



October 10, 2024

New Mexico Oil Conservation Division  
506 W. Texas Ave  
Artesia, NM 88210

RE: **East Caza- Closure Request Report**  
Incident Number: nAPP2424223470  
GPS: 32.06908°, -103.28072°  
Lea County, New Mexico  
ESRR Project No. 2419

To Whom It May Concern:

Earth Systems Response & Restoration (ESRR) presents the following Closure Request Report (CRR) detailing excavation activities and subsequent soil sampling events associated with an inadvertent release of crude oil at the East Caza (Site), owned by Salt Creek Midstream, LLC and operated by SCM Operations, LLC (Salt Creek), OGRID# 330368. Based on completed remedial actions and laboratory analytical results from recent soil sampling events, Salt Creek is requesting No Further Action (NFA) at the Site.

### Site Location & Incident Description

The Site is located in Unit I, Section 05, Township 26 South, Range 36 East, in Lea County, New Mexico (32.06908°, -103.28072°) and is associated with oil and gas exploration and production operations on Private Land (**Figure 1**).

On August 23, 2024, a pig receiver was opened prior to the drainage of residual fluids, causing the release of approximately 6 barrels (bbls) of crude oil onto native soils within a Salt Creek established right-of-way. Due to absorption of fluids by the sandy native soils, no fluids were recovered. ESRR conducted initial site assessment activities and mapped the observed release footprint on August 26, 2024, hereafter referred to as the Area of Concern (AOC) (**Figure 2**). Salt Creek gave notice to the New Mexico Oil Conservation Division (NMOCD) on August 28, 2024, by Notification of Release (NOR) and was subsequently assigned Incident Number nAPP2424223470. On September 12, 2024, Salt Creek reported the release on a Corrective Action Form C-141 (Form C-141).

### Site Characterization

ESRR characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). The following proximities were estimated:

- Greater than 5 miles of any continuously flowing watercourse or any other significant watercourse;
- Between ½ and 1 mile of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- Between 1 and 5 miles of any occupied permanent residence, school, hospital, institution or church;
- Between ½ and 1 mile of any spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Between ½ and 1 mile of any other freshwater well or spring;

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- Between 1 and 5 miles of any incorporated municipal boundary or a defined municipal fresh water well field covered under a municipal ordinance;
- Between ½ and 1 mile of any wetland;
- Greater than 5 miles of any subsurface mine;
- Greater than 5 miles of any unstable area (i.e. high karst potential); and
- Greater than 5 miles of a 100-year floodplain.

Receptor details used to determine the Site characterization are included in **Figure 3** and **Figure 4**. **Referenced Well Records** for the closest depth to water wells are attached.

Based on the results from the desktop review and no depth to water well within 0.5 mile of the Site with data no greater than 25 years old, the following Closure Criteria was applied:

<b>Constituents of Concern (COCs)</b>	<b>Closure Criteria<sup>‡</sup></b>
Chloride	600 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	100 mg/kg
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	50 mg/kg

<sup>‡</sup>The reclamation concentration requirements of 600 mg/kg Chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

TPH= Gasoline Range Organics + Diesel Range Organics + Oil Range Organics

Laboratory Analytical Methods used: Environmental Protection Agency (EPA) 300.0, EPA 8015 NM, EPA 8021 B

## Remediation Activities

From September 6 through September 21, 2024, ESRR conducted excavation activities via hydrovac and hand digging to address residual impacts associated with the AOC. Excavation activities were driven by field screening soil for chloride using HACH® chloride QuanTab® test strips combined with visual and olfactory observations.

Following the removal of soil, ESRR collected 5-point composite soil samples at a sampling frequency of 200 square feet from the excavation floor (CS-1 through CS-3) and sidewalls (SW-1 through SW-3). The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon resealable plastic bag. The confirmation soil samples were placed directly into pre-cleaned jars, packed with minimal void space, labeled, and placed on ice. The confirmation soil samples were transported under strict chain-of-custody procedures, to Eurofins in Carlsbad, New Mexico, for analysis of the COCs.

Laboratory analytical results indicated that concentrations of COCs for confirmation soil samples (SW-1 through SW-3) were below the applicable Site Closure Criteria and the reclamation standard.

Laboratory analytical results indicated that concentrations of COCs for confirmation soil samples (CS-1 through CS-3) were above the applicable Site Closure Criteria and the reclamation standard for Total Petroleum Hydrocarbon (TPH), specifically Diesel Range Organics (DRO), ranging from 129 to 397 mg/kg at 2.5 feet below ground surface (bgs).

## Continued Remediation Activities

Due to the concentrations of COCs in laboratory analytical results above, ESRR conducted further excavation activities, removing an additional 6 inches of impacted soil from the excavation floor to a final depth of 3 feet bgs. A variance to the 2-business day sampling notification was requested by Salt Creek

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and approved by the NMOCD on September 12, 2024. ESRR collected 5-point composite confirmation soil samples (CS-1 through CS-3) handled, transported, and analyzed as previously described.

Laboratory analytical results indicated that concentrations of COCs for the additional confirmation soil samples (CS-1 through CS-3) were below the applicable Site Closure Criteria and the reclamation standard. Laboratory results are summarized in **Table 1**, included in the attachments. The locations of all final confirmation soil samples are shown in **Figure 5**.

Approximately 40 cubic yards (CY) of impacted soil was removed from the Site and transported to the Northern Delaware Basin Disposal in Jal, New Mexico under Salt Creek approved manifests. Upon receipt of the final confirmation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. The final soil cover was contoured to match the Sites pre-existing grade to prevent ponding of water and erosion.

### Closure Request

Based on laboratory analytical results for all final confirmation soil samples, Salt Creek believes that residual soil impacts associated with the inadvertent release have been excavated and removed from the Site. Salt Creek believes the completed remedial actions meet the requirements set forth in NMAC 19.15.29.13 regulations in order to be protective of human health, the environment, and groundwater. As such, NFA appears warranted at this time, and Salt Creek requests Closure of this CRR associated with Incident Number nAPP2424223470.

If you have any questions or comments, please do not hesitate to contact Gilbert Moreno at (832) 541-7719 or [gmoreno@earthsys.net](mailto:gmoreno@earthsys.net). Documentation of correspondence and notifications and Executed chain-of-custody forms and laboratory analytical reports are attached.

Sincerely,

**EARTH SYSTEMS RESPONSE & RESTORATION**

A handwritten signature in black ink, appearing to read "Gilbert Moreno".

Gilbert Moreno  
Carlsbad Operations Manager-Project Geologist

cc: Susan Worthen, Salt Creek Midstream

#### Attachments:

- Figure 1 - Site Map
- Figure 2 - Area of Concern
- Figure 3 - Ground Water
- Figure 4 - Karst Potential
- Referenced Well Records
- Table 1 – Soil Sample Analytical Results
- Figure 5 - Excavation Soil Sample Locations
- Photographic Documentation
- NMOCD Email Documentation & Correspondance
- Executed Chain-of-Custody Forms and Laboratory Analytical Reports



**Figure 1 – Site Map**

Salt Creek Midstream – East Caza  
GPS: 32.069083, -103.280722  
Lea County, New Mexico

