
What is the estimated volume (in cubic yards) that will be reclaimed	7
What is the estimated surface area (in square feet) that will be remediated	0
What is the estimated volume (in cubic yards) that will be remediated	0

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 531769

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID:
	229137
	Action Number:
	531769
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112342028 LEA LAND LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	<i>Not answered.</i>
OR is the off-site disposal site, to be used, out-of-state	<i>Not answered.</i>
OR is the off-site disposal site, to be used, an NMED facility	<i>Not answered.</i>
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Jacob Laird Title: Environmental Engineer Email: jacob.laird@conocophillips.com Date: 12/04/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 531769

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
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	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 531769

QUESTIONS (continued)

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	520055
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/29/2025
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	250

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	0
What was the total volume (cubic yards) remediated	0
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	200
What was the total volume (in cubic yards) reclaimed	7
Summarize any additional remediation activities not included by answers (above)	NA
<i>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 (in .pdf format) 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.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Jacob Laird Title: Environmental Engineer Email: jacob.laird@conocophillips.com Date: 12/04/2025

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Action 531769

QUESTIONS (continued)

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	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 531769

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 531769
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	12/23/2025