



September 6, 2024

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

RE: **The Contest Federal CTB- Closure Request Report**

Incident Number: nAPP2327037534

GPS: 32.22871°, -103.47959°

Lea County, NM

ESRR Project No. 2288

To Whom It May Concern:

Earth Systems Response & Restoration (ESRR), on behalf of Civitas Resources (Civitas), presents the following Closure Request Report (CRR) detailing all remedial efforts to date associated with an inadvertent release of produced water at the former Tap Rock Operating (Tap Rock) location, The Contest Federal CTB (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, Civitas is requesting No Further Action (NFA) at the Site.

### **Site Location & Incident Description**

The production well (API 30-015-46673) for the Site is located in Unit L, Section 09, Township 24 South, Range 34 East, in Lea County, New Mexico (32.22871°, -103.47959°) and is associated with oil and gas exploration and production operations on Private Land (**Figure 1**). The lined secondary containment (LSC), where the release occurred, is located on the production pad just north of the production well pad (32.22997°, -103.47905°).

On September 19, 2023, a poly line within a LSC failed, causing the release of approximately 207 barrels (bbls) of produced water within the LSC and onto the adjacent production pad surface (**Figure 2**). A vacuum truck was immediately dispatched to the Site and recovered approximately 200 bbl of produced water. Immediate notice was given via email to the New Mexico Oil Conservation Division (NMOCD) on September 19, 2023. Tap Rock also reported the release to the NMOCD on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on September 27, 2023, and subsequently assigned Incident Number nAPP2327037534.

### **Background**

During early 2024, a Tap Rock contracted third-party consultant oversaw the completion of excavation activities via mechanical equipment at the Site. Amid the transition from Tap Rock operating to Civitas operating, the third-party consultant was not retained.

On June 16, 2024, Civitas assigned ESRR to the project to investigate work completed to date by the third-party consultant and to complete additional soil sampling activities where necessary for closure of the incident.

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On September 4, 2024, Civitas requested an extension to the past due deadline in order to get back in compliance prior to submittal of this CRR. NMOCD approved the request and updated the due date to November 4, 2024.

## 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;
- Greater than 5 miles of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- Greater than 5 miles of any occupied permanent residence, school, hospital, institution or church;
- Between 1 and 5 miles of any spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Greater than 5 miles of any other freshwater well or spring;
- Greater than 5 miles of any incorporated municipal boundary or a defined municipal fresh water well field covered under a municipal ordinance;
- Between 1 and 5 miles 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

Under the guidance of the third-party consultant, an estimated 2,100 cubic yards of impacted soil was excavated from the Area of Concern (AOC) by methods of mechanical equipment. The excavation was advanced to depths ranging between 0.5 feet and 6 feet below ground surface (bgs) and assumed to have been disposed at the nearest disposal facility.

Upon assignment of this project, ESRR collected 5-point composite confirmation soil samples at a sampling frequency of 200 square feet from the excavation floors (CS01 through CS60) and sidewalls (SW01 through SW17). 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,

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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 all final confirmation soil samples 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** and **Figure 6**.

The remaining impacted soil stockpiled on site by the previous third-party consultant was transported to the Northern Delaware Basin Disposal in Jal, New Mexico, under Civitas 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.

### **Liner Inspection & Delineation Activities**

On August 8, 2024, ESRR completed a visual inspection of the LSC for tears, cracks, cuts, breaks, and/or any other damage to the liner that could have resulted in a breach of containment at the time of the release. Based on the inspection, a single pinhole was located in the northeast corner of the LSC requiring further investigation to confirm as a definite source of breachment.

ESRR continued further investigation by cutting a hole in the liner near the pinhole to assess the presence or absence of impacts below the LSC via hand auger. ESRR advanced the delineation borehole (HA-1) to 4 feet bgs. A second delineation borehole (HA-2) was advanced within the southwest corner of the LSC to 4 feet bgs to also assess the presence or absence of impacts within the LSC. Three additional delineation boreholes (HA-3 through HA-5) were advanced outside of the LSC to confirm the absence of impacts.

Delineation activities were driven by field screening soil for chloride utilizing QuanTab® test strips. A minimum of two soil samples were collected from each delineation borehole, representing the highest observed field screening concentrations and the greatest depth. Delineation soil samples were handled and analyzed as previously described. **Soil Sampling Logs and Photographic Documentation** of all activities are attached. The LSC was repaired by Civitas following delineation activities.

Laboratory analytical results indicated that concentrations of COCs for all delineation soil samples 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 delineation soil samples are shown in **Figure 7**.

### **Closure Request**

Based on laboratory analytical results for all final confirmation soil samples, Civitas believes that residual soil impacts associated with the inadvertent release have been excavated and removed from the Site. Furthermore, liner inspection activities and subsequent delineation soil samples confirmed no breach in containment, rather overspray of fluids onto the production pad surface at the time of the release. Civitas 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.

The Contest Federal CTB - Closure Request Report  
Incident Number: nAPP2327037534  
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As such, NFA appears warranted at this time, and Civitas requests Closure of this CRR associated with Incident Number nAPP2327037534.

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 Correspondance and Executed Chain-of-Custody forms and Laboratory Analytical Reports are attached.

Sincerely,  
**EARTH SYSTEMS RESPONSE & RESTORATION**

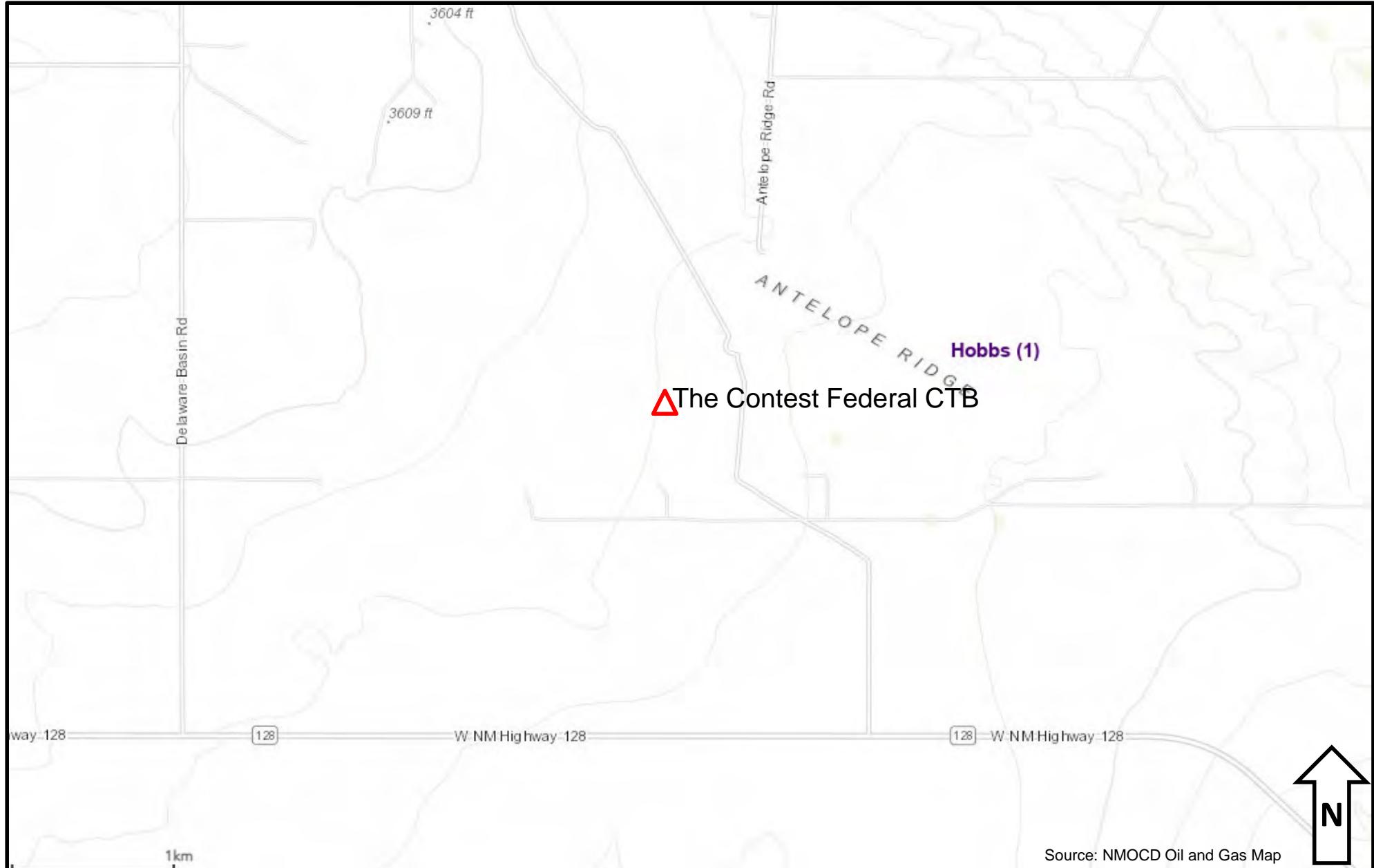
A handwritten signature in black ink, appearing to read "Gilbert Moreno".

Gilbert Moreno  
Carlsbad Operations Manager-Project Geologist

cc: Luke Kelly, Civitas Resources

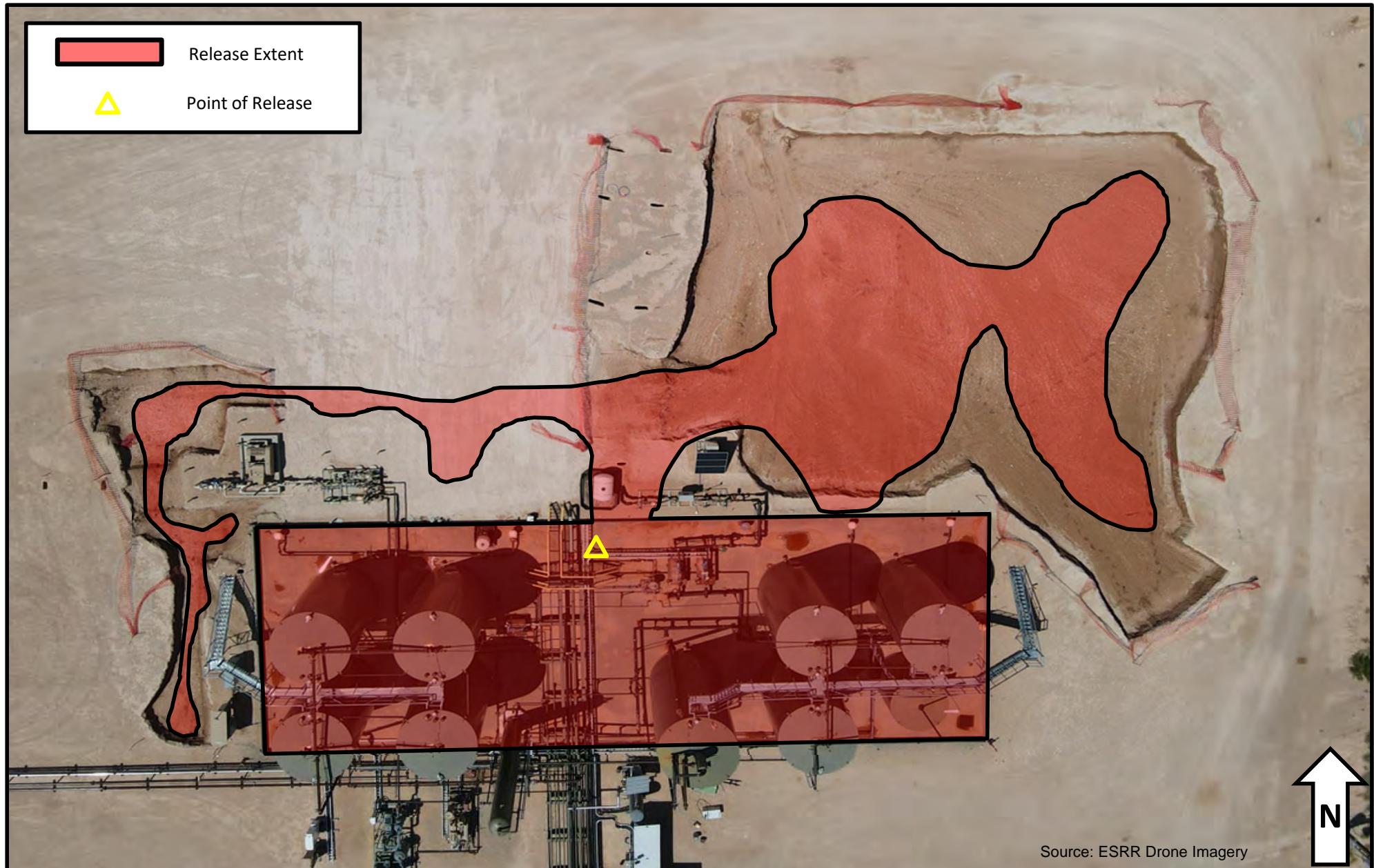
Attachments:

- Figure 1 - Site Location
- 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
- Figure 6 - Excavation Soil Sample Locations
- Figure 7 - Delineation Soil Sample Locations
- Soil Sampling Logs
- Photographic Documentation
- NMOCD Email Documentation & Correspondance
- Executed Chain-of-Custody Forms and Laboratory Analytical Reports



**Figure 1 – Site Location**

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997, -103.47905  
Lea County, New Mexico



**Figure 2 – Area of Concern**

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997,-103.47905  
Lea County, New Mexico