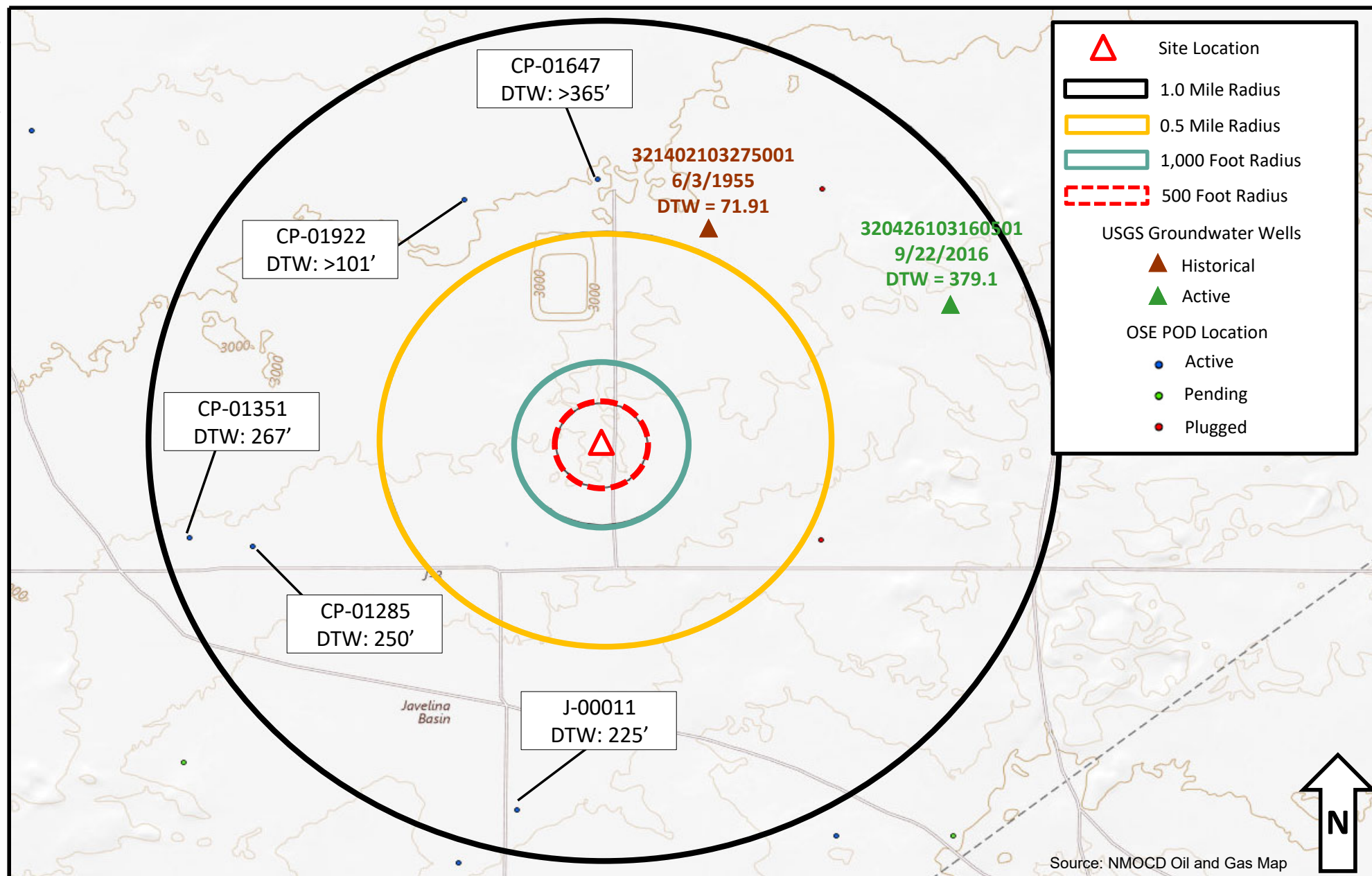






**Figure 2 – Area of Concern**

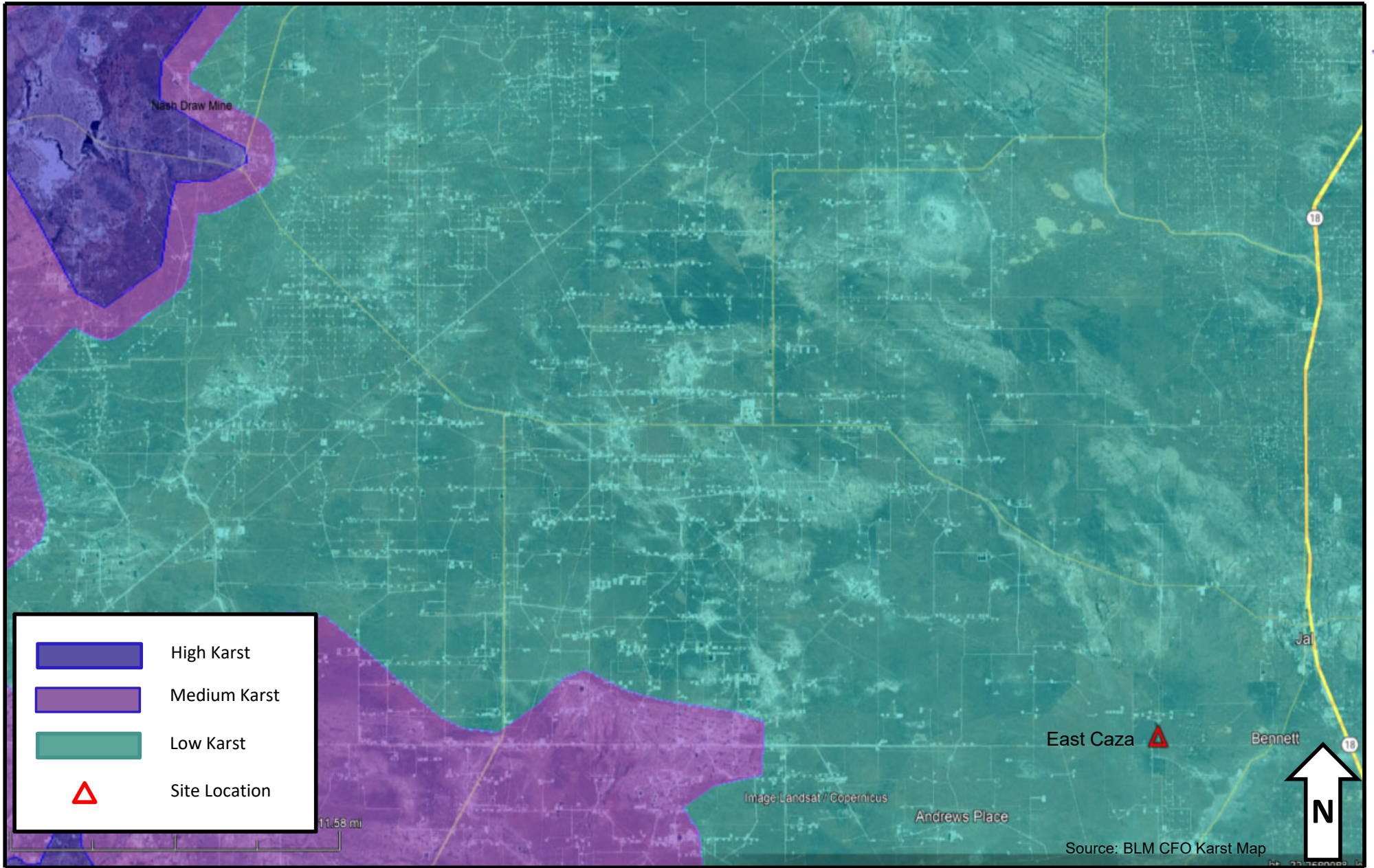
Salt Creek Midstream – East Caza  
GPS: 32.069083, -103.280722  
Lea County, New Mexico



**Figure 3 – Ground Water**

Salt Creek Midstream – East Caza  
GPS: 32.069083, -103.280722  
Lea County, New Mexico





**Figure 4 – Karst Potential**

Salt Creek Midstream – East Caza  
GPS: 32.069083, -103.280722  
Lea County, New Mexico





# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

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[illegible]

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)


FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (VERSION 01/20/2022)	
FILE NO.	CP-1922	POD NO.	1
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2
210S 310E D5 312			

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	14	14	Sand, fine-grained, poorly graded, Tan Brown	Y ✓ N	
	14	80	66	Sand, fine-grained, poorly graded, poorly consolidated, Tan Brown	Y ✓ N	
	80	101	21	Sand, fine-grained, poorly graded, with Caliche, Tan Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

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: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. DTW-16  OSE DIT SEP 30 2022 PM 1:25	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt	

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 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 Jackie D. Atkins SIGNATURE OF DRILLER / PRINT SIGNEE NAME	9/29/2022 DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO. <u>CD-1922</u>	POD NO. <u>1</u>	TRN NO. <u>733954</u>
LOCATION <u>2165. 316E. 05 312</u>	WELL TAG ID NO.	PAGE 2 OF 2



Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 733954  
File Nbr: CP 01922  
Well File Nbr: CP 01922 POD 1

Oct. 04, 2022

ANDREW PARKER  
AMEREDEV OPERATING LLC  
2901 VIA FORTUNA SUITE 600  
AUSTIN, TX 78746

Greetings:

The above numbered permit was issued in your name on 09/14/2022.

The Well Record was received in this office on 09/30/2022, stating that it had been completed on 09/21/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/14/2023.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

drywell

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 733954  
File Nbr: CP 01922  
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A handwritten signature in black ink that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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*Copy*

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S) CP-1285			
	WELL OWNER NAME(S) DINWIDDIE CATTLE COMPANY, LLC & ATKINS ENGINEERING A				PHONE (OPTIONAL) 575-354-2489			
	WELL OWNER MAILING ADDRESS P.O. BOX 3156				CITY ROSWELL		STATE NM	ZIP 88202
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 03	SECONDS 55	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 103	17	37	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE 1/4, SW 1/4, SW 1/4, SECTION 05, TOWNSHIP 26 SOUTH, RANGE 36 EAST N.M.P.M								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1607		NAME OF LICENSED DRILLER LUIS A. (TONY) DURAN			NAME OF WELL DRILLING COMPANY DURAN DRILLING		
	DRILLING STARTED 7/01/15	DRILLING ENDED 7/6/15	DEPTH OF COMPLETED WELL (FT) 511	BORE HOLE DEPTH (FT) 510	DEPTH WATER FIRST ENCOUNTERED (FT) 250			
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 2015 JUL 13 11:00 AM			
	DRILLING FLUID: <input type="radio"/> AIR <input type="radio"/> MUD				ADDITIVES - SPECIFY: DRILLING MUD			
	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	190	16	STEEL	STEEL PERF	10	1/4	-
	190	510	16	STEEL PERF	STEEL	10	1/4	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	20	16	20 BGS 80 LBS CEMENT		MIXER		
	20	510	16	36 YARDS 1/4 GRAVEL PACK				

FOR OSE INTERNAL USE

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

FILE NUMBER	CP-1285	POD NUMBER	TRN NUMBER	604512
LOCATION	26S.36E.5.3.3.3			

PAGE 1 OF 2

#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST; RIG SUPERVISION

## 6. SIGNATURE

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	CP-1285	POD NUMBER	TRN NUMBER
LOCATION	26S.36E.5.3.3.3	Comm.	PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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*Copy*

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S) CP-1285				
	WELL OWNER NAME(S) DINWIDDIE CATTLE COMPANY, LLC & ATKINS ENGINEERING A				PHONE (OPTIONAL) 575-354-2489				
	WELL OWNER MAILING ADDRESS P.O. BOX 3156				CITY ROSWELL		STATE NM		
					ZIP 88202				
	WELL LOCATION (FROM GPS)	DEGREES		MINUTES		SECONDS		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LATITUDE	32	03	55	N	LONGITUDE		103
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE 1/4, SW 1/4, SW 1/4, SECTION 05, TOWNSHIP 26 SOUTH, RANGE 36 EAST N.M.P.M									
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1607		NAME OF LICENSED DRILLER LUIS A. (TONY) DURAN			NAME OF WELL DRILLING COMPANY DURAN DRILLING			
	DRILLING STARTED 7/01/15		DRILLING ENDED 7/6/15		DEPTH OF COMPLETED WELL (FT) 511		BORE HOLE DEPTH (FT) 510		
					DEPTH WATER FIRST ENCOUNTERED (FT) 250				
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)							STATIC WATER LEVEL IN COMPLETED WELL (FT) 2015 JUL 13 11:00 AM	
	DRILLING FLUID: <input type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY: DRILLING MUD								
	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	190	16	STEEL	STEEL PERF	10	1/4	-	
	190	510	16	STEEL PERF	STEEL	10	1/4	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	20	16	20 BGS 80 LBS CEMENT		MIXER			
	20	510	16	36 YARDS 1/4 GRAVEL PACK					

FOR OSE INTERNAL USE

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

FILE NUMBER	CP-1285	POD NUMBER	TRN NUMBER	604512
LOCATION	26S.36E.5.3.3.3			

PAGE 1 OF 2

## 1. HYDROGEOLOGIC LOG OF WELL

### A. TEST: RIG SUPERVISION

**SIGNATURE**

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	CP-1285	POD NUMBER	TRN NUMBER
LOCATION	26S.36E.5.3.3.3		comm.   PAGE 2 OF 2



Table 1  
SOIL SAMPLE ANALYTICAL RESULTS  
East Caza  
Lea County, New Mexico



**SALT CREEK  
MIDSTREAM**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Confirmation Soil Samples - nAPP2424223470									
CS-1	09/11/24	2.5	<0.00199	<0.00398	<50.0	129	<50.0	129	13.9
CS-1	09/13/24	3	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	10.90
CS-2	09/11/24	2.5	<0.00201	<0.00402	<49.7	397	<49.7	397	77.9
CS-2	09/13/24	3	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	7.06
CS-3	09/11/24	2.5	<0.00202	<0.00404	<49.9	192	<49.9	192	<4.98
CS-3	09/13/24	3	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	7.40
SW-1	09/11/24	0-2.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<4.99
SW-2	09/11/24	0-2.5	<0.00200	<0.00400	<50.3	<50.3	<50.3	<50.3	<4.97
SW-3	09/11/24	0-2.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<5.00