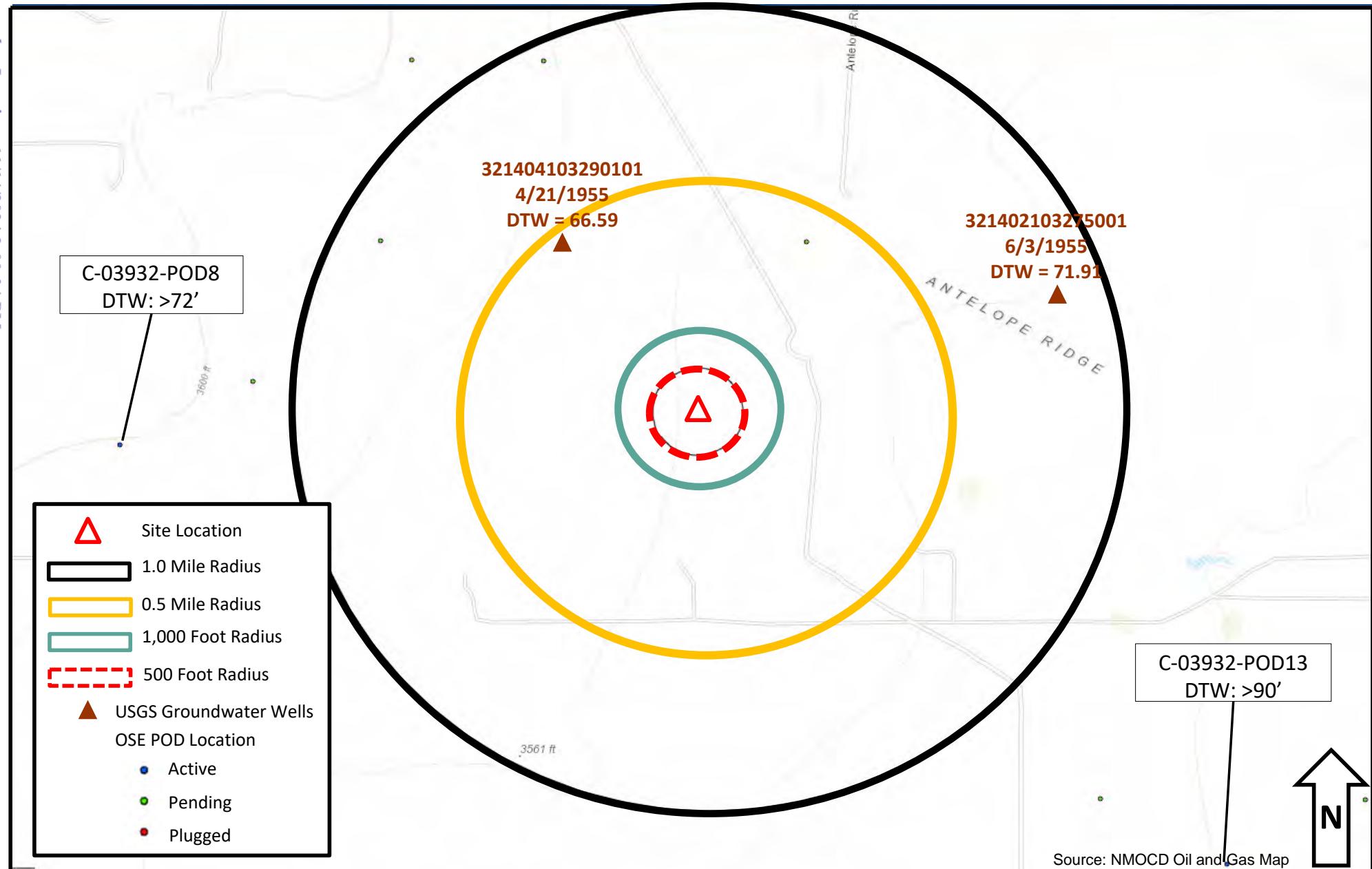


Figure 3 – Ground Water

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997, -103.47905  
Lea County, New Mexico



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

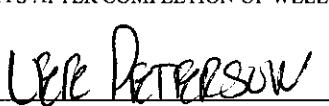
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) S8-BH-03				OSE FILE NUMBER(S) C 03932			
	WELL OWNER NAME(S) Bryce Krager % Parkhill, Smith & Cooper Attention: R.H. Holder				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 4222 85th Street				CITY Lubbock	STATE Texas	ZIP 79423	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	13	43.3	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE	103	30	8.3	W	* DATUM REQUIRED: WGS 84	
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW 1/4 of SE 1/4 of NE 1/4 of SE 1/4 of Section 15, Township 24S, Range 34E							
	LICENSE NUMBER WD-1222		NAME OF LICENSED DRILLER Lee Peterson			NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc.		
	DRILLING STARTED 02/08/16	DRILLING ENDED 02/09/16	DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 72'	DEPTH WATER FIRST ENCOUNTERED (FT)		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT)		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD		ADDITIVES - SPECIFY:					
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> 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							
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							

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 10/29/15)

FILE NUMBER <i>C-3932</i>	POD NUMBER <i>8</i>	TRN NUMBER <i>581433</i>
LOCATION <i>EXPL</i>	PAGE 1 OF 2	

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	7	7	Light Reddish Brown Fine Sand	Y ✓ N	
7	17	10	Tannish White to Light Reddish Brown Caliche With Fine Sand	Y ✓ N	
17	25	8	Tan-White Caliche	Y ✓ N	
25	30	5	Light Reddish Brown Sand	Y ✓ N	
30	32	2	Light Reddish Brown Sand	Y ✓ N	
32	40	8	Light Tan to White Sand	Y ✓ N	
40	45	5	Light Reddish Brown Sand with Sandstone Pebbles	Y ✓ N	
45	48	3	Light Reddish Brown Sand with Caliche	Y ✓ N	
48	50	2	Light Reddish Brown Sand	Y ✓ N	
50	54	4	Light Reddish Brown Sand with Caliche	Y ✓ N	
54	60	6	Red Sand	Y ✓ N	
60	61	1	Light Reddish Brown Sandy Gravel	Y ✓ N	
61	75	14	Dark Reddish brown Silty Clayey Sand	Y ✓ N	
				Y N	
				Y N	
				Y N	
				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: Boring location drilled only as a soil boring and plugged after completion per well plugging plan.				
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:				
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:				
				2/26/16 DATE	
SIGNATURE OF DRILLER / PRINT SIGHNEE NAME					

FOR OSE INTERNAL USE

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

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION	PAGE 2 OF 2	

Tom Blaine, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 581433  
File Nbr: C 03932  
Well File Nbr: C 03932 POD8

Mar. 09, 2016

ROBERT H HOLDER  
BRYCE KRAGER  
4222 85TH ST  
LUBBOCK, TX 79423

Greetings:

The above numbered permit was issued in your name on 01/27/2016.

The Well Record was received in this office on 03/01/2016, stating that it had been completed on 02/09/2016, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 01/14/2017.

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

Sincerely,

Deborah Dunaway  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

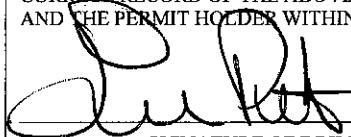
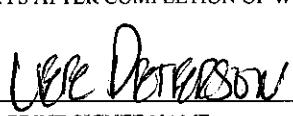
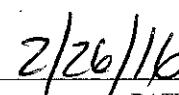
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) S15-BH-03				OSE FILE NUMBER(S) C 03932			
	WELL OWNER NAME(S) Bryce Krager % Parkhill, Smith & Cooper Attention: R.H. Holder				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 4222 85th Street				CITY Lubbock	STATE Texas	ZIP 79423	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	12	50.55 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE	27	28.96 W	* DATUM REQUIRED: WGS 84			
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW 1/4 of SW 1/4 of NW 1/4 of SE 1/4 of Section 15, Township 24S, Range 34E							
	LICENSE NUMBER WD-1222		NAME OF LICENSED DRILLER Lee Peterson			NAME OF WELL DRILLING COMPANY Peterson Drilling & Testing, Inc.		
	DRILLING STARTED 02/10/16	DRILLING ENDED 02/11/16	DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT) 90'	DEPTH WATER FIRST ENCOUNTERED (FT)		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT)		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD		ADDITIVES – SPECIFY:					
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL		<input type="checkbox"/> 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							
DEPTH (feet bgl)		LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL			AMOUNT (cubic feet)	METHOD OF PLACEMENT		
FROM	TO							
3. ANNULAR MATERIAL								

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 10/29/15)

FILE NUMBER <u>C-3932</u>	POD NUMBER <u>13</u>	TRN NUMBER <u>581433</u>
LOCATION <u>24S.34E.15.4.2.3</u>	<u>EXPL</u>	PAGE 1 OF 2

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	6	6	Light Reddish Brown Fine Sand	Y ✓ N	
6	13	7	Light Reddish Brown Sand with Caliche	Y ✓ N	
13	19	6	Light Reddish Brown Fine Sand	Y ✓ N	
19	29	10	Tan-White Caliche with Light Reddish Brown Sand	Y ✓ N	
29	39	10	Light Reddish Brown Sand	Y ✓ N	
39	45	6	Gray to Dark Gray Sand	Y ✓ N	
45	54	9	Gray-Dark Gray Sand with Sandstone Pebbles	Y ✓ N	
54	55	1	Dark Reddish Brown to Light Reddish Brown Silty Claystone	Y ✓ N	
55	58	3	Green to Gray Shale	Y ✓ N	
58	62	4	Dark Reddish Brown Silty Claystone	Y ✓ N	
62	74	12	Dark Reddish Brown Claystone	Y ✓ N	
74	75	1	Light Brown to Gray Silty Clay	Y ✓ N	
75	77	2	Dark Reddish Brown Claystone	Y ✓ N	
77	79	2	Light Brown to Gray Silty Clay	Y ✓ N	
79	80	1	Dark Reddish Brown Claystone	Y ✓ N	
80	82	2	Light Brown to Gray Sandy Silt	Y ✓ N	
82	87	5	Dark Reddish Brown Clayey Silt	Y ✓ N	
87	90	3	Light Brown to Gray Silty Sand	Y N	
				Y N	
				Y N	
				Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					
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:		Boring location drilled only as a soil boring and plugged after completion per well plugging plan.			
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:					
THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
 <b>SIGNATURE OF DRILLER</b>		 <b>PRINT SIGHNEE NAME</b>		 <b>DATE</b>	

FOR OSE INTERNAL USE

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

FILE NUMBER	C-3932	POD NUMBER	13	TRN NUMBER	581433
LOCATION	24S.34E.13.4-2-3			EXPL.	PAGE 2 OF 2

Tom Blaine, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 581433  
File Nbr: C 03932  
Well File Nbr: C 03932 POD13

Mar. 28, 2016

ROBERT H HOLDER  
BRYCE KRAGER  
4222 85TH ST  
LUBBOCK, TX 79423

Greetings:

The above numbered permit was issued in your name on 01/27/2016.

The Well Record was received in this office on 03/01/2016, stating that it had been completed on 02/11/2016, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 01/14/2017.

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

Sincerely,

*Dunaway*

Deborah Dunaway  
(575) 622-6521

drywell



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

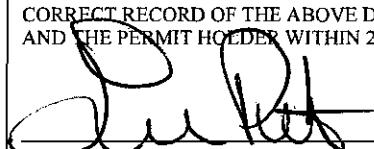
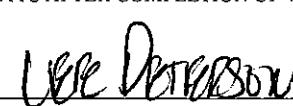
[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) S15-BH-03				OSE FILE NUMBER(S) C 03932			
	WELL OWNER NAME(S) Bryce Krager % Parkhill, Smith & Cooper Attention: R.H. Holder				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 4222 85th Street				CITY Lubbock	STATE Texas	ZIP 79423	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	32	MINUTES 12	SECONDS 50.55	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE	103	27	28.96	W	* DATUM REQUIRED: WGS 84	
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW 1/4 of SW 1/4 of NW 1/4 of SE 1/4 of Section 15, Township 24S, Range 34E							
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	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT)		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> 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							
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							
3. ANNULAR MATERIAL								

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 10/29/15)

FILE NUMBER <i>C-3932</i>	POD NUMBER <i>13</i>	TRN NUMBER <i>581433</i>
LOCATION <i>24S.34E.15.3.2.4</i>	<i>EXPL</i>	PAGE 1 OF 2

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	6	6	Light Reddish Brown Fine Sand	Y ✓ N	
6	13	7	Light Reddish Brown Sand with Caliche	Y ✓ N	
13	19	6	Light Reddish Brown Fine Sand	Y ✓ N	
19	29	10	Tan-White Caliche with Light Reddish Brown Sand	Y ✓ N	
29	39	10	Light Reddish Brown Sand	Y ✓ N	
39	45	6	Gray to Dark Gray Sand	Y ✓ N	
45	54	9	Gray-Dark Gray Sand with Sandstone Pebbles	Y ✓ N	
54	55	1	Dark Reddish Brown to Light Reddish Brown Silty Claystone	Y ✓ N	
55	58	3	Green to Gray Shale	Y ✓ N	
58	62	4	Dark Reddish Brown Silty Claystone	Y ✓ N	
62	74	12	Dark Reddish Brown Claystone	Y ✓ N	
74	75	1	Light Brown to Gray Silty Clay	Y ✓ N	
75	77	2	Dark Reddish Brown Claystone	Y ✓ N	
77	79	2	Light Brown to Gray Silty Clay	Y ✓ N	
79	80	1	Dark Reddish Brown Claystone	Y ✓ N	
80	82	2	Light Brown to Gray Sandy Silt	Y ✓ N	
82	87	5	Dark Reddish Brown Clayey Silt	Y ✓ N	
87	90	3	Light Brown to Gray Silty Sand	Y N	
				Y N	
				Y N	
				Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:				TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.			
	MISCELLANEOUS INFORMATION: Boring location drilled only as a soil boring and plugged after completion per well plugging plan.				
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:				
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:				
 SIGNATURE OF DRILLER / PRINT SIGNEE NAME		 2/26/16 DATE			

FOR OSE INTERNAL USE

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

FILE NUMBER	C-3932	POD NUMBER	13	TRN NUMBER	581433
LOCATION	24S. 34E. 13. 3-2-4			EXPL	PAGE 2 OF 2

Tom Blaine, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 581433  
File Nbr: C 03932  
Well File Nbr: C 03932 POD13

Apr. 12, 2016

ROBERT H. HOLDER  
BRYCE KARGER  
4222 85TH ST.  
LUBBOCK, TX 79423

Greetings:

The above numbered permit was issued in your name on 01/27/2016.

The Well Record was received in this office on 03/01/2016, stating that it had been completed on 02/11/2016, and was a dry well. The well is to be plugged or capped or otherwise maintained in a manner satisfactory to the State Engineer.

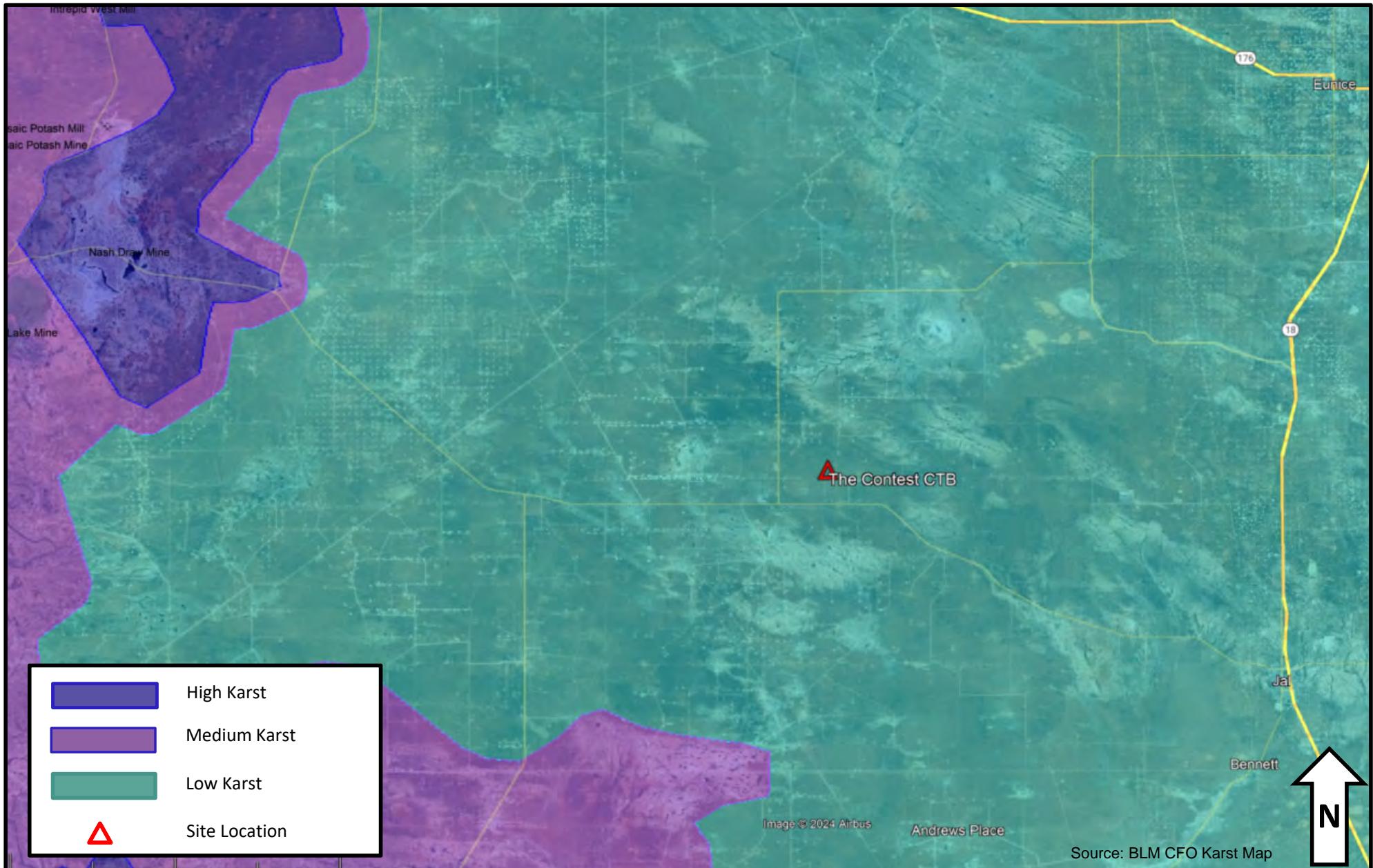
Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 01/14/2017.

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

Sincerely,

Deborah Dunaway  
(575) 622-6521

drywell

**Figure 4 – Karst Potential**

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997,-103.47905  
Lea County, New Mexico



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**The Contest Federal CTB**  
**Lea County, New Mexico**



Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			10	50	NE	NE	NE	100	600
<b>Delineation Soil Samples - nAPP2327037534</b>									
HA-1	08/08/24	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	41.0
HA-1	08/08/24	1	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	29.1
HA-1	08/08/24	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	19.6
HA-2	08/08/24	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	186
HA-2	08/08/24	1	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	66.1
HA-2	08/08/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	27.6
HA-3	08/08/24	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	81.4
HA-3	08/08/24	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	37.1
HA-4	08/08/24	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	18.4
HA-4	08/08/24	1	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	15.1
HA-5	08/08/24	0.5	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	133
HA-5	08/08/24	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	107
HA-5	08/08/24	4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	47.8
<b>Confirmation Soil Samples - nAPP2327037534</b>									
CS01	08/02/24	4	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	8.49
CS02	08/02/24	4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	63.6
CS03	08/02/24	4	<0.00200	<0.00400	<49.7	<49.7	<49.7	<49.7	41.2
CS04	08/02/24	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	76.4
CS05	08/02/24	4	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	55.2
CS06	08/02/24	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	48.7
CS07	08/02/24	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	40.4
CS08	08/02/24	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	21.9
CS09	08/02/24	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	46.4
CS10	08/02/24	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	8.10
CS11	08/02/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	8.81



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**The Contest Federal CTB**  
**Lea County, New Mexico**



Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
CS12	08/02/24	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	55.2
CS13	08/02/24	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	5.04
CS14	08/02/24	4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	40.6
CS15	08/02/24	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	33.5
CS16	08/02/24	4	<0.00202	<0.00404	<49.6	<49.6	<49.6	<49.6	45.1
CS17	08/02/24	4	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	6.67
CS18	08/02/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	40.6
CS19	08/02/24	4	<0.00200	<0.00400	<49.6	<49.6	<49.6	<49.6	45.4
CS20	08/02/24	4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	44.2
CS21	08/02/24	4	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	30.4
CS22	08/02/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	8.13
CS23	08/02/24	4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	38.5
CS24	08/02/24	4	<0.00201	<0.00402	<49.9	67.7	<49.9	67.7	8.33
CS25	08/02/24	4	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	48.5
CS26	08/02/24	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	45.9
CS27	08/02/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	39.7
CS28	08/02/24	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	5.04
CS29	08/02/24	4	<0.00200	<0.00400	<50.1	<50.1	<50.1	<50.1	<4.96
CS30	08/02/24	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	9.99
CS31	08/02/24	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	38.5
CS32	08/02/24	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	42.3
CS33	08/02/24	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	50.5
CS34	08/02/24	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	40.8
CS35	08/02/24	4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	48.9
CS36	08/02/24	4	<0.00202	<0.00404	<49.7	<49.7	<49.7	<49.7	32.8
CS37	08/02/24	6	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<4.97



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**The Contest Federal CTB**  
**Lea County, New Mexico**



Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
CS38	08/02/24	6	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	38.2
CS39	08/02/24	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	49.8
CS40	08/02/24	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	72.8
CS41	08/07/24	4	<0.00404	<0.00202	<49.8	<49.8	<49.8	<49.8	<5.02
CS42	08/07/24	4	<0.00402	<0.00201	<49.9	<49.9	<49.9	<49.9	5.51
CS43	08/07/24	4	<0.00399	<0.00200	<50.0	<50.0	<50.0	<50.0	<5.01
CS44	08/07/24	4	<0.00398	<0.00199	<49.7	<49.7	<49.7	<49.7	31.1
CS45	08/07/24	1	<0.00398	<0.00199	<49.8	<49.8	<49.8	<49.8	4.98
CS46	08/07/24	4	<0.00402	<0.00201	<50.0	<50.0	<50.0	<50.0	8.10
CS47	08/07/24	4	<0.00399	<0.00200	<49.9	<49.9	<49.9	<49.9	44.3
CS48	08/07/24	4	<0.00400	<0.00200	<50.0	<50.0	<50.0	<50.0	<4.97
CS49	08/07/24	1	<0.00398	<0.00199	<49.8	<49.8	<49.8	<49.8	7.48
CS50	08/07/24	2	<0.00398	<0.00199	<49.7	<49.7	<49.7	<49.7	7.67
CS51	08/07/24	2	0.449	<0.00201	<49.8	<49.8	<49.8	<49.8	<4.97
CS52	08/07/24	4	0.00906	<0.00199	<49.8	<49.8	<49.8	<49.8	<4.95
CS53	08/07/24	4	<0.00404	<0.00202	<49.8	<49.8	<49.8	<49.8	<5.05
CS54	08/07/24	4	<0.00399	<0.00200	<49.7	<49.7	<49.7	<49.7	<5.05
CS55	08/07/24	4	<0.00404	<0.00202	<49.9	<49.9	<49.9	<49.9	<4.96
CS56	08/08/24	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	90.9
CS57	08/08/24	0.5	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	88.4
CS58	08/08/24	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	95.6
CS59	08/08/24	0.5	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	92.1
CS60	08/08/24	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	96.9
SW01	08/02/24	0-6	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	28.4
SW02	08/02/24	0-4	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	32.6
SW03	08/02/24	0-4	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	31.6



**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**The Contest Federal CTB**  
**Lea County, New Mexico**



Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>100</b>	<b>600</b>
SW04	08/02/24	0-4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	27.8
SW05	08/02/24	0-4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	37.2
SW06	08/02/24	0-4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	40.4
SW07	08/02/24	0-4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	35.1
SW08	08/02/24	0-4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	35.0
SW09	08/02/24	0-4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	221
SW10	08/07/24	0-4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	5.09
SW11	08/07/24	0-4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	28.0
SW12	08/07/24	0-4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	31.6
SW13	08/07/24	0-4	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	34.0
SW14	08/07/24	0-4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<4.97
SW15	08/07/24	0-4	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	5.57
SW16	08/08/24	0-0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	12.4
SW17	08/08/24	0-0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	14.3

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

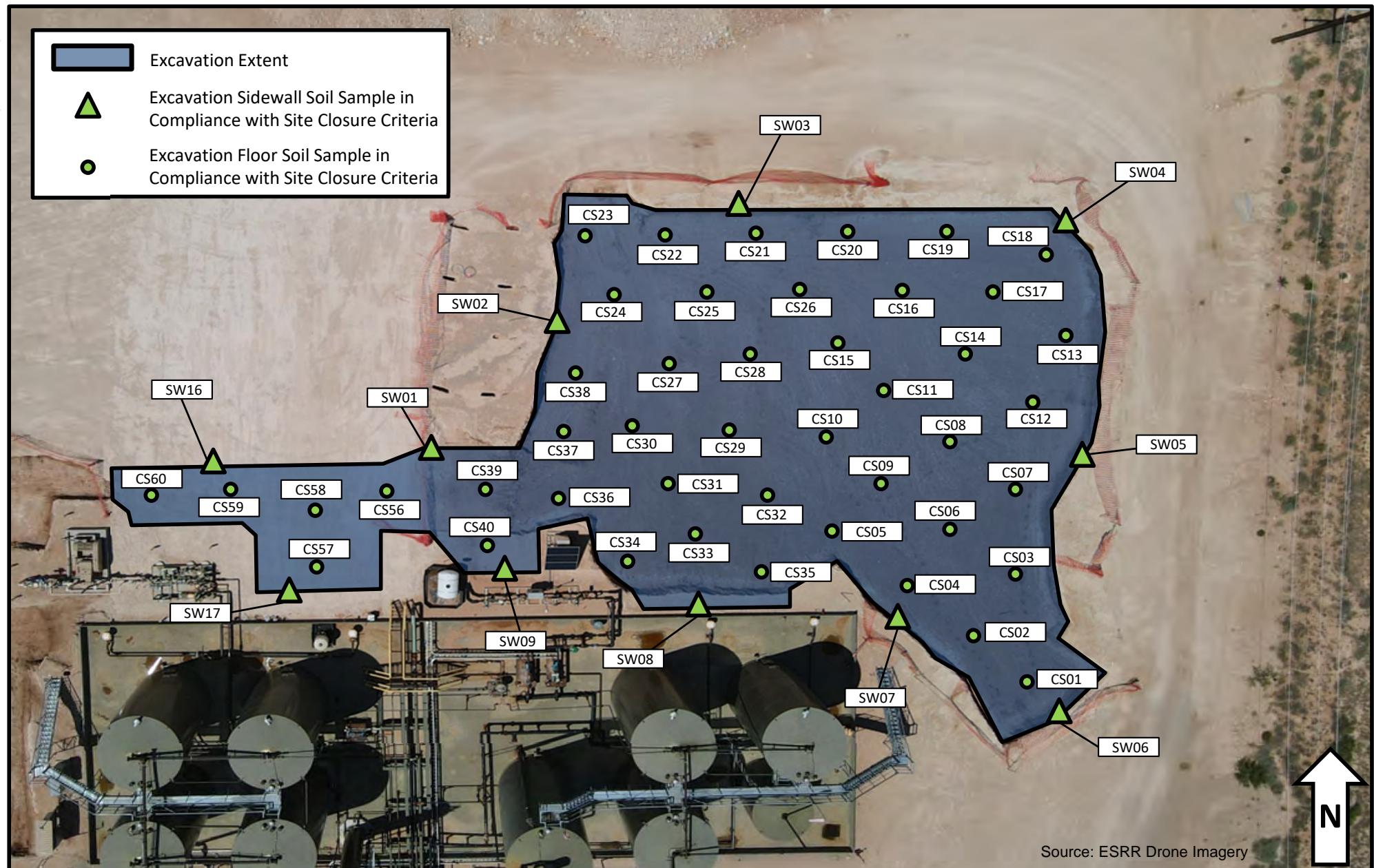
NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Text in "grey" represents excavated soil samples