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

NMOCD: New Mexico Oil Conservation Division

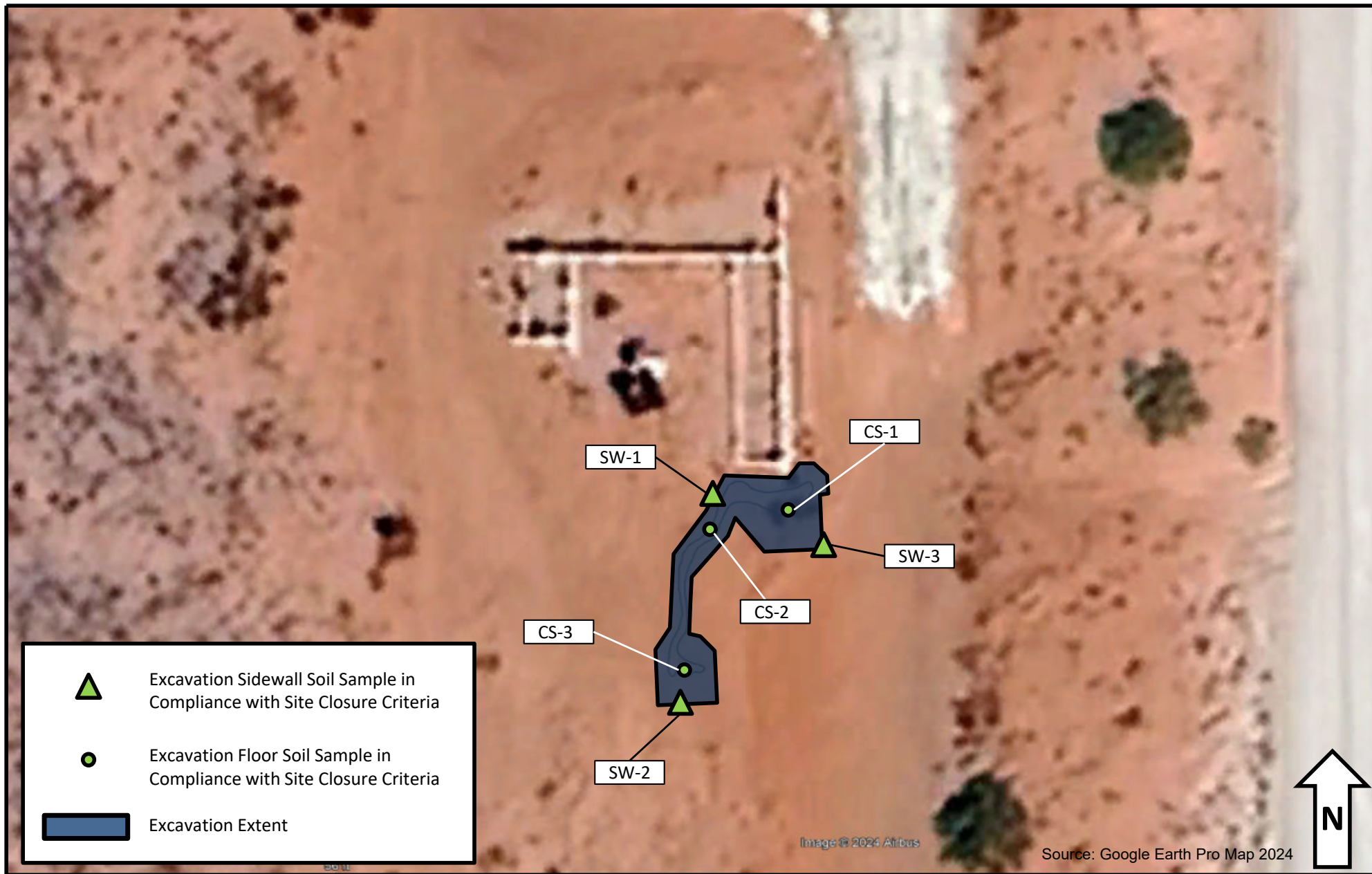
NMAC: New Mexico Administrative Code

Text in "grey" represents excavated soil samples

Concentrations in **bold and highlighted** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard<sup>+</sup> for Soils Impacted by a Release

<sup>+</sup>The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.





**Figure 5 – Excavation Soil Sample Locations**

Salt Creek Midstream – East Caza  
GPS: 32.069083, -103.280722  
Lea County, New Mexico



East Caza- Closure Request Report  
Incident Number nAPP242423470  
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**PHOTO 1:** Northeast view of AOC during initial response. 08/26/2024



**PHOTO 2:** Southwest view of AOC during initial response. 08/26/2024



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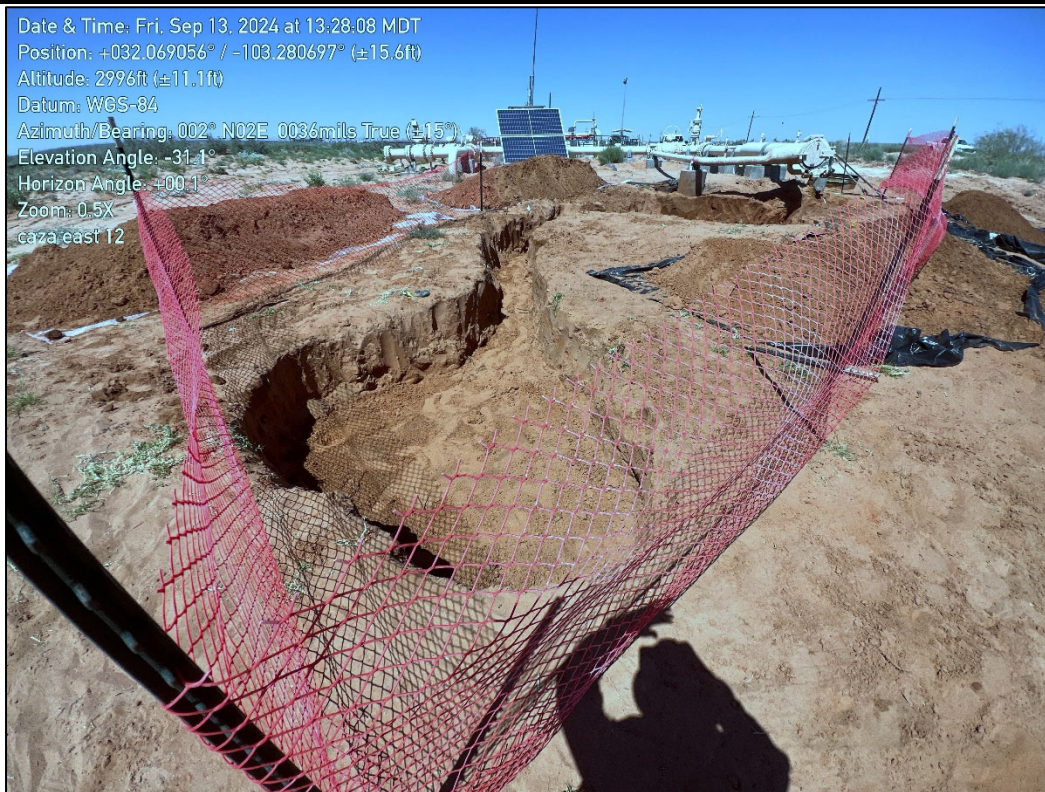
**PHOTO 3:** Southeast view of excavation extent. 9/6/2024



**PHOTO 4:** Western view of excavation extent. 9/11/2024



East Caza- Closure Request Report  
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**PHOTO 5:** Northeast view of excavation extent. 9/13/2024



**PHOTO 6:** Southwest view during restoration activities. 9/21/2024



East Caza- Closure Request Report  
Incident Number nAPP2424223470  
GPS: 32.06908°, -103.28072°



**PHOTO 7:** Northeast view during restoration activities. 9/21/2024



**PHOTO 8:** Southeast view during restoration activities. 9/21/2024

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

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

QUESTIONS

Action 381432

QUESTIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 381432
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2424223470
Incident Name	NAPP2424223470 EAST CAZA @ 0
Incident Type	Oil Release
Incident Status	Notification Accepted

Location of Release Source	
Site Name	East Caza
Date Release Discovered	08/23/2024
Surface Owner	Private

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	350
What is the estimated number of samples that will be gathered	6
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/11/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	Gilbert Moreno (832) 541-7719
Please provide any information necessary for navigation to sampling site	32.069010°, -103.280755° From the intersection of Hwy 128 and Battle Axe Road, Drive southeast on Hwy 128 for 8.46 miles, Turn South onto the lease road; Drive south for 1.65 miles, Turn West; Drive West for 400 ft. and turn South; Drive South for 3.32 miles; Stop and walk west for 109 ft.

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

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

CONDITIONS  
  
Action 381432

CONDITIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 381432
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
sworthen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/6/2024



Outlook

---

**RE: [EXTERNAL] nAPP2424223470 Sampling Activities - Variance Request**

---

**From** Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>

**Date** Thu 9/12/2024 12:44 PM

**To** Gilbert Moreno <gmoreno@earthsys.net>

**Cc** Worthen, Susan <Susan.Worthen@scmid.com>; Kristopher Williams <kwilliams@earthsys.net>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Good afternoon Gilbert,

Your variance request for the 2- business day sampling notification is approved.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

Thank you,  
Scott

**Scott Rodgers** • Environmental Specialist – Adv.

Environmental Bureau

EMNRD - Oil Conservation Division

8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113

505.469.1830 | [scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)

<http://www.emnrd.nm.gov/ocd>



---

**From:** Gilbert Moreno <gmoreno@earthsys.net>

**Sent:** Thursday, September 12, 2024 1:20 PM

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

**Cc:** Worthen, Susan <Susan.Worthen@scmid.com>; Kristopher Williams <kwilliams@earthsys.net>

**Subject:** [EXTERNAL] nAPP2424223470 Sampling Activities - Variance Request

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

Hello,

Earth Systems R & R (ESRR) on behalf of Salt Creek Midstream would like to request a variance to the 2-business day sampling notification. Lab analytical data has confirmed further remediation will be required to meet the Closure Criteria and/ or Reclamation Standard. ESRR will be conducting the continued remediation on September 13, 2024, and anticipates conducting soil sampling activities on the

same day if granted a variance. A Notification of Sampling (C-141N) will be followed up based on approval of this request.