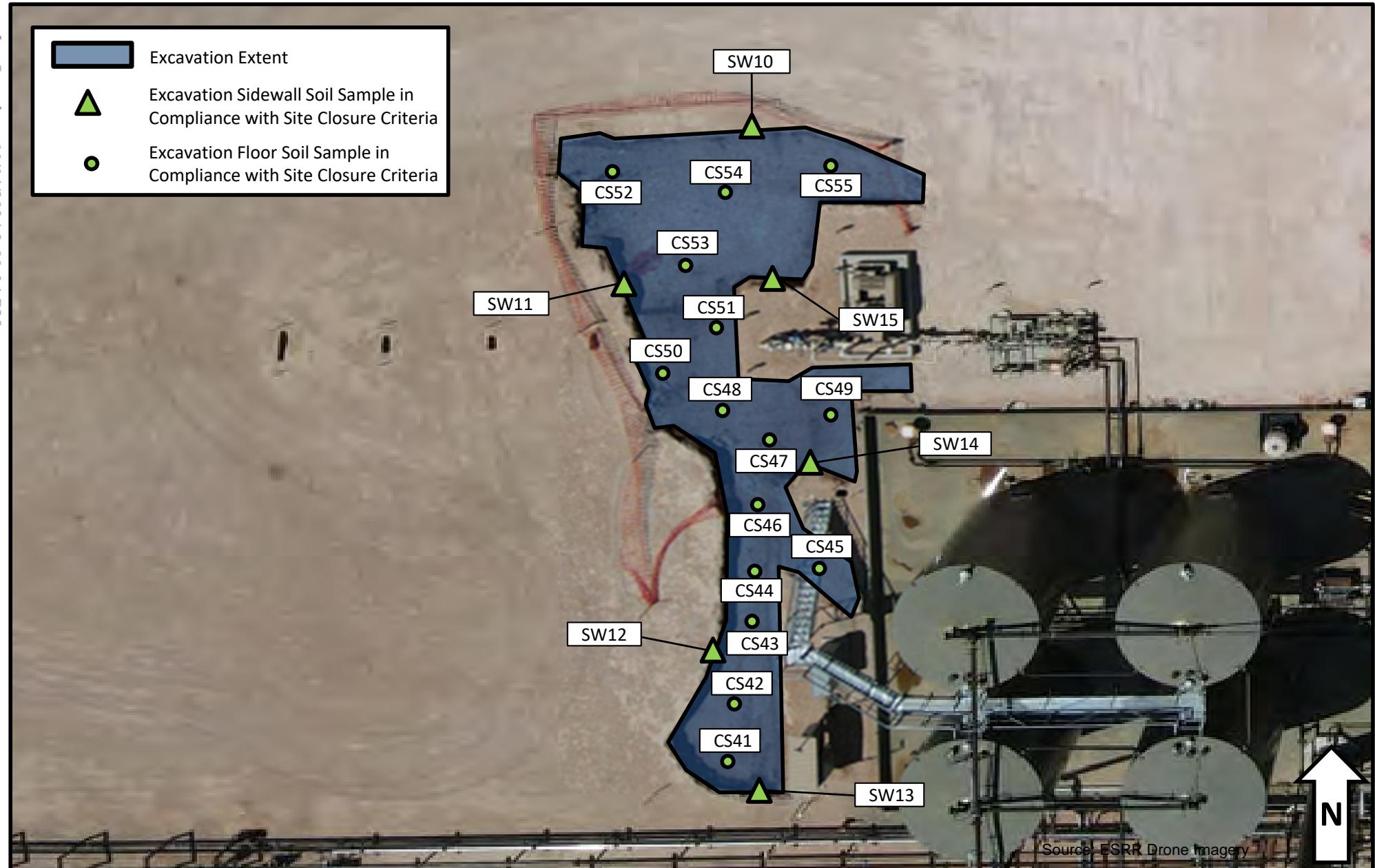
Concentrations in **bold and highlighted** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard<sup>†</sup> for Soils Impacted by a Release

<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.

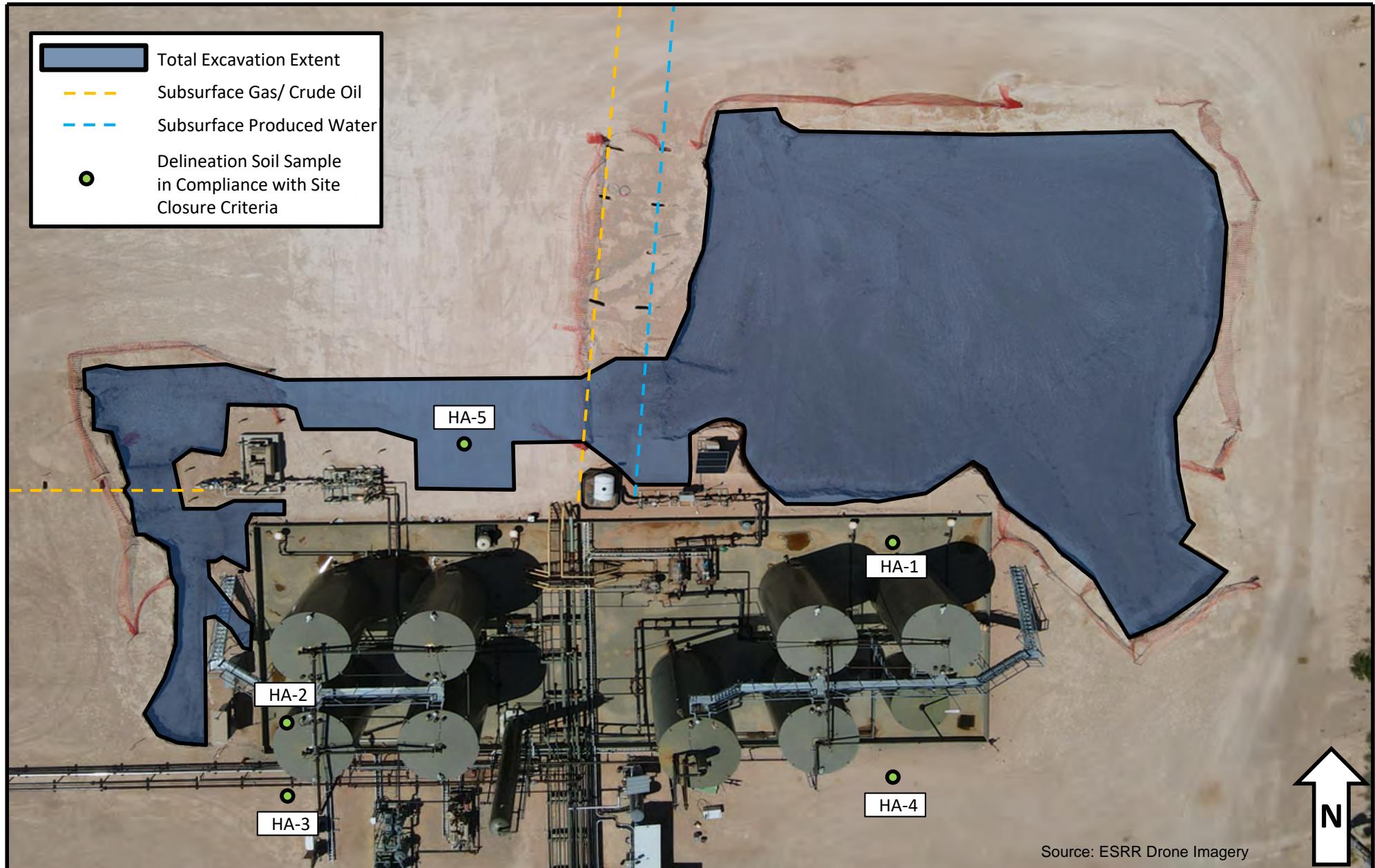


**Figure 5 – Excavation Soil Sample Locations**

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997, -103.47905  
Lea County, New Mexico

**Figure 6 – Excavation Soil Sample Locations**

Civitas Resources – The Contest Federal CTB  
 GPS: 32.22997, -103.47905  
 Lea County, New Mexico



**Figure 7 – Delineation Soil Sample Locations**

Civitas Resources – The Contest Federal CTB  
GPS: 32.22997,-103.47905  
Lea County, New Mexico

 <p><b>LITHOLOGIC / SOIL SAMPLING LOG</b></p>								Sample Name: HA-1	Date: 8/08/2024	
								Site Name: The Contest Federal CTB		
								Incident Number: nAPP2327037534		
								Job Number: 2288		
								Logged By: GM	Method: Hand Auger	
Site Coordinates: 32.22871, -103.47959								Hole Diameter: 3.75"	Total Depth: 4 feet bgs	
Comments: Field screening conducted with HACH Chloride Test Strips for chloride, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes		
Dry	<120	-	No	HA-1	0.5	0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to medium grain, abundant small to large subround gravel, no stain, no odor.		
Dry	<120	-	No	HA-1	1		SP	(1-4') SAND, dry, brown, poorly graded, fine grain, trace silt, trace clay, trace small subround gravel, no stain, no odor.		
Dry	<120	-	No		2	2		@2' trace organics		
Dry	<120	-	No	HA-1	4	4		@4' no organics, no gravel		
										Total Depth

 <p><b>LITHOLOGIC / SOIL SAMPLING LOG</b></p>								Sample Name: HA-2	Date: 8/08/2024	
								Site Name: The Contest Federal CTB		
								Incident Number: nAPP2327037534		
								Job Number: 2288		
Site Coordinates: 32.22871, -103.47959				Logged By: GM	Method: Hand Auger					
				Hole Diameter: 3.75"	Total Depth: 4 feet bgs					
Comments: Field screening conducted with HACH Chloride Test Strips for chloride, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes		
Dry	140	-	No	HA-2	0.5	0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to medium grain, abundant small to large subangular gravel, no stain, no odor.		
Dry	<120	-	No	HA-2	1		SW-SM	(1-2') SAND, dry, brown, well graded with silt, fine grain, abundant small subangular caliche gravel, no stain, no odor.		
Dry	<120	-	No		2	2	SP	(2-4') SAND, dry, brown, poorly graded, fine grain, trace silt, trace clay, trace small subangular caliche gravel, no stain, no odor. @4' increase in gravel		
Dry	<120	-	No	HA-2	4	4				
Total Depth										

 <p><b>LITHOLOGIC / SOIL SAMPLING LOG</b></p>								Sample Name: HA-3	Date: 8/08/2024						
								Site Name: The Contest Federal CTB							
								Incident Number: nAPP2327037534							
								Job Number: 2288							
								Logged By: GM	Method: Hand Auger						
Site Coordinates: 32.22871, -103.47959								Hole Diameter: 3.75"	Total Depth: 1 foot bgs						
Comments: Field screening conducted with HACH Chloride Test Strips for chloride, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes							
Dry	<120	-	No	HA-3	0.5	0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to medium grain, abundant small to large subround gravel, no stain, no odor.							
Dry	<120	-	No	HA-3	1	1									
Total Depth															

 <p><b>LITHOLOGIC / SOIL SAMPLING LOG</b></p>								Sample Name: HA-4	Date: 8/08/2024						
								Site Name: The Contest Federal CTB							
								Incident Number: nAPP2327037534							
								Job Number: 2288							
								Logged By: GM	Method: Hand Auger						
Site Coordinates: 32.22871, -103.47959								Hole Diameter: 3.75"	Total Depth: 1 foot bgs						
Comments: Field screening conducted with HACH Chloride Test Strips for chloride, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes							
Dry	<120	-	No	HA-4	0.5	0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to medium grain, abundant small to large subround gravel, no stain, no odor.							
Dry	<120	-	No	HA-4	1	1									
Total Depth															

 <p><b>LITHOLOGIC / SOIL SAMPLING LOG</b></p>								Sample Name: HA-5	Date: 8/08/2024						
								Site Name: The Contest Federal CTB							
								Incident Number: nAPP2327037534							
								Job Number: 2288							
								Logged By: GM	Method: Hand Auger						
Site Coordinates: 32.22871, -103.47959								Hole Diameter: 3.75"	Total Depth: 4 feet bgs						
Comments: Field screening conducted with HACH Chloride Test Strips for chloride, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes							
Dry	140	-	No	HA-5	0.5	0	CCHE	(0-1') CALICHE, dry, tan, well graded with silt, fine to medium grain, abundant small to large subround gravel, no stain, no odor.							
Dry	<120	-	No	HA-5	1		SP	(1-4') SAND, dry, reddish brown, poorly graded, fine grain, trace silt, trace clay, trace small subangular caliche gravel, no stain, no odor.							
Dry	<120	-	No		2	2									
Dry	<120	-	No	HA-5	4	4									
Total Depth															