<b>Proposed Time:</b>	08:00-17:00 MST
<b>Site Name:</b>	Caza East 12
<b>Incident Number:</b>	nAPP2424223470
<b>Sampling Surface Area:</b>	600 sq. ft.
<b>Samples to be collected:</b>	3
<b>Sampling Date:</b>	09/13/2024
<b>Who to Contact:</b>	Gilbert Moreno P: 832-541-7719
<b>Site GPS:</b>	32.069010°, -103.280755°
<b>Navigation to Site:</b>	From the intersection of Hwy 128 and Battle Axe Road, Drive southeast on Hwy 128 for 8.46 miles, Turn South onto the lease road; Drive south for 1.65 miles, Turn West; Drive West for 400 ft. and turn South; Drive South for 3.32 miles; Stop and walk west for 109 ft.

**Gilbert Moreno** | Carlsbad Operations Manager- Project Geologist  
1910 Resource Ct | Carlsbad NM, 88220  
O. 575.323.9034 M. (832) 541-7719 | [gmoreno@earthsys.net](mailto:gmoreno@earthsys.net)





**District I**  
1625 N. French Dr., Hobbs, NM 88240  
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Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 383275

QUESTIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 383275
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2424223470
Incident Name	NAPP2424223470 EAST CAZA @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Received

Location of Release Source	
Site Name	East Caza
Date Release Discovered	08/23/2024
Surface Owner	Private

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	600
What is the estimated number of samples that will be gathered	3
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/13/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Gilbert Moreno P: 832-541-7719
Please provide any information necessary for navigation to sampling site	From the intersection of Hwy 128 and Battle Axe Road, Drive southeast on Hwy 128 for 8.46 miles, Turn South onto the lease road; Drive south for 1.65 miles, Turn West; Drive West for 400 ft. and turn South; Drive South for 3.32 miles; Stop and walk west for 109 ft.

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

CONDITIONS  
  
Action 383275

CONDITIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 383275
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
sworthen	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/12/2024



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Gilbert Moreno  
Earth Systems Response and Restoration  
4115 South County Road 1297  
Odessa, Texas 79765

Generated 9/12/2024 3:08:47 PM Revision 1

## JOB DESCRIPTION

Salt Creek - Caza East 12"  
Lee County, NM

## JOB NUMBER

880-48261-1

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

*Brianna Teel*

Authorized for release by  
Brianna Teel, Project Manager  
[Brianna.Teel@et.eurofinsus.com](mailto:Brianna.Teel@et.eurofinsus.com)  
(432)704-5440

Generated  
9/12/2024 3:08:47 PM  
Revision 1

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Laboratory Job ID: 880-48261-1  
SDG: Lee County, NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
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
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.
α	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: Earth Systems Response and Restoration  
Project: Salt Creek - Caza East 12"

Job ID: 880-48261-1

**Job ID: 880-48261-1**

**Eurofins Midland**

### Job Narrative 880-48261-1

#### REVISION

The report being provided is a revision of the original report sent on 9/12/2024. The report (revision 1) is being revised due to Revised to correct sampel depths.

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 9/11/2024 12:07 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: SW-1 (880-48261-1), SW-2 (880-48261-2) and SW-3 (880-48261-3).

#### **GC VOA**

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-90478 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-90478/2).

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-90502/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-48165-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-90502 and analytical batch 880-90478 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-1 (880-48261-1). 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.

#### **Diesel Range Organics**

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

#### **HPLC/IC**

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

Eurofins Midland



## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

Client Sample ID: SW-1

Lab Sample ID: 880-48261-1

Date Collected: 09/11/24 08:25

Matrix: Solid

Date Received: 09/11/24 12:07

Sample Depth: 0-2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 17:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 17:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 17:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/11/24 12:26	09/11/24 17:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 17:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/11/24 12:26	09/11/24 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	161	S1+	70 - 130	09/11/24 12:26	09/11/24 17:08	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/11/24 12:26	09/11/24 17:08	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/11/24 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/11/24 19:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/11/24 10:57	09/11/24 19:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/11/24 10:57	09/11/24 19:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/11/24 10:57	09/11/24 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/11/24 10:57	09/11/24 19:09	1
o-Terphenyl	91		70 - 130	09/11/24 10:57	09/11/24 19:09	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			09/11/24 19:26	1

Client Sample ID: SW-2

Lab Sample ID: 880-48261-2

Date Collected: 09/11/24 08:30

Matrix: Solid

Date Received: 09/11/24 12:07

Sample Depth: 0-2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 18:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 18:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 18:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/11/24 12:26	09/11/24 18:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/24 12:26	09/11/24 18:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/11/24 12:26	09/11/24 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	09/11/24 12:26	09/11/24 18:55	1

Eurofins Midland

## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

Client Sample ID: SW-2

Date Collected: 09/11/24 08:30

Date Received: 09/11/24 12:07

Sample Depth: 0-2.5

Lab Sample ID: 880-48261-2

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	09/11/24 12:26	09/11/24 18:55	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			09/11/24 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/11/24 19:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		09/11/24 10:57	09/11/24 19:24	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		09/11/24 10:57	09/11/24 19:24	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/11/24 10:57	09/11/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/11/24 10:57	09/11/24 19:24	1
o-Terphenyl	110		70 - 130				09/11/24 10:57	09/11/24 19:24	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			09/11/24 19:35	1

Client Sample ID: SW-3

Date Collected: 09/11/24 08:35

Date Received: 09/11/24 12:07

Sample Depth: 0-2.5

Lab Sample ID: 880-48261-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/11/24 12:26	09/11/24 19:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/11/24 12:26	09/11/24 19:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/11/24 12:26	09/11/24 19:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/11/24 12:26	09/11/24 19:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/11/24 12:26	09/11/24 19:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/11/24 12:26	09/11/24 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/11/24 12:26	09/11/24 19:22	1
1,4-Difluorobenzene (Surr)	81		70 - 130	09/11/24 12:26	09/11/24 19:22	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/24 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/11/24 19:40	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

Client Sample ID: SW-3  
Date Collected: 09/11/24 08:35  
Date Received: 09/11/24 12:07  
Sample Depth: 0-2.5

Lab Sample ID: 880-48261-3  
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/11/24 10:57	09/11/24 19:40	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/11/24 10:57	09/11/24 19:40	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/11/24 10:57	09/11/24 19:40	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	79		70 - 130				09/11/24 10:57	09/11/24 19:40	1	
o-Terphenyl	80		70 - 130				09/11/24 10:57	09/11/24 19:40	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			09/11/24 19:44	1	

## Surrogate Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee 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)
880-48165-A-1-D MS	Matrix Spike	103	103
880-48165-A-1-E MSD	Matrix Spike Duplicate	131 S1+	108
880-48261-1	SW-1	161 S1+	99
880-48261-2	SW-2	117	88
880-48261-3	SW-3	108	81
LCS 880-90502/1-A	Lab Control Sample	137 S1+	91
LCSD 880-90502/2-A	Lab Control Sample Dup	119	88
MB 880-90502/5-A	Method Blank	61 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)
880-48246-A-1-C MS	Matrix Spike	110	101
880-48246-A-1-D MSD	Matrix Spike Duplicate	99	92
880-48261-1	SW-1	89	91
880-48261-2	SW-2	106	110
880-48261-3	SW-3	79	80
LCS 880-90510/2-A	Lab Control Sample	106	101
LCSD 880-90510/3-A	Lab Control Sample Dup	106	100
MB 880-90510/1-A	Method Blank	76	80

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl



## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

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

Lab Sample ID: MB 880-90502/5-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/11/24 10:26	09/11/24 12:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	61	S1-	70 - 130	09/11/24 10:26	09/11/24 12:39	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/11/24 10:26	09/11/24 12:39	1

Lab Sample ID: LCS 880-90502/1-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09641		mg/Kg		96	70 - 130
Toluene	0.100	0.1071		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1124		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2307		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1128		mg/Kg		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-90502/2-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09749		mg/Kg		97	70 - 130	1	35
Toluene	0.100	0.1036		mg/Kg		104	70 - 130	3	35
Ethylbenzene	0.100	0.1048		mg/Kg		105	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2150		mg/Kg		108	70 - 130	7	35
o-Xylene	0.100	0.1052		mg/Kg		105	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-48165-A-1-D MS

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1158		mg/Kg		116	70 - 130
Toluene	<0.00200	U	0.100	0.07906		mg/Kg		79	70 - 130

Eurofins Midland

## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

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

Lab Sample ID: 880-48165-A-1-D MS

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.07448		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1529		mg/Kg		76	70 - 130
o-Xylene	<0.00200	U	0.100	0.07384		mg/Kg		74	70 - 130

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

Lab Sample ID: 880-48165-A-1-E MSD

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.1016		mg/Kg		102	70 - 130	13	35
Toluene	<0.00200	U	0.100	0.09557		mg/Kg		96	70 - 130	19	35
Ethylbenzene	<0.00200	U	0.100	0.09884		mg/Kg		99	70 - 130	28	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2036		mg/Kg		102	70 - 130	28	35
o-Xylene	<0.00200	U	0.100	0.09936		mg/Kg		99	70 - 130	29	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

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

Lab Sample ID: MB 880-90510/1-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130	09/11/24 08:00	09/11/24 08:41	1
o-Terphenyl	80		70 - 130	09/11/24 08:00	09/11/24 08:41	1

Lab Sample ID: LCS 880-90510/2-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	860.4		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	801.6		mg/Kg		80	70 - 130

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## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

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

Lab Sample ID: LCS 880-90510/2-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90510

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-90510/3-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90510

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	874.9		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	812.7		mg/Kg		81	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 880-48246-A-1-C MS

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	1113		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)	129		996	1200		mg/Kg		108	70 - 130		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-48246-A-1-D MSD

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	974.4		mg/Kg		98	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	129		996	1110		mg/Kg		98	70 - 130	8	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	92		70 - 130

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## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-90525/1-A

Matrix: Solid

Analysis Batch: 90526

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/11/24 15:09	1

Lab Sample ID: LCS 880-90525/2-A

Matrix: Solid

Analysis Batch: 90526

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	235.5		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-90525/3-A

Matrix: Solid

Analysis Batch: 90526

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	236.8		mg/Kg		95	90 - 110	1	20

Lab Sample ID: 880-48260-A-8-C MS

Matrix: Solid

Analysis Batch: 90526

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	23.7		251	260.1		mg/Kg		94	90 - 110

Lab Sample ID: 880-48260-A-8-D MSD

Matrix: Solid

Analysis Batch: 90526

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	23.7		251	263.1		mg/Kg		95	90 - 110	1	20

## QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

## GC VOA

## Analysis Batch: 90478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	8021B	90502
880-48261-2	SW-2	Total/NA	Solid	8021B	90502
880-48261-3	SW-3	Total/NA	Solid	8021B	90502
MB 880-90502/5-A	Method Blank	Total/NA	Solid	8021B	90502
LCS 880-90502/1-A	Lab Control Sample	Total/NA	Solid	8021B	90502
LCSD 880-90502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	90502
880-48165-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	90502
880-48165-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	90502

## Prep Batch: 90502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	5035	
880-48261-2	SW-2	Total/NA	Solid	5035	
880-48261-3	SW-3	Total/NA	Solid	5035	
MB 880-90502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-90502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-90502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-48165-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-48165-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 90603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	Total BTEX	
880-48261-2	SW-2	Total/NA	Solid	Total BTEX	
880-48261-3	SW-3	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 90510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	8015NM Prep	
880-48261-2	SW-2	Total/NA	Solid	8015NM Prep	
880-48261-3	SW-3	Total/NA	Solid	8015NM Prep	
MB 880-90510/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-90510/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-90510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-48246-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-48246-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 90528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	8015B NM	90510
880-48261-2	SW-2	Total/NA	Solid	8015B NM	90510
880-48261-3	SW-3	Total/NA	Solid	8015B NM	90510
MB 880-90510/1-A	Method Blank	Total/NA	Solid	8015B NM	90510
LCS 880-90510/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	90510
LCSD 880-90510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	90510
880-48246-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	90510
880-48246-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	90510

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QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

GC Semi VOA

Analysis Batch: 90594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Total/NA	Solid	8015 NM	
880-48261-2	SW-2	Total/NA	Solid	8015 NM	
880-48261-3	SW-3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 90525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Soluble	Solid	DI Leach	
880-48261-2	SW-2	Soluble	Solid	DI Leach	
880-48261-3	SW-3	Soluble	Solid	DI Leach	
MB 880-90525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-90525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-90525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-48260-A-8-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-48260-A-8-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 90526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48261-1	SW-1	Soluble	Solid	300.0	90525
880-48261-2	SW-2	Soluble	Solid	300.0	90525
880-48261-3	SW-3	Soluble	Solid	300.0	90525
MB 880-90525/1-A	Method Blank	Soluble	Solid	300.0	90525
LCS 880-90525/2-A	Lab Control Sample	Soluble	Solid	300.0	90525
LCSD 880-90525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	90525
880-48260-A-8-C MS	Matrix Spike	Soluble	Solid	300.0	90525
880-48260-A-8-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	90525



## Lab Chronicle

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

**Client Sample ID: SW-1****Lab Sample ID: 880-48261-1****Date Collected: 09/11/24 08:25****Matrix: Solid****Date Received: 09/11/24 12:07**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	90502	09/11/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90603	09/11/24 17:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			90594	09/11/24 19:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 19:09	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 19:26	CH	EET MID

**Client Sample ID: SW-2****Lab Sample ID: 880-48261-2****Date Collected: 09/11/24 08:30****Matrix: Solid****Date Received: 09/11/24 12:07**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	90502	09/11/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 18:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90603	09/11/24 18:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			90594	09/11/24 19:24	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 19:24	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 19:35	CH	EET MID

**Client Sample ID: SW-3****Lab Sample ID: 880-48261-3****Date Collected: 09/11/24 08:35****Matrix: Solid****Date Received: 09/11/24 12:07**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	90502	09/11/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 19:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90603	09/11/24 19:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			90594	09/11/24 19:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 19:40	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 19:44	CH	EET MID

**Laboratory References:**

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

Eurofins Midland

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee 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	06-30-25
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: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee 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: Earth Systems Response and Restoration  
Project/Site: Salt Creek - Caza East 12"

Job ID: 880-48261-1  
SDG: Lee County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-48261-1	SW-1	Solid	09/11/24 08:25	09/11/24 12:07	0-2.5
880-48261-2	SW-2	Solid	09/11/24 08:30	09/11/24 12:07	0-2.5
880-48261-3	SW-3	Solid	09/11/24 08:35	09/11/24 12:07	0-2.5

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## Environment Testing

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

## Chain of Custody



880-48261 Chain of Custody

**THE UNIVERSITY OF CHICAGO**

Page \_\_\_\_\_ of \_\_\_\_\_  
[www.xenco.com](http://www.xenco.com)

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	432-894-6385	Email:	<a href="mailto:gilmoreno@earthsys.net">gilmoreno@earthsys.net</a>

Work Order Comments
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRD <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: _____ Reporting: Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level N <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

ANALYSIS REQUEST						Preservative Codes	
						None: NO	DI Water: H <sub>2</sub> O
						Cool: Cool	MeOH: Me
						HCL: HC	HNO <sub>3</sub> : HN
						H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na
						H <sub>3</sub> PO <sub>4</sub> : HP	
						NaHSO <sub>4</sub> : NABIS	
						Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
						Zn Acetate+NaOH: Zn	
						NaOH+Ascorbic Acid: SAPC	
Sample Comments							



**Total 200.7 / 6010      200.8 / 6020:**

	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO <sub>2</sub>	Na	Si	Ti	Sn	U	V	Zn		
8RCRA																														
13PPM																														
Texas 11																														

Hg: 163.1 / 245.1 / 7470 / 747

Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document of relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenofo, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenofo 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 Xenofo. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xenofo, 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
		9/11/24			
		1207			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-48261-1  
SDG Number: Lee County, NM

Login Number: 48261  
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: Gilbert Moreno  
Earth Systems Response and Restoration  
4115 South County Road 1297  
Odessa, Texas 79765

Generated 9/18/2024 1:24:57 PM Revision 1

## JOB DESCRIPTION

Salt Creek-Caza East 12"  
Lea County, NM

## JOB NUMBER

880-48246-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701



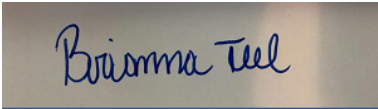
Eurofins Midland

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



Authorized for release by  
Brianna Teel, Project Manager  
[Brianna.Teel@et.eurofinsus.com](mailto:Brianna.Teel@et.eurofinsus.com)  
(432)704-5440

Generated  
9/18/2024 1:24:57 PM  
Revision 1



Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Laboratory Job ID: 880-48246-1  
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
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.
α	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: Earth Systems Response and Restoration  
Project: Salt Creek-Caza East 12"

Job ID: 880-48246-1

**Job ID: 880-48246-1**

**Eurofins Midland**

**Job Narrative  
880-48246-1**

### REVISION

The report being provided is a revision of the original report sent on 9/12/2024. The report (revision 1) is being revised due to Revised to add updated COC to report.

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 9/11/2024 9:31 AM. 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 16.6°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 (880-48246-1), CS-2 (880-48246-2), CS-3 (880-48246-3), CS-4 (880-48246-4), CS-5 (880-48246-5) and SW-1 (880-48246-6).

### **GC VOA**

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-90478 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-90478/2).

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-90502/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-48165-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-90502 and analytical batch 880-90478 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: CS-3 (880-48246-3). 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.

### **Diesel Range Organics**

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

### **HPLC/IC**

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

Eurofins Midland

## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Client Sample ID: CS-1

Lab Sample ID: 880-48246-1

Date Collected: 09/11/24 08:00

Matrix: Solid

Date Received: 09/11/24 09:31

Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/11/24 10:26	09/11/24 15:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/11/24 10:26	09/11/24 15:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/11/24 10:26	09/11/24 15:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/11/24 10:26	09/11/24 15:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/11/24 10:26	09/11/24 15:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/11/24 10:26	09/11/24 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/11/24 10:26	09/11/24 15:47	1
1,4-Difluorobenzene (Surr)	93		70 - 130	09/11/24 10:26	09/11/24 15:47	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/11/24 15:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	129		50.0		mg/Kg			09/11/24 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/11/24 10:57	09/11/24 17:08	1
Diesel Range Organics (Over C10-C28)	129		50.0		mg/Kg		09/11/24 10:57	09/11/24 17:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/11/24 10:57	09/11/24 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	09/11/24 10:57	09/11/24 17:08	1
o-Terphenyl	93		70 - 130	09/11/24 10:57	09/11/24 17:08	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.9		4.98		mg/Kg			09/11/24 15:35	1

Client Sample ID: CS-2

Lab Sample ID: 880-48246-2

Date Collected: 09/11/24 08:05

Matrix: Solid

Date Received: 09/11/24 09:31

Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/11/24 10:26	09/11/24 16:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/11/24 10:26	09/11/24 16:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/11/24 10:26	09/11/24 16:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/11/24 10:26	09/11/24 16:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/11/24 10:26	09/11/24 16:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/11/24 10:26	09/11/24 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	09/11/24 10:26	09/11/24 16:14	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Client Sample ID: CS-2

Lab Sample ID: 880-48246-2

Date Collected: 09/11/24 08:05

Matrix: Solid

Date Received: 09/11/24 09:31

Sample Depth: 2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	09/11/24 10:26	09/11/24 16:14	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/11/24 16:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	397		49.7		mg/Kg			09/11/24 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		09/11/24 10:57	09/11/24 17:54	1
Diesel Range Organics (Over C10-C28)	397		49.7		mg/Kg		09/11/24 10:57	09/11/24 17:54	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/11/24 10:57	09/11/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/11/24 10:57	09/11/24 17:54	1
o-Terphenyl	105		70 - 130				09/11/24 10:57	09/11/24 17:54	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.9		4.98		mg/Kg			09/11/24 16:02	1

Client Sample ID: CS-3

Lab Sample ID: 880-48246-3

Date Collected: 09/11/24 08:10

Matrix: Solid

Date Received: 09/11/24 09:31

Sample Depth: 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/11/24 10:26	09/11/24 16:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/11/24 10:26	09/11/24 16:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/11/24 10:26	09/11/24 16:41	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/11/24 10:26	09/11/24 16:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/11/24 10:26	09/11/24 16:41	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/11/24 10:26	09/11/24 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	165	S1+	70 - 130	09/11/24 10:26	09/11/24 16:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/11/24 10:26	09/11/24 16:41	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/11/24 16:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	192		49.9		mg/Kg			09/11/24 18:09	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Client Sample ID: CS-3  
Date Collected: 09/11/24 08:10  
Date Received: 09/11/24 09:31  
Sample Depth: 2.5