The Contest Federal CTB - Closure Request Report  
Incident Number nAPP2327037534  
GPS: 32.22871, -103.47959



PHOTO 1: Northwest view of AOC during initial response by Tap Rock. 09/19/2023



PHOTO 2: Northwest view of AOC during initial response by Tap Rock. 09/19/2023

The Contest Federal CTB - Closure Request Report  
Incident Number nAPP2327037534  
GPS: 32.22871, -103.47959



Date & Time: Fri, Aug 02, 2024 at 12:30:03 MDT  
Position: +032.230095° / -103.478923° ( $\pm 15.6\text{ft}$ )  
Altitude: 3569ft ( $\pm 10.9\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 063° N63E 1120mils True ( $\pm 14^\circ$ )  
Elevation Angle: -23.8°  
Horizon Angle: +00.6°  
Zoom: 0.5X  
the contest ctb



PHOTO 3: Northeast view of excavation extent. 8/02/2024

Date & Time: Fri, Aug 02, 2024 at 12:28:18 MDT  
Position: +032.229967° / -103.479226° ( $\pm 15.6\text{ft}$ )  
Altitude: 3568ft ( $\pm 11.0\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 318° N42W 5653mils True ( $\pm 14^\circ$ )  
Elevation Angle: -17.7°  
Horizon Angle: -01.8°  
Zoom: 0.5X  
the contest ctb



PHOTO 4: Northwest view of excavation extent. 8/02/2024

The Contest Federal CTB - Closure Request Report  
Incident Number nAPP2327037534  
GPS: 32.22871, -103.47959



Date & Time: Fri, Aug 02, 2024 at 12:28:48 MDT  
Position: +032.230100° / -103.479328° ( $\pm 15.6\text{ft}$ )  
Altitude: 3574ft ( $\pm 11.0\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 093° S87E 1653mils True ( $\pm 14^\circ$ )  
Elevation Angle: -23.7°  
Horizon Angle: +00.4°  
Zoom: 0.5X  
the contest ctb



**PHOTO 5:** Southeast view of excavation extent. 8/02/2024

Date & Time: Thu, Aug 08, 2024 at 08:19:08 MDT  
Position: +032.230043° / -103.478737° ( $\pm 15.6\text{ft}$ )  
Altitude: 3564ft ( $\pm 11.0\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 123° S57E 2187mils True ( $\pm 12^\circ$ )  
Elevation Angle: -79.7°  
Horizon Angle: -21.8°  
Zoom: 0.5X  
the Contest CTB pinhole



**PHOTO 6:** Southeast view of potential pinhole during liner inspection activities. 8/08/2024

The Contest Federal CTB - Closure Request Report  
Incident Number nAPP2327037534  
GPS: 32.22871, -103.47959



PHOTO 7: Northeast view during delineation activities of HA-1. 8/08/2024



PHOTO 8: Southwest view during delineation activities of HA-2. 8/08/2024

The Contest Federal CTB - Closure Request Report  
Incident Number nAPP2327037534  
GPS: 32.22871, -103.47959



Date & Time: Thu, Aug 29, 2024 at 13:35:20 MDT  
Position: +032.229985° / -103.479396° ( $\pm 15.6\text{ft}$ )  
Altitude: 3567ft ( $\pm 10.9\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 076° N76E 1351mils True ( $\pm 13^\circ$ )  
Elevation Angle: -03.7°  
Horizon Angle: -01.3°  
Zoom: 0.5X  
the contest ctb



PHOTO 9: Northeast view during Site restoration activities. 8/29/2024

Date & Time: Thu, Aug 29, 2024 at 14:29:55 MDT  
Position: +032.230259° / -103.478982° ( $\pm 15.1\text{ft}$ )  
Altitude: 3554ft ( $\pm 11.6\text{ft}$ )  
Datum: WGS-84  
Azimuth/Bearing: 123° S57E 2187mils True ( $\pm 17^\circ$ )  
Elevation Angle: -01.6°  
Horizon Angle: -00.9°  
Zoom: 0.5X  
the contest ctb



PHOTO 10: Southeast view during Site restoration activities. 8/29/2024

## Sampling Notification- Incident Number nAPP2327037534

Gilbert Moreno <gmoreno@earthsys.net>

Wed 7/31/2024 6:42 AM

To:ocd.enviro@emnrd.nm.gov <ocd.enviro@emnrd.nm.gov>

Cc:Luke Kelly <l.kelly@civiresources.com>;Kristopher Williams <kwilliams@earthsys.net>

Hello,

Civitas Resources anticipates conducting soil sampling activities at the following Site on August 2<sup>nd</sup>, August 7<sup>th</sup> and August 8<sup>th</sup>, 2024. This email will be followed up with a Notification of Sampling (C-141N) for the proposed dates.

<b>Proposed Time:</b>	08:30-17:00 MST
<b>Site Name:</b>	The Contest CTB
<b>Incident Number:</b>	nAPP2327037534
<b>Sampling Surface Area:</b>	10,553 sqft
<b>Samples to be collected:</b>	70
<b>Sampling Date:</b>	08/02/2024, 08/07/2024, 08/08/2024
<b>Who to Contact:</b>	Gilbert Moreno
<b>Navigation to Site:</b>	From the intersection of Hwy 128 and Wyoming road, Drive NW on Hwy 128 for 16.46 miles; Turn N onto lease road and drive 0.83 miles; Turn W onto lease road and drive 0.25 miles; Turn NW onto lease road and drive 0.30 miles; Turn N onto lease road and drive 0.08 miles; Turn W and drive 0.34 miles onto the pad. Turn N and drive to the N side of the pad

**Gilbert Moreno** | Operations Manager  
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  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
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Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
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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 369407

**QUESTIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369407
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2327037534
Incident Name	NAPP2327037534 THE CONTEST FEDERAL CTB @ 30-025-46673
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-46673] THE CONTEST FEDERAL COM #131H
Incident Facility	[fAPP2126033053] THE CONTEST CTB

Location of Release Source	
Site Name	THE CONTEST FEDERAL CTB
Date Release Discovered	09/19/2023
Surface Owner	Federal

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	10,553
What is the estimated number of samples that will be gathered	70
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/02/2024
Time sampling will commence	08:30 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 - 832-541-7719
Please provide any information necessary for navigation to sampling site	From the intersection of Hwy 128 and Wyoming road, Drive NW on Hwy 128 for 16.46 miles; Turn N onto lease road and drive 0.83 miles; Turn W onto lease road and drive 0.25 miles; Turn NW onto lease road and drive 0.30 miles; Turn N onto lease road and drive 0.08 miles; Turn W and drive 0.34 miles onto the pad. Turn N and drive to the N side of the pad

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**State of New Mexico**

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**Oil Conservation Division**  
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CONDITIONS

Action 369407

**CONDITIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369407
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
Ikelly	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.	8/1/2024

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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS

Action 369418

**QUESTIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369418
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2327037534
Incident Name	NAPP2327037534 THE CONTEST FEDERAL CTB @ 30-025-46673
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-46673] THE CONTEST FEDERAL COM #131H
Incident Facility	[fAPP2126033053] THE CONTEST CTB

Location of Release Source	
Site Name	THE CONTEST FEDERAL CTB
Date Release Discovered	09/19/2023
Surface Owner	Federal

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	10,533
What is the estimated number of samples that will be gathered	70
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/07/2024
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	From the intersection of Hwy 128 and Wyoming road, Drive NW on Hwy 128 for 16.46 miles; Turn N onto lease road and drive 0.83 miles; Turn W onto lease road and drive 0.25 miles; Turn NW onto lease road and drive 0.30 miles; Turn N onto lease road and drive 0.08 miles; Turn W and drive 0.34 miles onto the pad. Turn N and drive to the N side of the pad

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
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**Santa Fe, NM 87505**

CONDITIONS

Action 369418

**CONDITIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369418
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
Ikelly	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.	8/1/2024

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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**

QUESTIONS

Action 369420

#### QUESTIONS

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369420
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327037534
Incident Name	NAPP2327037534 THE CONTEST FEDERAL CTB @ 30-025-46673
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-46673] THE CONTEST FEDERAL COM #131H
Incident Facility	[fAPP2126033053] THE CONTEST CTB

#### Location of Release Source

Site Name	THE CONTEST FEDERAL CTB
Date Release Discovered	09/19/2023
Surface Owner	Federal

#### Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	10,553
What is the estimated number of samples that will be gathered	70
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/08/2024
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	From the intersection of Hwy 128 and Wyoming road, Drive NW on Hwy 128 for 16.46 miles; Turn N onto lease road and drive 0.83 miles; Turn W onto lease road and drive 0.25 miles; Turn NW onto lease road and drive 0.30 miles; Turn N onto lease road and drive 0.08 miles; Turn W and drive 0.34 miles onto the pad. Turn N and drive to the N side of the pad

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 369420

**CONDITIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369420
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**CONDITIONS**

Created By	Condition	Condition Date
Ikelly	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.	8/1/2024

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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**

QUESTIONS

Action 369411

#### QUESTIONS

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369411
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327037534
Incident Name	NAPP2327037534 THE CONTEST FEDERAL CTB @ 30-025-46673
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-46673] THE CONTEST FEDERAL COM #131H
Incident Facility	[fAPP2126033053] THE CONTEST CTB

#### Location of Release Source

Site Name	THE CONTEST FEDERAL CTB
Date Release Discovered	09/19/2023
Surface Owner	Federal

#### Liner Inspection Event Information

Please answer all the questions in this group.

What is the liner inspection surface area in square feet	8,117
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	08/08/2024
Time liner inspection will commence	08:00 AM
Please provide any information necessary for observers to liner inspection	Gilbert Moreno - 832-541-7719
Please provide any information necessary for navigation to liner inspection site	From the intersection of Hwy 128 and Wyoming road, Drive NW on Hwy 128 for 16.46 miles; Turn N onto lease road and drive 0.83 miles; Turn W onto lease road and drive 0.25 miles; Turn NW onto lease road and drive 0.30 miles; Turn N onto lease road and drive 0.08 miles; Turn W and drive 0.34 miles onto the pad. Turn N and drive to the N side of the pad

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CONDITIONS

Action 369411

**CONDITIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 369411
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**CONDITIONS**

Created By	Condition	Condition Date
Ikelly	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	8/1/2024

## RE: [EXTERNAL] The Contest Federal CTB Extension Request- nAPP2327037534

Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>

Wed 9/4/2024 8:54 AM

To: Gilbert Moreno <gmoreno@earthsys.net>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>

Cc: Luke Kelly <lkelly@civiresources.com>; Joel Lujan <jlujan@civiresources.com>; Kristopher Williams <kwilliams@earthsys.net>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

You don't often get email from michael.buchanan@emnrd.nm.gov. [Learn why this is important](#)

Good morning, Mr. Moreno

The OCD has received your request for a remediation closure extension and is approved for sixty (60) days from 09/04/2024. The new due date for submission is now 11/04/2024. Please keep a copy of this notification and correspondence in the incident file and as part of future documentation and/or reporting.

Thank you,

---

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

**Sent:** Wednesday, September 4, 2024 9:05 AM

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

**Cc:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Luke Kelly <lkelly@civiresources.com>; Joel Lujan <jlujan@civiresources.com>; Kristopher Williams <kwilliams@earthsys.net>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

**Subject:** [EXTERNAL] The Contest Federal CTB Extension Request- nAPP2327037534

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

Scott,

Earth Systems R & R (ESRR) on behalf of Civitas Resources (Civitas) is requesting an extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at The Contest Federal CTB (Site).

A produced water release was discovered on September 19, 2023, and was subsequently assigned Incident Number nAPP2327037534 at a former Tap Rock Operating location. During early 2024, a Tap Rock contracted third-party oversaw the excavation of an estimated 2,100 cubic yards via mechanical equipment. Since excavation activities, Civitas has acquired this Site from Tap Rock Operating and the original third-party consultant was not retained.

Civitas requests an extension of the past due deadline for the release associated with Incident Number nAPP2327037534 in order to get back in compliance prior to submitting a subsequent corrective action report completed by ESRR.

**Gilbert Moreno** | Carlsbad Operations Manager- Project Geologist

1910 Resource Ct | Carlsbad NM, 88220

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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 8/8/2024 9:50:54 AM

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6973-1

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1089 N Canal St.  
Carlsbad NM 88220

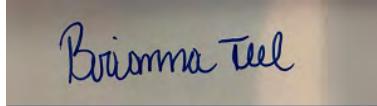
# Eurofins Carlsbad

## 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  
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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: The Contest CTB

Laboratory Job ID: 890-6973-1  
SDG: Lea County,NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high 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
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

These commonly used abbreviations may or may not be present in this report.

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

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## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: The Contest CTB

Job ID: 890-6973-1

**Job ID: 890-6973-1**

**Eurofins Carlsbad**

### Job Narrative 890-6973-1

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 8/2/2024 3:31 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 3.2°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: CS 01 (890-6973-1), CS 02 (890-6973-2), CS 03 (890-6973-3), CS 04 (890-6973-4), CS 05 (890-6973-5), CS 06 (890-6973-6), CS 07 (890-6973-7), CS 08 (890-6973-8), CS 09 (890-6973-9), CS 10 (890-6973-10), CS 11 (890-6973-11), CS 12 (890-6973-12), CS 13 (890-6973-13), CS 14 (890-6973-14), CS 15 (890-6973-15), CS 16 (890-6973-16), CS 17 (890-6973-17), CS 18 (890-6973-18), CS 19 (890-6973-19), CS 20 (890-6973-20), CS 21 (890-6973-21), CS 22 (890-6973-22), CS 23 (890-6973-23), CS 24 (890-6973-24), CS 25 (890-6973-25), CS 26 (890-6973-26), CS 27 (890-6973-27), CS 28 (890-6973-28), CS 29 (890-6973-29), CS 30 (890-6973-30), CS 31 (890-6973-31), CS 32 (890-6973-32), CS 33 (890-6973-33), CS 34 (890-6973-34), CS 35 (890-6973-35) and CS 36 (890-6973-36).