Lab Sample ID: 880-48246-3  
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/11/24 10:57	09/11/24 18:09	1	
Diesel Range Organics (Over C10-C28)	192		49.9		mg/Kg		09/11/24 10:57	09/11/24 18:09	1	
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/11/24 10:57	09/11/24 18:09	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	82		70 - 130				09/11/24 10:57	09/11/24 18:09	1	
o-Terphenyl	88		70 - 130				09/11/24 10:57	09/11/24 18:09	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<4.98	U	4.98		mg/Kg			09/11/24 16:11	1	

## Surrogate Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
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)
880-48165-A-1-D MS	Matrix Spike	103	103
880-48165-A-1-E MSD	Matrix Spike Duplicate	131 S1+	108
880-48246-1	CS-1	113	93
880-48246-2	CS-2	127	90
880-48246-3	CS-3	165 S1+	96
LCS 880-90502/1-A	Lab Control Sample	137 S1+	91
LCSD 880-90502/2-A	Lab Control Sample Dup	119	88
MB 880-90502/5-A	Method Blank	61 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)
880-48246-1	CS-1	86	93
880-48246-1 MS	CS-1	110	101
880-48246-1 MSD	CS-1	99	92
880-48246-2	CS-2	96	105
880-48246-3	CS-3	82	88
LCS 880-90510/2-A	Lab Control Sample	106	101
LCSD 880-90510/3-A	Lab Control Sample Dup	106	100
MB 880-90510/1-A	Method Blank	76	80

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

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

Lab Sample ID: MB 880-90502/5-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/11/24 10:26	09/11/24 12:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/11/24 10:26	09/11/24 12:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	61	S1-	70 - 130	09/11/24 10:26	09/11/24 12:39	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/11/24 10:26	09/11/24 12:39	1

Lab Sample ID: LCS 880-90502/1-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09641		mg/Kg		96	70 - 130
Toluene	0.100	0.1071		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1124		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2307		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1128		mg/Kg		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-90502/2-A

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09749		mg/Kg		97	70 - 130	1	35
Toluene	0.100	0.1036		mg/Kg		104	70 - 130	3	35
Ethylbenzene	0.100	0.1048		mg/Kg		105	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2150		mg/Kg		108	70 - 130	7	35
o-Xylene	0.100	0.1052		mg/Kg		105	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	88		70 - 130

Lab Sample ID: 880-48165-A-1-D MS

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1158		mg/Kg		116	70 - 130
Toluene	<0.00200	U	0.100	0.07906		mg/Kg		79	70 - 130

Eurofins Midland



## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

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

Lab Sample ID: 880-48165-A-1-D MS

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.07448		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1529		mg/Kg		76	70 - 130
o-Xylene	<0.00200	U	0.100	0.07384		mg/Kg		74	70 - 130
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	103		70 - 130						
1,4-Difluorobenzene (Surr)	103		70 - 130						

Lab Sample ID: 880-48165-A-1-E MSD

Matrix: Solid

Analysis Batch: 90478

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 90502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1016		mg/Kg		102	70 - 130	13	35
Toluene	<0.00200	U	0.100	0.09557		mg/Kg		96	70 - 130	19	35
Ethylbenzene	<0.00200	U	0.100	0.09884		mg/Kg		99	70 - 130	28	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2036		mg/Kg		102	70 - 130	28	35
o-Xylene	<0.00200	U	0.100	0.09936		mg/Kg		99	70 - 130	29	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	108		70 - 130								

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

Lab Sample ID: MB 880-90510/1-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/11/24 08:00	09/11/24 08:41	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130				09/11/24 08:00	09/11/24 08:41	1
o-Terphenyl	80		70 - 130				09/11/24 08:00	09/11/24 08:41	1

Lab Sample ID: LCS 880-90510/2-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	860.4		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	801.6		mg/Kg		80	70 - 130

Eurofins Midland

## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-90510/2-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90510

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-90510/3-A

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90510

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	874.9		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	812.7		mg/Kg		81	70 - 130	1	20
Surrogate		LCSD	LCSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	106		70 - 130								
o-Terphenyl	100		70 - 130								

Lab Sample ID: 880-48246-1 MS

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	1113		mg/Kg		112	70 - 130		
Diesel Range Organics (Over C10-C28)	129		996	1200		mg/Kg		108	70 - 130		
Surrogate		MS	MS								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	101		70 - 130								

Lab Sample ID: 880-48246-1 MSD

Matrix: Solid

Analysis Batch: 90528

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 90510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	996	974.4		mg/Kg		98	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	129		996	1110		mg/Kg		98	70 - 130	8	20
Surrogate		MSD	MSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	99		70 - 130								
o-Terphenyl	92		70 - 130								

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-90525/1-A Matrix: Solid Analysis Batch: 90526										Client Sample ID: Method Blank Prep Type: Soluble	
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00		mg/Kg			09/11/24 15:09	1		

Lab Sample ID: LCS 880-90525/2-A Matrix: Solid Analysis Batch: 90526										Client Sample ID: Lab Control Sample Prep Type: Soluble	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	235.5		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-90525/3-A Matrix: Solid Analysis Batch: 90526										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	236.8		mg/Kg		95	90 - 110	1	20

Lab Sample ID: 880-48246-1 MS Matrix: Solid Analysis Batch: 90526										Client Sample ID: CS-1 Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	13.9		249	247.4		mg/Kg		94	90 - 110		

Lab Sample ID: 880-48246-1 MSD Matrix: Solid Analysis Batch: 90526										Client Sample ID: CS-1 Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	13.9		249	245.3		mg/Kg		93	90 - 110	1	20

## QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

## GC VOA

## Analysis Batch: 90478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	8021B	90502
880-48246-2	CS-2	Total/NA	Solid	8021B	90502
880-48246-3	CS-3	Total/NA	Solid	8021B	90502
MB 880-90502/5-A	Method Blank	Total/NA	Solid	8021B	90502
LCS 880-90502/1-A	Lab Control Sample	Total/NA	Solid	8021B	90502
LCSD 880-90502/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	90502
880-48165-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	90502
880-48165-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	90502

## Prep Batch: 90502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	5035	
880-48246-2	CS-2	Total/NA	Solid	5035	
880-48246-3	CS-3	Total/NA	Solid	5035	
MB 880-90502/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-90502/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-90502/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-48165-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-48165-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 90602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	Total BTEX	
880-48246-2	CS-2	Total/NA	Solid	Total BTEX	
880-48246-3	CS-3	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 90510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	8015NM Prep	
880-48246-2	CS-2	Total/NA	Solid	8015NM Prep	
880-48246-3	CS-3	Total/NA	Solid	8015NM Prep	
MB 880-90510/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-90510/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-90510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-48246-1 MS	CS-1	Total/NA	Solid	8015NM Prep	
880-48246-1 MSD	CS-1	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 90528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	8015B NM	90510
880-48246-2	CS-2	Total/NA	Solid	8015B NM	90510
880-48246-3	CS-3	Total/NA	Solid	8015B NM	90510
MB 880-90510/1-A	Method Blank	Total/NA	Solid	8015B NM	90510
LCS 880-90510/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	90510
LCSD 880-90510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	90510
880-48246-1 MS	CS-1	Total/NA	Solid	8015B NM	90510
880-48246-1 MSD	CS-1	Total/NA	Solid	8015B NM	90510

Eurofins Midland



QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 90592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Total/NA	Solid	8015 NM	
880-48246-2	CS-2	Total/NA	Solid	8015 NM	
880-48246-3	CS-3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 90525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Soluble	Solid	DI Leach	
880-48246-2	CS-2	Soluble	Solid	DI Leach	
880-48246-3	CS-3	Soluble	Solid	DI Leach	
MB 880-90525/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-90525/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-90525/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-48246-1 MS	CS-1	Soluble	Solid	DI Leach	
880-48246-1 MSD	CS-1	Soluble	Solid	DI Leach	

Analysis Batch: 90526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-48246-1	CS-1	Soluble	Solid	300.0	90525
880-48246-2	CS-2	Soluble	Solid	300.0	90525
880-48246-3	CS-3	Soluble	Solid	300.0	90525
MB 880-90525/1-A	Method Blank	Soluble	Solid	300.0	90525
LCS 880-90525/2-A	Lab Control Sample	Soluble	Solid	300.0	90525
LCSD 880-90525/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	90525
880-48246-1 MS	CS-1	Soluble	Solid	300.0	90525
880-48246-1 MSD	CS-1	Soluble	Solid	300.0	90525

Lab Chronicle

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Client Sample ID: CS-1  
Date Collected: 09/11/24 08:00  
Date Received: 09/11/24 09:31

Lab Sample ID: 880-48246-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	90502	09/11/24 10:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 15:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90602	09/11/24 15:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			90592	09/11/24 17:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 17:08	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 15:35	CH	EET MID

Client Sample ID: CS-2  
Date Collected: 09/11/24 08:05  
Date Received: 09/11/24 09:31

Lab Sample ID: 880-48246-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	90502	09/11/24 10:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 16:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90602	09/11/24 16:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			90592	09/11/24 17:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 17:54	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 16:02	CH	EET MID

Client Sample ID: CS-3  
Date Collected: 09/11/24 08:10  
Date Received: 09/11/24 09:31

Lab Sample ID: 880-48246-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	90502	09/11/24 10:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90478	09/11/24 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			90602	09/11/24 16:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			90592	09/11/24 18:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	90510	09/11/24 10:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90528	09/11/24 18:09	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	90525	09/11/24 12:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90526	09/11/24 16:11	CH	EET MID

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
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	06-30-25
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: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
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: Earth Systems Response and Restoration  
Project/Site: Salt Creek-Caza East 12"

Job ID: 880-48246-1  
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-48246-1	CS-1	Solid	09/11/24 08:00	09/11/24 09:31	2.5
880-48246-2	CS-2	Solid	09/11/24 08:05	09/11/24 09:31	2.5
880-48246-3	CS-3	Solid	09/11/24 08:10	09/11/24 09:31	2.5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14





Environment Testing  
Xenco

### Chain of Custody

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



880-48246 Chain of Custody

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Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	432-894-6385	Email:	gmoreno@earthsys.net

<b>Work Order Comments</b>	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:	