### **GC VOA**

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-87458 recovered under the lower control limit for m-Xylene & p-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-87487 and analytical batch 880-87458 was outside the upper control limits.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-87487 and analytical batch 880-87458 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

### **Diesel Range Organics**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87401 and analytical batch 880-87619 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: CS 29 (890-6973-29), CS 30 (890-6973-30), CS 31 (890-6973-31), CS 32 (890-6973-32), CS 33 (890-6973-33), CS 34 (890-6973-34), CS 35 (890-6973-35), CS 36 (890-6973-36), (LCS 880-87446/2-A) and (LCSD 880-87446/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87446 and analytical batch 880-87450 was outside the upper control limits.

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-87446 and analytical batch 880-87450 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: CS 01

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## Case Narrative

Client: Earth Systems Response and Restoration  
Project: The Contest CTB

Job ID: 890-6973-1

### Job ID: 890-6973-1 (Continued)

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(890-6973-1), CS 02 (890-6973-2), CS 03 (890-6973-3), CS 04 (890-6973-4), CS 05 (890-6973-5), CS 06 (890-6973-6), CS 07 (890-6973-7), CS 08 (890-6973-8), CS 10 (890-6973-10), CS 11 (890-6973-11), CS 12 (890-6973-12), CS 14 (890-6973-14), CS 17 (890-6973-17), CS 25 (890-6973-25), (890-6971-A-1-B MS) and (890-6971-A-1-C MSD). Percent recoveries are based on the amount spiked.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-87445/2-A) and (LCSD 880-87445/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: CS 24 (890-6973-24). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The continuing calibration verification (CCV) associated with batch 880-87619 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-87619/21).

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-87553 and analytical batch 880-87649 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-87554 and analytical batch 880-87655 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 01**

Date Collected: 08/02/24 09:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-1**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 00:08	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 00:08	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 00:08	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 00:08	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/05/24 10:06	08/06/24 00:08	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 00:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130				08/05/24 10:06	08/06/24 00:08	1
1,4-Difluorobenzene (Surr)	106		70 - 130				08/05/24 10:06	08/06/24 00:08	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			08/06/24 00:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/06/24 16:02	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		08/02/24 15:06	08/06/24 16:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 16:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	149	S1+	70 - 130				08/02/24 15:06	08/06/24 16:02	1
<i>o</i> -Terphenyl	150	S1+	70 - 130				08/02/24 15:06	08/06/24 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.49		4.97		mg/Kg			08/07/24 18:03	1

**Client Sample ID: CS 02**

Date Collected: 08/02/24 09:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-2**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 00:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 00:29	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				08/05/24 10:06	08/06/24 00:29	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 02**  
 Date Collected: 08/02/24 09:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-2**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	08/05/24 10:06	08/06/24 00:29	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			08/06/24 00:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 16:20	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		08/02/24 15:06	08/06/24 16:20	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/02/24 15:06	08/06/24 16:20	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/02/24 15:06	08/06/24 16:20	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	154	S1+	70 - 130	08/02/24 15:06	08/06/24 16:20	1
o-Terphenyl	156	S1+	70 - 130	08/02/24 15:06	08/06/24 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.6		5.03		mg/Kg			08/07/24 18:09	1

**Client Sample ID: CS 03****Lab Sample ID: 890-6973-3**

Date Collected: 08/02/24 09:20  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

Matrix: Solid

**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		08/05/24 10:06	08/06/24 00:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 00:49	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 00:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 00:49	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	08/05/24 10:06	08/06/24 00:49	1
1,4-Difluorobenzene (Surr)	110		70 - 130	08/05/24 10:06	08/06/24 00:49	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			08/06/24 00:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 16:38	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 03****Lab Sample ID: 890-6973-3**

Matrix: Solid

Date Collected: 08/02/24 09:20

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/02/24 15:06	08/06/24 16:38	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/02/24 15:06	08/06/24 16:38	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/02/24 15:06	08/06/24 16:38	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130				08/02/24 15:06	08/06/24 16:38	1
o-Terphenyl	144	S1+	70 - 130				08/02/24 15:06	08/06/24 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.2		5.03		mg/Kg			08/07/24 18:15	1

**Client Sample ID: CS 04****Lab Sample ID: 890-6973-4**

Matrix: Solid

Date Collected: 08/02/24 09:30

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 01:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 01:10	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 01:10	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	104		70 - 130				08/05/24 10:06	08/06/24 01:10	1
1,4-Difluorobenzene (Surr)	114		70 - 130				08/05/24 10:06	08/06/24 01:10	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			08/06/24 01:10	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			08/06/24 16:56	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		08/02/24 15:06	08/06/24 16:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/02/24 15:06	08/06/24 16:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/02/24 15:06	08/06/24 16:56	1
<b>Surrogate</b>									
1-Chlorooctane	161	S1+	70 - 130				08/02/24 15:06	08/06/24 16:56	1
o-Terphenyl	163	S1+	70 - 130				08/02/24 15:06	08/06/24 16:56	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 04****Lab Sample ID: 890-6973-4**

Matrix: Solid

Date Collected: 08/02/24 09:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.4	F1	4.96		mg/Kg			08/07/24 07:24	1

**Client Sample ID: CS 05****Lab Sample ID: 890-6973-5**

Matrix: Solid

Date Collected: 08/02/24 09:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 01:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 01:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 01:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 01:30	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/05/24 10:06	08/06/24 01:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 01:30	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				08/05/24 10:06	08/06/24 01:30	1
1,4-Difluorobenzene (Surr)	114		70 - 130				08/05/24 10:06	08/06/24 01:30	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			08/06/24 01:30	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			08/06/24 17:14	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		08/02/24 15:06	08/06/24 17:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 17:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 17:14	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	140	S1+	70 - 130				08/02/24 15:06	08/06/24 17:14	1
<i>o</i> -Terphenyl	143	S1+	70 - 130				08/02/24 15:06	08/06/24 17:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.2		4.96		mg/Kg			08/07/24 07:42	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 06**  
 Date Collected: 08/02/24 09:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-6**  
 Matrix: Solid

**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		08/05/24 10:06	08/06/24 01:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 01:51	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/05/24 10:06	08/06/24 01:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 01:51	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		108		70 - 130			08/05/24 10:06	08/06/24 01:51	1
1,4-Difluorobenzene (Surr)		114		70 - 130			08/05/24 10:06	08/06/24 01:51	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			08/06/24 01:51	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			08/06/24 17:33	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		08/02/24 15:06	08/06/24 17:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 17:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/02/24 15:06	08/06/24 17:33	1
<b>Surrogate</b>									
1-Chlorooctane	139	S1+	70 - 130				08/02/24 15:06	08/06/24 17:33	1
<i>o</i> -Terphenyl	141	S1+	70 - 130				08/02/24 15:06	08/06/24 17:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.7		4.98		mg/Kg			08/07/24 07:48	1

**Client Sample ID: CS 07**  
 Date Collected: 08/02/24 10:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-7**  
 Matrix: Solid

**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		08/05/24 10:06	08/06/24 02:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 02:11	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 02:11	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		104		70 - 130			08/05/24 10:06	08/06/24 02:11	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 07**  
 Date Collected: 08/02/24 10:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-7**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	119		70 - 130	08/05/24 10:06	08/06/24 02:11	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			08/06/24 02:11	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			08/06/24 17:51	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		08/02/24 15:06	08/06/24 17:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/02/24 15:06	08/06/24 17:51	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/02/24 15:06	08/06/24 17:51	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130	08/02/24 15:06	08/06/24 17:51	1
o-Terphenyl	132	S1+	70 - 130	08/02/24 15:06	08/06/24 17:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		4.98		mg/Kg			08/07/24 07:54	1

**Client Sample ID: CS 08**

**Lab Sample ID: 890-6973-8**

Matrix: Solid

Date Collected: 08/02/24 10:10

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 02:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/05/24 10:06	08/06/24 02:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/05/24 10:06	08/06/24 02:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/24 10:06	08/06/24 02:31	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/05/24 10:06	08/06/24 02:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/24 10:06	08/06/24 02:31	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	08/05/24 10:06	08/06/24 02:31	1
1,4-Difluorobenzene (Surr)	116		70 - 130	08/05/24 10:06	08/06/24 02:31	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			08/06/24 02:31	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			08/06/24 18:09	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 08****Lab Sample ID: 890-6973-8**

Matrix: Solid

Date Collected: 08/02/24 10:10

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/02/24 15:06	08/06/24 18:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/02/24 15:06	08/06/24 18:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/02/24 15:06	08/06/24 18:09	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130				08/02/24 15:06	08/06/24 18:09	1
o-Terphenyl	145	S1+	70 - 130				08/02/24 15:06	08/06/24 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.9		5.02		mg/Kg			08/07/24 08:00	1

**Client Sample ID: CS 09****Lab Sample ID: 890-6973-9**

Matrix: Solid

Date Collected: 08/02/24 10:20

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 02:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 02:52	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 02:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 02:52	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:06	08/06/24 02:52	1
1,4-Difluorobenzene (Surr)	114		70 - 130				08/05/24 10:06	08/06/24 02:52	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			08/06/24 02:52	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			08/06/24 21:07	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		08/03/24 15:56	08/06/24 21:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 21:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 21:07	1
<b>Surrogate</b>									
1-Chlorooctane	121		70 - 130				08/03/24 15:56	08/06/24 21:07	1
o-Terphenyl	122		70 - 130				08/03/24 15:56	08/06/24 21:07	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 09****Lab Sample ID: 890-6973-9**

Matrix: Solid

Date Collected: 08/02/24 10:20  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.4		4.97		mg/Kg			08/07/24 08:18	1

**Client Sample ID: CS 10****Lab Sample ID: 890-6973-10**

Matrix: Solid

Date Collected: 08/02/24 10:30  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 03:12	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 03:12	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 03:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 03:12	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/05/24 10:06	08/06/24 03:12	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 03:12	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		70 - 130				08/05/24 10:06	08/06/24 03:12	1
1,4-Difluorobenzene (Surr)	111		70 - 130				08/05/24 10:06	08/06/24 03:12	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			08/06/24 03:12	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			08/06/24 21:58	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		08/03/24 15:56	08/06/24 21:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:56	08/06/24 21:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:56	08/06/24 21:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	131	S1+	70 - 130				08/03/24 15:56	08/06/24 21:58	1
<i>o-Terphenyl</i>	132	S1+	70 - 130				08/03/24 15:56	08/06/24 21:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.10		5.02		mg/Kg			08/07/24 08:24	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 11**

Date Collected: 08/02/24 10:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-11**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 05:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 05:03	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 05:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				08/05/24 10:06	08/06/24 05:03	1
1,4-Difluorobenzene (Surr)	111		70 - 130				08/05/24 10:06	08/06/24 05:03	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			08/06/24 05:03	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			08/06/24 22:15	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		08/03/24 15:56	08/06/24 22:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/06/24 22:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/06/24 22:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130				08/03/24 15:56	08/06/24 22:15	1
<i>o</i> -Terphenyl	141	S1+	70 - 130				08/03/24 15:56	08/06/24 22:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.81		4.99		mg/Kg			08/07/24 08:30	1

**Client Sample ID: CS 12**

Date Collected: 08/02/24 10:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-12**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 05:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 05:23	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 05:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 05:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				08/05/24 10:06	08/06/24 05:23	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 12**  
 Date Collected: 08/02/24 10:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-12**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	115		70 - 130	08/05/24 10:06	08/06/24 05:23	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			08/06/24 05:23	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			08/06/24 22:32	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		08/03/24 15:56	08/06/24 22:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 22:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 22:32	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130	08/03/24 15:56	08/06/24 22:32	1
o-Terphenyl	145	S1+	70 - 130	08/03/24 15:56	08/06/24 22:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.2		5.02		mg/Kg			08/07/24 08:36	1

**Client Sample ID: CS 13****Lab Sample ID: 890-6973-13**

Matrix: Solid

Date Collected: 08/02/24 11:00

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 05:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 05:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 05:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 05:43	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/05/24 10:06	08/06/24 05:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 05:43	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	08/05/24 10:06	08/06/24 05:43	1
1,4-Difluorobenzene (Surr)	116		70 - 130	08/05/24 10:06	08/06/24 05:43	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			08/06/24 05:43	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			08/06/24 22:49	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 13****Lab Sample ID: 890-6973-13**

Date Collected: 08/02/24 11:00

Matrix: Solid

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/03/24 15:56	08/06/24 22:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/06/24 22:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/06/24 22:49	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				08/03/24 15:56	08/06/24 22:49	1
o-Terphenyl	128		70 - 130				08/03/24 15:56	08/06/24 22:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.04		4.98		mg/Kg			08/07/24 08:42	1

**Client Sample ID: CS 14****Lab Sample ID: 890-6973-14**

Date Collected: 08/02/24 11:10

Matrix: Solid

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 06:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 06:04	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 06:04	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				08/05/24 10:06	08/06/24 06:04	1
1,4-Difluorobenzene (Surr)	120		70 - 130				08/05/24 10:06	08/06/24 06:04	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			08/06/24 06:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 23:05	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		08/03/24 15:56	08/06/24 23:05	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/06/24 23:05	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/06/24 23:05	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130				08/03/24 15:56	08/06/24 23:05	1
o-Terphenyl	141	S1+	70 - 130				08/03/24 15:56	08/06/24 23:05	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 14**

Date Collected: 08/02/24 11:10  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

**Lab Sample ID: 890-6973-14**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.6		5.02		mg/Kg			08/07/24 08:48	1

**Client Sample ID: CS 15**

Date Collected: 08/02/24 11:20  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

**Lab Sample ID: 890-6973-15**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 06:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 06:24	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 06:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 06:24	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		104		70 - 130			08/05/24 10:06	08/06/24 06:24	1
1,4-Difluorobenzene (Surr)		117		70 - 130			08/05/24 10:06	08/06/24 06:24	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			08/06/24 06:24	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			08/06/24 23:22	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		08/03/24 15:56	08/06/24 23:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 23:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 23:22	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane		127		70 - 130			08/03/24 15:56	08/06/24 23:22	1
<i>o</i> -Terphenyl		128		70 - 130			08/03/24 15:56	08/06/24 23:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.5		5.01		mg/Kg			08/07/24 09:07	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 16**  
 Date Collected: 08/02/24 11:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-16**  
 Matrix: Solid

**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		08/05/24 10:06	08/06/24 06:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 06:45	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 06:45	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 06:45	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/05/24 10:06	08/06/24 06:45	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:06	08/06/24 06:45	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109			70 - 130			08/05/24 10:06	08/06/24 06:45	1
1,4-Difluorobenzene (Surr)	121			70 - 130			08/05/24 10:06	08/06/24 06:45	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			08/06/24 06:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/06/24 23:38	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	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/06/24 23:38	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/06/24 23:38	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/06/24 23:38	1
<b>Surrogate</b>									
1-Chlorooctane	127		70 - 130				08/03/24 15:56	08/06/24 23:38	1
<i>o</i> -Terphenyl	128		70 - 130				08/03/24 15:56	08/06/24 23:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.1		5.01		mg/Kg			08/07/24 09:13	1

**Client Sample ID: CS 17**  
 Date Collected: 08/02/24 11:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-17**  
 Matrix: Solid

**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		08/05/24 10:06	08/06/24 07:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 07:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:06	08/06/24 07:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/05/24 10:06	08/06/24 07:05	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/05/24 10:06	08/06/24 07:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/05/24 10:06	08/06/24 07:05	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103			70 - 130			08/05/24 10:06	08/06/24 07:05	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 17**  
 Date Collected: 08/02/24 11:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-17**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	08/05/24 10:06	08/06/24 07:05	1

**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			08/06/24 07:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 23:55	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	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/06/24 23:55	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/06/24 23:55	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/06/24 23:55	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	08/03/24 15:56	08/06/24 23:55	1
o-Terphenyl	138	S1+	70 - 130	08/03/24 15:56	08/06/24 23:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.67		5.04		mg/Kg			08/07/24 09:31	1

**Client Sample ID: CS 18****Lab Sample ID: 890-6973-18**

Matrix: Solid

Date Collected: 08/02/24 11:50

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 07:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 07:26	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:06	08/06/24 07:26	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	08/05/24 10:06	08/06/24 07:26	1
1,4-Difluorobenzene (Surr)	109		70 - 130	08/05/24 10:06	08/06/24 07:26	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			08/06/24 07:26	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			08/07/24 00:11	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 18****Lab Sample ID: 890-6973-18**

Matrix: Solid

Date Collected: 08/02/24 11:50

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/03/24 15:56	08/07/24 00:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 00:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 00:11	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130				08/03/24 15:56	08/07/24 00:11	1
o-Terphenyl	130		70 - 130				08/03/24 15:56	08/07/24 00:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.6		4.96		mg/Kg			08/07/24 09:37	1

**Client Sample ID: CS 19****Lab Sample ID: 890-6973-19**

Matrix: Solid

Date Collected: 08/02/24 12:00

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:06	08/06/24 07:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 07:46	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/05/24 10:06	08/06/24 07:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:06	08/06/24 07:46	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				08/05/24 10:06	08/06/24 07:46	1
1,4-Difluorobenzene (Surr)	113		70 - 130				08/05/24 10:06	08/06/24 07:46	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			08/06/24 07:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/07/24 00:44	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	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/07/24 00:44	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/07/24 00:44	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/03/24 15:56	08/07/24 00:44	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				08/03/24 15:56	08/07/24 00:44	1
o-Terphenyl	128		70 - 130				08/03/24 15:56	08/07/24 00:44	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 19**

Date Collected: 08/02/24 12:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-19**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.4		4.98		mg/Kg			08/07/24 09:43	1

**Client Sample ID: CS 20**

Date Collected: 08/02/24 12:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-20**

Matrix: Solid

**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		08/05/24 10:06	08/06/24 08:07	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 08:07	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:06	08/06/24 08:07	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 08:07	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/05/24 10:06	08/06/24 08:07	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:06	08/06/24 08:07	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:06	08/06/24 08:07	1
1,4-Difluorobenzene (Surr)	120		70 - 130				08/05/24 10:06	08/06/24 08:07	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			08/06/24 08:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/07/24 01:01	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		08/03/24 15:56	08/07/24 01:01	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 01:01	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 01:01	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				08/03/24 15:56	08/07/24 01:01	1
<i>o</i> -Terphenyl	113		70 - 130				08/03/24 15:56	08/07/24 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.2		5.02		mg/Kg			08/07/24 09:49	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 21**

Date Collected: 08/02/24 12:20

Date Received: 08/02/24 15:31

Sample Depth: 4'

**Lab Sample ID: 890-6973-21**

Matrix: Solid

**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		08/05/24 10:16	08/06/24 12:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 12:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 12:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 12:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 12:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 12:50	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		83		70 - 130			08/05/24 10:16	08/06/24 12:50	1
1,4-Difluorobenzene (Surr)		102		70 - 130			08/05/24 10:16	08/06/24 12:50	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			08/06/24 12:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/07/24 01:17	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		08/03/24 15:56	08/07/24 01:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 01:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 01:17	1
<b>Surrogate</b>									<b>Dil Fac</b>
1-Chlorooctane		118	70 - 130				08/03/24 15:56	08/07/24 01:17	1
<i>o</i> -Terphenyl		120	70 - 130				08/03/24 15:56	08/07/24 01:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.4		5.04		mg/Kg			08/07/24 09:55	1

**Client Sample ID: CS 22**

Date Collected: 08/02/24 12:30

Date Received: 08/02/24 15:31

Sample Depth: 4'

**Lab Sample ID: 890-6973-22**

Matrix: Solid

**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		08/05/24 10:16	08/06/24 14:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 14:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 14:33	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		109		70 - 130			08/05/24 10:16	08/06/24 14:33	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 22**  
 Date Collected: 08/02/24 12:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-22**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	116		70 - 130	08/05/24 10:16	08/06/24 14:33	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			08/06/24 14:33	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			08/07/24 01:34	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		08/03/24 15:56	08/07/24 01:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 01:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 01:34	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	08/03/24 15:56	08/07/24 01:34	1
o-Terphenyl	124		70 - 130	08/03/24 15:56	08/07/24 01:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.13		5.05		mg/Kg			08/07/24 10:01	1

**Client Sample ID: CS 23**

**Lab Sample ID: 890-6973-23**

Matrix: Solid

Date Collected: 08/02/24 12:40

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 14:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 14:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 14:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 14:53	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	08/05/24 10:16	08/06/24 14:53	1
1,4-Difluorobenzene (Surr)	115		70 - 130	08/05/24 10:16	08/06/24 14:53	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			08/06/24 14:53	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			08/07/24 01:50	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 23****Lab Sample ID: 890-6973-23**

Matrix: Solid

Date Collected: 08/02/24 12:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/03/24 15:56	08/07/24 01:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:56	08/07/24 01:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:56	08/07/24 01:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				08/03/24 15:56	08/07/24 01:50	1
o-Terphenyl	127		70 - 130				08/03/24 15:56	08/07/24 01:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.5		5.05		mg/Kg			08/07/24 10:07	1

**Client Sample ID: CS 24****Lab Sample ID: 890-6973-24**

Matrix: Solid

Date Collected: 08/02/24 12:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 15:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 15:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				08/05/24 10:16	08/06/24 15:14	1
1,4-Difluorobenzene (Surr)	115		70 - 130				08/05/24 10:16	08/06/24 15:14	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			08/06/24 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.7		49.9		mg/Kg			08/07/24 09:41	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		08/03/24 15:56	08/07/24 09:41	1
Diesel Range Organics (Over C10-C28)	67.7		49.9		mg/Kg		08/03/24 15:56	08/07/24 09:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:56	08/07/24 09:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130				08/03/24 15:56	08/07/24 09:41	1
o-Terphenyl	274	S1+	70 - 130				08/03/24 15:56	08/07/24 09:41	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 24**

Date Collected: 08/02/24 12:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-24**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.33	F1	5.02		mg/Kg			08/07/24 20:06	1

**Client Sample ID: CS 25**

Date Collected: 08/02/24 13:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-25**

Matrix: Solid

**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		08/05/24 10:16	08/06/24 15:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 15:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 15:35	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 15:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 15:35	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 15:35	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:16	08/06/24 15:35	1
1,4-Difluorobenzene (Surr)	121		70 - 130				08/05/24 10:16	08/06/24 15:35	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			08/06/24 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/07/24 09:59	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		08/03/24 15:56	08/07/24 09:59	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 09:59	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:56	08/07/24 09:59	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				08/03/24 15:56	08/07/24 09:59	1
<i>o</i> -Terphenyl	135	S1+	70 - 130				08/03/24 15:56	08/07/24 09:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.5		5.05		mg/Kg			08/07/24 20:22	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 26**  
 Date Collected: 08/02/24 13:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-26**  
 Matrix: Solid

**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		08/05/24 10:16	08/06/24 15:55	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:55	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:55	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 15:55	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 15:55	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 15:55	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		110		70 - 130			08/05/24 10:16	08/06/24 15:55	1
1,4-Difluorobenzene (Surr)		113		70 - 130			08/05/24 10:16	08/06/24 15:55	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			08/06/24 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/07/24 10:16	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		08/03/24 15:56	08/07/24 10:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/07/24 10:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/07/24 10:16	1
<b>Surrogate</b>									
1-Chlorooctane									1
o-Terphenyl									1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.9		5.04		mg/Kg			08/07/24 20:27	1

**Client Sample ID: CS 27**  
 Date Collected: 08/02/24 13:20  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-27**  
 Matrix: Solid

**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		08/05/24 10:16	08/06/24 17:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 17:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 17:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 17:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 17:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 17:46	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		85		70 - 130			08/05/24 10:16	08/06/24 17:46	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 27**  
 Date Collected: 08/02/24 13:20  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-27**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	08/05/24 10:16	08/06/24 17:46	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			08/06/24 17:46	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			08/07/24 10:35	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		08/03/24 15:56	08/07/24 10:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 10:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:56	08/07/24 10:35	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	08/03/24 15:56	08/07/24 10:35	1
o-Terphenyl	129		70 - 130	08/03/24 15:56	08/07/24 10:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39.7		5.02		mg/Kg			08/07/24 20:32	1

**Client Sample ID: CS 28**

**Lab Sample ID: 890-6973-28**

Matrix: Solid

Date Collected: 08/02/24 13:30

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 18:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/05/24 10:16	08/06/24 18:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/05/24 10:16	08/06/24 18:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/05/24 10:16	08/06/24 18:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/05/24 10:16	08/06/24 18:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/05/24 10:16	08/06/24 18:07	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	08/05/24 10:16	08/06/24 18:07	1
1,4-Difluorobenzene (Surr)	114		70 - 130	08/05/24 10:16	08/06/24 18:07	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			08/06/24 18:07	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			08/07/24 10:53	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 28****Lab Sample ID: 890-6973-28**

Matrix: Solid

Date Collected: 08/02/24 13:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/03/24 15:56	08/07/24 10:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/07/24 10:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/07/24 10:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				08/03/24 15:56	08/07/24 10:53	1
o-Terphenyl	113		70 - 130				08/03/24 15:56	08/07/24 10:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.04		4.98		mg/Kg			08/07/24 20:38	1

**Client Sample ID: CS 29****Lab Sample ID: 890-6973-29**

Matrix: Solid

Date Collected: 08/02/24 13:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 18:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 18:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 18:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 18:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 18:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				08/05/24 10:16	08/06/24 18:28	1
1,4-Difluorobenzene (Surr)	113		70 - 130				08/05/24 10:16	08/06/24 18:28	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			08/06/24 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			08/05/24 20:57	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	<50.1	U	50.1		mg/Kg		08/03/24 15:59	08/05/24 20:57	1
Diesel Range Organics (Over C10-C28)	<50.1	U F1	50.1		mg/Kg		08/03/24 15:59	08/05/24 20:57	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/03/24 15:59	08/05/24 20:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				08/03/24 15:59	08/05/24 20:57	1
o-Terphenyl	154	S1+	70 - 130				08/03/24 15:59	08/05/24 20:57	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
SDG: Lea County, NM

**Client Sample ID: CS 29****Lab Sample ID: 890-6973-29**

Matrix: Solid

Date Collected: 08/02/24 13:40  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			08/07/24 20:53	1