Project Name:		Salt Creek - Caza East 12"		Turn Around		ANALYSIS REQUEST										Preservative Codes						
Project Number:		2419		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush												None: NO DI Water: H <sub>2</sub> O						
Project Location:		Lee County, NM		Due Date:		24hr												Cool: Cool MeOH: Me				
Sampler's Name:		Joey Pinson		TAT starts the day received by the lab, if received by 4:30pm												HCL: HC HNO <sub>3</sub> : HN						
PO #:																H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na						
<b>SAMPLE RECEIPT</b>		Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No												H <sub>3</sub> PO <sub>4</sub> : HP						
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Thermometer ID:												NaHSO <sub>4</sub> : NABIS						
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Correction Factor:												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>						
Sample Custody Seals:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Temperature Reading:												Zn Acetate+NaOH: Zn						
Total Containers:				Corrected Temperature:												NaOH+Ascorbic Acid: SAPC						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH - NM	BTEX - NM	Chloride - NM											Sample Comments	
CS-1		S	9/11/2024	8:00	2.5	Comp	1	X	X	X												
CS-2		S	9/11/2024	8:05	2.5	Comp	1	X	X	X												
CS-3		S	9/11/2024	8:10	2.5	Comp	1	X	X	X												
<del>CS-4</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:15</del>	<del>2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												
<del>CS-5</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:20</del>	<del>2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												
<del>SW-1</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:25</del>	<del>0 - 2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												

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 <sub>2</sub> Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		Hg: 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		9/11/24 931	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2





Environment Testing  
Xenco

## Chain of Custody

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



880-48246 Chain of Custody

www.xenco.com Page \_\_\_\_\_ of \_\_\_\_\_

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	432-894-6385	Email:	gmoreno@earthsys.net

<b>Work Order Comments</b>	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:	

Project Name:		Salt Creek - Caza East 12"		Turn Around		ANALYSIS REQUEST												Preservative Codes				
Project Number:		2419		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush														None: NO DI Water: H <sub>2</sub> O				
Project Location:		Lee County, NM		Due Date:		24hr														Cool: Cool MeOH: Me		
Sampler's Name:		Joey Pinson		TAT starts the day received by the lab, if received by 4:30pm														HCL: HC HNO <sub>3</sub> : HN				
PO #:																		H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub> NaOH: Na				
<b>SAMPLE RECEIPT</b>		Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No														H <sub>3</sub> PO <sub>4</sub> : HP				
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Thermometer ID:														NaHSO <sub>4</sub> : NABIS				
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Correction Factor:														Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>				
Sample Custody Seals:		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Temperature Reading:														Zn Acetate+NaOH: Zn				
Total Containers:				Corrected Temperature:														NaOH+Ascorbic Acid: SAPC				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH - NM	BTEX - NM	Chloride - NM											Sample Comments	
CS-1		S	9/11/2024	8:00	2.5	Comp	1	X	X	X												
CS-2		S	9/11/2024	8:05	2.5	Comp	1	X	X	X												
CS-3		S	9/11/2024	8:10	2.5	Comp	1	X	X	X												
<del>CS-4</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:15</del>	<del>2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												
<del>CS-5</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:20</del>	<del>2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												
<del>SW-1</del>		<del>S</del>	<del>9/11/2024</del>	<del>8:25</del>	<del>0 - 2.5</del>	<del>Comp</del>	<del>1</del>	<del>X</del>	<del>X</del>	<del>X</del>												

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 <sub>2</sub>	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		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 \$65.00 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
0		9/11/24 931	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-48246-1  
SDG Number: Lea County, NM

Login Number: 48246  
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: Gilbert Moreno  
Earth Systems Response and Restoration  
4115 South County Road 1297  
Odessa, Texas 79765

Generated 9/17/2024 7:59:27 AM

## JOB DESCRIPTION

Caza East 12  
Lea County, NM

## JOB NUMBER

890-7091-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

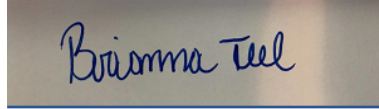
# Eurofins Carlsbad

## 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  
9/17/2024 7:59:27 AM

Authorized for release by  
Brianna Teel, Project Manager  
[Brianna.Teel@et.eurofinsus.com](mailto:Brianna.Teel@et.eurofinsus.com)  
(432)704-5440



Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Laboratory Job ID: 890-7091-1  
SDG: Lea County,NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

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
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.
α	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: Earth Systems Response and Restoration  
Project: Caza East 12

Job ID: 890-7091-1

Job ID: 890-7091-1

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### Job Narrative 890-7091-1

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 9/13/2024 3:17 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C.

#### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 (890-7091-1), CS-2 (890-7091-2) and CS-3 (890-7091-3).

#### 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

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: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

Client Sample ID: CS-1

Lab Sample ID: 890-7091-1

Date Collected: 09/13/24 13:00

Matrix: Solid

Date Received: 09/13/24 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/16/24 08:50	09/16/24 12:15	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/16/24 08:50	09/16/24 12:15	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/16/24 08:50	09/16/24 12:15	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/16/24 08:50	09/16/24 12:15	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/16/24 08:50	09/16/24 12:15	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/16/24 08:50	09/16/24 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/16/24 08:50	09/16/24 12:15	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/16/24 08:50	09/16/24 12:15	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/16/24 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/16/24 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 16:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 16:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/13/24 15:55	09/16/24 16:55	1
o-Terphenyl	93		70 - 130	09/13/24 15:55	09/16/24 16:55	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		4.97		mg/Kg			09/16/24 13:03	1

Client Sample ID: CS-2

Lab Sample ID: 890-7091-2

Date Collected: 09/13/24 13:10

Matrix: Solid

Date Received: 09/13/24 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/16/24 08:50	09/16/24 12:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/16/24 08:50	09/16/24 12:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/16/24 08:50	09/16/24 12:35	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/16/24 08:50	09/16/24 12:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/16/24 08:50	09/16/24 12:35	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/16/24 08:50	09/16/24 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/16/24 08:50	09/16/24 12:35	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/16/24 08:50	09/16/24 12:35	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

Client Sample ID: CS-2

Lab Sample ID: 890-7091-2

Date Collected: 09/13/24 13:10

Matrix: Solid

Date Received: 09/13/24 15:17

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/16/24 12:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/16/24 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/24 15:55	09/16/24 17:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/24 15:55	09/16/24 17:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/24 15:55	09/16/24 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				09/13/24 15:55	09/16/24 17:10	1
o-Terphenyl	90		70 - 130				09/13/24 15:55	09/16/24 17:10	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.06		4.98		mg/Kg			09/16/24 13:08	1

Client Sample ID: CS-3

Lab Sample ID: 890-7091-3

Date Collected: 09/13/24 13:20

Matrix: Solid

Date Received: 09/13/24 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/16/24 08:50	09/16/24 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				09/16/24 08:50	09/16/24 12:56	1
1,4-Difluorobenzene (Surr)	100		70 - 130				09/16/24 08:50	09/16/24 12:56	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/16/24 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/16/24 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/13/24 15:55	09/16/24 17:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/24 15:55	09/16/24 17:25	1

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Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

Client Sample ID: CS-3  
Date Collected: 09/13/24 13:20  
Date Received: 09/13/24 15:17

Lab Sample ID: 890-7091-3  
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/24 15:55	09/16/24 17:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				09/13/24 15:55	09/16/24 17:25	1
o-Terphenyl	88		70 - 130				09/13/24 15:55	09/16/24 17:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.40		5.05		mg/Kg			09/16/24 13:13	1

## Surrogate Summary

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
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	DFBZ1
		(70-130)	(70-130)
890-7091-1	CS-1	105	100
890-7091-1 MS	CS-1	101	100
890-7091-1 MSD	CS-1	106	97
890-7091-2	CS-2	103	102
890-7091-3	CS-3	105	100
LCS 880-90805/1-A	Lab Control Sample	103	98
LCSD 880-90805/2-A	Lab Control Sample Dup	97	99
MB 880-90805/5-A	Method Blank	100	95

## 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)
890-7091-1	CS-1	89	93
890-7091-2	CS-2	89	90
890-7091-3	CS-3	86	88
LCS 880-90745/2-A	Lab Control Sample	127	121
LCSD 880-90745/3-A	Lab Control Sample Dup	122	113
MB 880-90745/1-A	Method Blank	92	104

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

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

Lab Sample ID: MB 880-90805/5-A

Matrix: Solid

Analysis Batch: 90791

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 90805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 11:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 11:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 11:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/24 08:50	09/16/24 11:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/24 08:50	09/16/24 11:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/24 08:50	09/16/24 11:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/16/24 08:50	09/16/24 11:53	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/16/24 08:50	09/16/24 11:53	1

Lab Sample ID: LCS 880-90805/1-A

Matrix: Solid

Analysis Batch: 90791

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 90805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08754		mg/Kg		88	70 - 130
Toluene	0.100	0.08258		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08243		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	0.200	0.1735		mg/Kg		87	70 - 130
o-Xylene	0.100	0.08710		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-90805/2-A

Matrix: Solid

Analysis Batch: 90791

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 90805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09405		mg/Kg		94	70 - 130	7	35
Toluene	0.100	0.08799		mg/Kg		88	70 - 130	6	35
Ethylbenzene	0.100	0.08808		mg/Kg		88	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1863		mg/Kg		93	70 - 130	7	35
o-Xylene	0.100	0.09241		mg/Kg		92	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-7091-1 MS

Matrix: Solid

Analysis Batch: 90791

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 90805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.101	0.08977		mg/Kg		89	70 - 130
Toluene	<0.00198	U	0.101	0.08423		mg/Kg		84	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

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

Lab Sample ID: 890-7091-1 MS  
Matrix: Solid  
Analysis Batch: 90791

Client Sample ID: CS-1  
Prep Type: Total/NA  
Prep Batch: 90805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.101	0.08270		mg/Kg		82	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.202	0.1747		mg/Kg		87	70 - 130
o-Xylene	<0.00198	U	0.101	0.08736		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: 890-7091-1 MSD  
Matrix: Solid  
Analysis Batch: 90791

Client Sample ID: CS-1  
Prep Type: Total/NA  
Prep Batch: 90805

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0998	0.08515		mg/Kg		85	70 - 130	5	35
Toluene	<0.00198	U	0.0998	0.07965		mg/Kg		80	70 - 130	6	35
Ethylbenzene	<0.00198	U	0.0998	0.07860		mg/Kg		79	70 - 130	5	35
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1667		mg/Kg		84	70 - 130	5	35
o-Xylene	<0.00198	U	0.0998	0.08348		mg/Kg		84	70 - 130	5	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	106		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								

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

Lab Sample ID: MB 880-90745/1-A  
Matrix: Solid  
Analysis Batch: 90827

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 90745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 09:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 09:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/24 15:55	09/16/24 09:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	104		70 - 130						

Lab Sample ID: LCS 880-90745/2-A  
Matrix: Solid  
Analysis Batch: 90827

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 90745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	958.1		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	1000	978.5		mg/Kg		98	70 - 130

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## QC Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

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

Lab Sample ID: LCS 880-90745/2-A  
Matrix: Solid  
Analysis Batch: 90827

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 90745

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: LCSD 880-90745/3-A  
Matrix: Solid  
Analysis Batch: 90827

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 90745

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	910.6		mg/Kg		91	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	923.8		mg/Kg		92	70 - 130	6	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	113		70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-90789/1-A  
Matrix: Solid  
Analysis Batch: 90795

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/16/24 11:51	1

Lab Sample ID: LCS 880-90789/2-A  
Matrix: Solid  
Analysis Batch: 90795

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.8		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-90789/3-A  
Matrix: Solid  
Analysis Batch: 90795

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	260.0		mg/Kg		104	90 - 110	0	20

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## QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

## GC VOA

## Analysis Batch: 90791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	8021B	90805
890-7091-2	CS-2	Total/NA	Solid	8021B	90805
890-7091-3	CS-3	Total/NA	Solid	8021B	90805
MB 880-90805/5-A	Method Blank	Total/NA	Solid	8021B	90805
LCS 880-90805/1-A	Lab Control Sample	Total/NA	Solid	8021B	90805
LCSD 880-90805/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	90805
890-7091-1 MS	CS-1	Total/NA	Solid	8021B	90805
890-7091-1 MSD	CS-1	Total/NA	Solid	8021B	90805

## Prep Batch: 90805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	5035	
890-7091-2	CS-2	Total/NA	Solid	5035	
890-7091-3	CS-3	Total/NA	Solid	5035	
MB 880-90805/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-90805/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-90805/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7091-1 MS	CS-1	Total/NA	Solid	5035	
890-7091-1 MSD	CS-1	Total/NA	Solid	5035	

## Analysis Batch: 90928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	Total BTEX	
890-7091-2	CS-2	Total/NA	Solid	Total BTEX	
890-7091-3	CS-3	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 90745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	8015NM Prep	
890-7091-2	CS-2	Total/NA	Solid	8015NM Prep	
890-7091-3	CS-3	Total/NA	Solid	8015NM Prep	
MB 880-90745/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-90745/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-90745/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 90827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	8015B NM	90745
890-7091-2	CS-2	Total/NA	Solid	8015B NM	90745
890-7091-3	CS-3	Total/NA	Solid	8015B NM	90745
MB 880-90745/1-A	Method Blank	Total/NA	Solid	8015B NM	90745
LCS 880-90745/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	90745
LCSD 880-90745/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	90745

## Analysis Batch: 90927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Total/NA	Solid	8015 NM	
890-7091-2	CS-2	Total/NA	Solid	8015 NM	
890-7091-3	CS-3	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

HPLC/IC

Leach Batch: 90789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Soluble	Solid	DI Leach	
890-7091-2	CS-2	Soluble	Solid	DI Leach	
890-7091-3	CS-3	Soluble	Solid	DI Leach	
MB 880-90789/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-90789/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-90789/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 90795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7091-1	CS-1	Soluble	Solid	300.0	90789
890-7091-2	CS-2	Soluble	Solid	300.0	90789
890-7091-3	CS-3	Soluble	Solid	300.0	90789
MB 880-90789/1-A	Method Blank	Soluble	Solid	300.0	90789
LCS 880-90789/2-A	Lab Control Sample	Soluble	Solid	300.0	90789
LCSD 880-90789/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	90789

Lab Chronicle

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

Client Sample ID: CS-1  
Date Collected: 09/13/24 13:00  
Date Received: 09/13/24 15:17

Lab Sample ID: 890-7091-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	90805	09/16/24 08:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90791	09/16/24 12:15	SM	EET MID
Total/NA	Analysis	Total BTEX		1			90928	09/16/24 12:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			90927	09/16/24 16:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	90745	09/13/24 15:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90827	09/16/24 16:55	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	90789	09/16/24 07:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90795	09/16/24 13:03	CH	EET MID

Client Sample ID: CS-2  
Date Collected: 09/13/24 13:10  
Date Received: 09/13/24 15:17

Lab Sample ID: 890-7091-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	90805	09/16/24 08:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90791	09/16/24 12:35	SM	EET MID
Total/NA	Analysis	Total BTEX		1			90928	09/16/24 12:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			90927	09/16/24 17:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	90745	09/13/24 15:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90827	09/16/24 17:10	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	90789	09/16/24 07:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90795	09/16/24 13:08	CH	EET MID

Client Sample ID: CS-3  
Date Collected: 09/13/24 13:20  
Date Received: 09/13/24 15:17

Lab Sample ID: 890-7091-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	90805	09/16/24 08:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	90791	09/16/24 12:56	SM	EET MID
Total/NA	Analysis	Total BTEX		1			90928	09/16/24 12:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			90927	09/16/24 17:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	90745	09/13/24 15:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90827	09/16/24 17:25	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	90789	09/16/24 07:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	90795	09/16/24 13:13	CH	EET MID

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
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	06-30-25
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: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
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: Earth Systems Response and Restoration  
Project/Site: Caza East 12

Job ID: 890-7091-1  
SDG: Lea County,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7091-1	CS-1	Solid	09/13/24 13:00	09/13/24 15:17
890-7091-2	CS-2	Solid	09/13/24 13:10	09/13/24 15:17
890-7091-3	CS-3	Solid	09/13/24 13:20	09/13/24 15:17

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing  
Xenco

Chain of Custody

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

Work Order No: \_\_\_\_\_

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Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Program: <input type="checkbox"/> UST/PSI <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other: _____

Project Name:	Caiza East 12	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush	Pres. Code	ANALYSIS REQUEST										Preservative Codes						
Project Number:	2419														None: NO	DI Water: H <sub>2</sub> O					
Project Location:	Lea County, NM	Due Date:	24 HR TAT												Cool: Cool	MeOH: Me					
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm													HCL: HC	HNO <sub>3</sub> : HN					
PO #:															H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>	NaOH: Na					
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No													H <sub>3</sub> PO <sub>4</sub> : HP						
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID:	TANNO												NaHSO <sub>4</sub> : NABIS						
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor:	-0.2												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>						
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading:	1.6												Zn Acetate+NaOH: Zn						
Total Containers:		Corrected Temperature:	1.4												NaOH+Ascorbic Acid: SAPC						
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH	Chloride	BTEX	Hold											Sample Comments
CS-1	S	9/13/2024	13:00	3'	Comp	1	X	X	X												Incident Number
CS-2	S	9/13/2024	13:10	3'	Comp	1	X	X	X												nAPP2423424961
CS-3	S	9/13/2024	13:20	3'	Comp	1	X	X	X												



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<sub>2</sub> Na Sr Ti Sn U V Zn  
Hg: 1631 / 245.1 / 7470 / 7471

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

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
<i>[Signature]</i>	<i>[Signature]</i>	9/13 1517			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7091-1  
SDG Number: Lea County,NM

Login Number: 7091  
List Number: 1  
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7091-1  
SDG Number: Lea County,NM

Login Number: 7091  
List Number: 2  
Creator: Laing, Edmundo

List Source: Eurofins Midland  
List Creation: 09/13/24 09:57 PM

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").	True	

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Oil Conservation Division  
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Santa Fe, NM 87505

QUESTIONS  
  
Action 391749

QUESTIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:	330368
	Action Number:	391749
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2424223470
Incident Name	NAPP2424223470 EAST CAZA @ 0
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	East Caza
Date Release Discovered	08/23/2024
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: Human Error   Pipeline (Any)   Crude Oil   Released: 6 BBL   Recovered: 0 BBL   Lost: 6 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)	Cause: Human error: Pig receiver was opened before being drained. Source: Other: Specify: Pig receiver



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QUESTIONS, Page 2

Action 391749

**QUESTIONS (continued)**

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:	330368
	Action Number:	391749
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>False</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<b>The area of the release consists of sandy soils. There were no free liquids to contain within a berm or absorb.</b>

*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: Susan Worthen Title: EHS Manager Email: Susan.Worthen@scmid.com Date: 09/12/2024
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QUESTIONS, Page 3

Action 391749

**QUESTIONS (continued)**

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:
	330368
	Action Number:
	391749
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

**QUESTIONS**

<b>Site Characterization</b>	
<i>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.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (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
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (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 ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between ½ and 1 (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	Yes

<b>Remediation Plan</b>	
<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>	
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
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	10.9
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	397
GRO+DRO (EPA SW-846 Method 8015M)	397
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<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>	
On what estimated date will the remediation commence	09/06/2024
On what date will (or did) the final sampling or liner inspection occur	09/13/2024
On what date will (or was) the remediation complete(d)	09/21/2024
What is the estimated surface area (in square feet) that will be reclaimed	600
What is the estimated volume (in cubic yards) that will be reclaimed	40
What is the estimated surface area (in square feet) that will be remediated	600
What is the estimated volume (in cubic yards) that will be remediated	40
<i>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.</i>	
<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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**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 391749

**QUESTIONS (continued)**

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:	330368
	Action Number:	391749
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<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>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	OWL LANDFILL JAL [fJEG1635837366]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> 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: Susan Worthen Title: EHS Manager Email: Susan.Worthen@scmid.com Date: 10/15/2024
<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 391749

**QUESTIONS (continued)**

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 391749
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>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.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 391749

**QUESTIONS (continued)**

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:	330368
	Action Number:	391749
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>383275</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>09/13/2024</b>
What was the (estimated) number of samples that were to be gathered	<b>3</b>
What was the sampling surface area in square feet	<b>600</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>No</b>
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	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>600</b>
What was the total volume (cubic yards) remediated	<b>40</b>
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	<b>Yes</b>
What was the total surface area (in square feet) reclaimed	<b>600</b>
What was the total volume (in cubic yards) reclaimed	<b>40</b>
Summarize any additional remediation activities not included by answers (above)	<b>No additional remediation activities required. Lab analytical results for all final confirmation sampling meet Site Closure Criteria and reclamation standards. Area will be reclaimed when facility is deconstructed.</b>

*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 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	<b>Name: Susan Worthen</b> <b>Title: EHS Manager</b> <b>Email: Susan.Worthen@scmid.com</b> <b>Date: 10/15/2024</b>
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QUESTIONS, Page 7  
  
Action 391749

**QUESTIONS (continued)**

Operator:  SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID:  330368
	Action Number:  391749
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Reclamation Report</b>	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

CONDITIONS

Action 391749

CONDITIONS

Operator: SCM Operations, LLC 5775 N Sam Houston Pkwy W Houston, TX 77086	OGRID: 330368
	Action Number: 391749
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	10/28/2024