**Client Sample ID: CS 30****Lab Sample ID: 890-6973-30**

Matrix: Solid

Date Collected: 08/02/24 13:50  
Date Received: 08/02/24 15:31  
Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 18:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 18:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 18:48	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 18:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 18:48	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 18:48	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				08/05/24 10:16	08/06/24 18:48	1
1,4-Difluorobenzene (Surr)	108		70 - 130				08/05/24 10:16	08/06/24 18:48	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			08/06/24 18:48	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			08/05/24 21:58	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		08/03/24 15:59	08/05/24 21:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/05/24 21:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/05/24 21:58	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				08/03/24 15:59	08/05/24 21:58	1
<i>o</i> -Terphenyl	146	S1+	70 - 130				08/03/24 15:59	08/05/24 21:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.99		4.96		mg/Kg			08/07/24 20:58	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 31**

Date Collected: 08/02/24 14:00  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-31**

Matrix: Solid

**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		08/05/24 10:16	08/06/24 19:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 19:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 19:09	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		104		70 - 130			08/05/24 10:16	08/06/24 19:09	1
1,4-Difluorobenzene (Surr)		111		70 - 130			08/05/24 10:16	08/06/24 19:09	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			08/06/24 19:09	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			08/05/24 22:19	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		08/03/24 15:59	08/05/24 22:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/05/24 22:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/05/24 22:19	1
<b>Surrogate</b>									<b>Dil Fac</b>
1-Chlorooctane									1
<i>o-Terphenyl</i>									1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.5		4.96		mg/Kg			08/07/24 21:04	1

**Client Sample ID: CS 32**

Date Collected: 08/02/24 14:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-32**

Matrix: Solid

**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		08/05/24 10:16	08/06/24 19:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 19:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 19:29	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 19:29	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		108		70 - 130			08/05/24 10:16	08/06/24 19:29	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 32**  
 Date Collected: 08/02/24 14:10  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**Lab Sample ID: 890-6973-32**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130	08/05/24 10:16	08/06/24 19:29	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			08/06/24 19:29	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			08/05/24 22:39	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		08/03/24 15:59	08/05/24 22:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 22:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 22:39	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	08/03/24 15:59	08/05/24 22:39	1
o-Terphenyl	131	S1+	70 - 130	08/03/24 15:59	08/05/24 22:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.3		5.04		mg/Kg			08/07/24 21:09	1

**Client Sample ID: CS 33**

**Lab Sample ID: 890-6973-33**

Matrix: Solid

Date Collected: 08/02/24 14:20

Date Received: 08/02/24 15:31

Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 19:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 19:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 19:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 19:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:16	08/06/24 19:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:16	08/06/24 19:50	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	08/05/24 10:16	08/06/24 19:50	1
1,4-Difluorobenzene (Surr)	109		70 - 130	08/05/24 10:16	08/06/24 19:50	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			08/06/24 19:50	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			08/05/24 23:00	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 33****Lab Sample ID: 890-6973-33**

Matrix: Solid

Date Collected: 08/02/24 14:20  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/03/24 15:59	08/05/24 23:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/05/24 23:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/05/24 23:00	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				08/03/24 15:59	08/05/24 23:00	1
o-Terphenyl	149	S1+	70 - 130				08/03/24 15:59	08/05/24 23:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.5		4.98		mg/Kg			08/07/24 21:14	1

**Client Sample ID: CS 34****Lab Sample ID: 890-6973-34**

Matrix: Solid

Date Collected: 08/02/24 14:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 20:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 20:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:16	08/06/24 20:10	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	97		70 - 130				08/05/24 10:16	08/06/24 20:10	1
1,4-Difluorobenzene (Surr)	111		70 - 130				08/05/24 10:16	08/06/24 20:10	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			08/06/24 20:10	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			08/05/24 23:20	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		08/03/24 15:59	08/05/24 23:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/05/24 23:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/05/24 23:20	1
<b>Surrogate</b>									
1-Chlorooctane	142	S1+	70 - 130				08/03/24 15:59	08/05/24 23:20	1
o-Terphenyl	166	S1+	70 - 130				08/03/24 15:59	08/05/24 23:20	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 34****Lab Sample ID: 890-6973-34**

Matrix: Solid

Date Collected: 08/02/24 14:30  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.8	F1	4.99		mg/Kg			08/07/24 21:19	1

**Client Sample ID: CS 35****Lab Sample ID: 890-6973-35**

Matrix: Solid

Date Collected: 08/02/24 14:40  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 20:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 20:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 20:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 20:31	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				08/05/24 10:16	08/06/24 20:31	1
1,4-Difluorobenzene (Surr)	113		70 - 130				08/05/24 10:16	08/06/24 20:31	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			08/06/24 20:31	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			08/05/24 23:40	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		08/03/24 15:59	08/05/24 23:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 23:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 23:40	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	149	S1+	70 - 130				08/03/24 15:59	08/05/24 23:40	1
<i>o</i> -Terphenyl	179	S1+	70 - 130				08/03/24 15:59	08/05/24 23:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.9		4.99		mg/Kg			08/07/24 21:35	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**Client Sample ID: CS 36****Lab Sample ID: 890-6973-36**

Matrix: Solid

Date Collected: 08/02/24 14:50  
 Date Received: 08/02/24 15:31  
 Sample Depth: 4'

**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		08/05/24 10:16	08/06/24 20:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 20:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 20:51	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 20:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:16	08/06/24 20:51	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:16	08/06/24 20:51	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		110		70 - 130			08/05/24 10:16	08/06/24 20:51	1
1,4-Difluorobenzene (Surr)		119		70 - 130			08/05/24 10:16	08/06/24 20:51	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			08/06/24 20:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 00:00	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		08/03/24 15:59	08/06/24 00:00	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 00:00	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 00:00	1
<b>Surrogate</b>									
1-Chlorooctane	155	S1+	70 - 130				08/03/24 15:59	08/06/24 00:00	1
<i>o</i> -Terphenyl	169	S1+	70 - 130				08/03/24 15:59	08/06/24 00:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.8		5.04		mg/Kg			08/07/24 21:40	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB1 (70-130)	DFBZ1 (70-130)	
890-6973-1	CS 01	84	106	
890-6973-1 MS	CS 01	103	106	
890-6973-1 MSD	CS 01	102	110	
890-6973-2	CS 02	103	109	
890-6973-3	CS 03	97	110	
890-6973-4	CS 04	104	114	
890-6973-5	CS 05	102	114	
890-6973-6	CS 06	108	114	
890-6973-7	CS 07	104	119	
890-6973-8	CS 08	113	116	
890-6973-9	CS 09	110	114	
890-6973-10	CS 10	100	111	
890-6973-11	CS 11	85	111	
890-6973-12	CS 12	98	115	
890-6973-13	CS 13	104	116	
890-6973-14	CS 14	112	120	
890-6973-15	CS 15	104	117	
890-6973-16	CS 16	109	121	
890-6973-17	CS 17	103	108	
890-6973-18	CS 18	112	109	
890-6973-19	CS 19	106	113	
890-6973-20	CS 20	110	120	
890-6973-21	CS 21	83	102	
890-6973-21 MS	CS 21	95	106	
890-6973-21 MSD	CS 21	97	101	
890-6973-22	CS 22	109	116	
890-6973-23	CS 23	101	115	
890-6973-24	CS 24	109	115	
890-6973-25	CS 25	110	121	
890-6973-26	CS 26	110	113	
890-6973-27	CS 27	85	106	
890-6973-28	CS 28	106	114	
890-6973-29	CS 29	100	113	
890-6973-30	CS 30	94	108	
890-6973-31	CS 31	104	111	
890-6973-32	CS 32	108	114	
890-6973-33	CS 33	106	109	
890-6973-34	CS 34	97	111	
890-6973-35	CS 35	102	113	
890-6973-36	CS 36	110	119	
LCS 880-87487/1-A	Lab Control Sample	101	99	
LCS 880-87488/1-A	Lab Control Sample	105	100	
LCSD 880-87487/2-A	Lab Control Sample Dup	103	105	
LCSD 880-87488/2-A	Lab Control Sample Dup	89	109	
MB 880-87475/5-A	Method Blank	121	100	
MB 880-87487/5-A	Method Blank	203 S1+	145 S1+	
MB 880-87488/5-A	Method Blank	119	91	

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB  
 DFBZ = 1,4-Difluorobenzene (Surr)

Job ID: 890-6973-1  
 SDG: Lea County,NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		1CO1 (70-130)	OTPH1 (70-130)	
890-6973-1	CS 01	149 S1+	150 S1+	
890-6973-2	CS 02	154 S1+	156 S1+	
890-6973-3	CS 03	144 S1+	144 S1+	
890-6973-4	CS 04	161 S1+	163 S1+	
890-6973-5	CS 05	140 S1+	143 S1+	
890-6973-6	CS 06	139 S1+	141 S1+	
890-6973-7	CS 07	132 S1+	132 S1+	
890-6973-8	CS 08	143 S1+	145 S1+	
890-6973-9	CS 09	121	122	
890-6973-9 MS	CS 09	110	120	
890-6973-9 MSD	CS 09	111	122	
890-6973-10	CS 10	131 S1+	132 S1+	
890-6973-11	CS 11	139 S1+	141 S1+	
890-6973-12	CS 12	143 S1+	145 S1+	
890-6973-13	CS 13	127	128	
890-6973-14	CS 14	139 S1+	141 S1+	
890-6973-15	CS 15	127	128	
890-6973-16	CS 16	127	128	
890-6973-17	CS 17	135 S1+	138 S1+	
890-6973-18	CS 18	130	130	
890-6973-19	CS 19	128	128	
890-6973-20	CS 20	113	113	
890-6973-21	CS 21	118	120	
890-6973-22	CS 22	124	124	
890-6973-23	CS 23	126	127	
890-6973-24	CS 24	135 S1+	274 S1+	
890-6973-25	CS 25	134 S1+	135 S1+	
890-6973-26	CS 26	129	130	
890-6973-27	CS 27	129	129	
890-6973-28	CS 28	113	113	
890-6973-29	CS 29	132 S1+	154 S1+	
890-6973-29 MS	CS 29	129	125	
890-6973-29 MSD	CS 29	106	113	
890-6973-30	CS 30	132 S1+	146 S1+	
890-6973-31	CS 31	136 S1+	147 S1+	
890-6973-32	CS 32	112	131 S1+	
890-6973-33	CS 33	133 S1+	149 S1+	
890-6973-34	CS 34	142 S1+	166 S1+	
890-6973-35	CS 35	149 S1+	179 S1+	
890-6973-36	CS 36	155 S1+	169 S1+	
LCS 880-87401/2-A	Lab Control Sample	115	128	
LCS 880-87445/2-A	Lab Control Sample	122	134 S1+	
LCS 880-87446/2-A	Lab Control Sample	125	135 S1+	
LCSD 880-87401/3-A	Lab Control Sample Dup	109	120	
LCSD 880-87445/3-A	Lab Control Sample Dup	121	133 S1+	
LCSD 880-87446/3-A	Lab Control Sample Dup	129	149 S1+	
MB 880-87401/1-A	Method Blank	138 S1+	140 S1+	
MB 880-87445/1-A	Method Blank	102	103	

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID			Percent Surrogate Recovery (Acceptance Limits)					
		1CO1 (70-130)	OTPH1 (70-130)	141 S1+	172 S1+				
MB 880-87446/1-A	Method Blank								

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

1

2

3

4

5

6

7

8

9

10

11

12

13

14

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-87475/5-A****Matrix: Solid****Analysis Batch: 87458****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87475**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 09:36	08/05/24 12:00	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	121		70 - 130		08/05/24 09:36	08/05/24 12:00	1				
1,4-Difluorobenzene (Surr)	100		70 - 130		08/05/24 09:36	08/05/24 12:00	1				

**Lab Sample ID: MB 880-87487/5-A****Matrix: Solid****Analysis Batch: 87458****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87487**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 10:06	08/05/24 23:40	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	203	S1+	70 - 130		08/05/24 10:06	08/05/24 23:40	1				
1,4-Difluorobenzene (Surr)	145	S1+	70 - 130		08/05/24 10:06	08/05/24 23:40	1				

**Lab Sample ID: LCS 880-87487/1-A****Matrix: Solid****Analysis Batch: 87458****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87487**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	Limits
Benzene	0.100	0.1067		mg/Kg	107	70 - 130				
Toluene	0.100	0.1042		mg/Kg	104	70 - 130				
Ethylbenzene	0.100	0.1146		mg/Kg	115	70 - 130				
m-Xylene & p-Xylene	0.200	0.2331		mg/Kg	117	70 - 130				
o-Xylene	0.100	0.1282		mg/Kg	128	70 - 130				
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	101		70 - 130							
1,4-Difluorobenzene (Surr)	99		70 - 130							

**Lab Sample ID: LCSD 880-87487/2-A****Matrix: Solid****Analysis Batch: 87458****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87487**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	Limits
Benzene	0.100	0.1195		mg/Kg	119	70 - 130			RPD	Limit

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Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

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

**Lab Sample ID: LCSD 880-87487/2-A** **Client Sample ID: Lab Control Sample Dup**

**Matrix: Solid**

**Analysis Batch: 87458**

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
		Added	Result	Qualifier							
Toluene		0.100	0.1085		mg/Kg		109	70 - 130	4		35
Ethylbenzene		0.100	0.1190		mg/Kg		119	70 - 130	4		35
m-Xylene & p-Xylene		0.200	0.2505		mg/Kg		125	70 - 130	7		35
o-Xylene		0.100	0.1404	*+	mg/Kg		140	70 - 130	9		35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

**Lab Sample ID: 890-6973-1 MS**

**Matrix: Solid**

**Analysis Batch: 87458**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00202	U	0.100	0.09663		mg/Kg		97	70 - 130		
Toluene	<0.00202	U	0.100	0.09014		mg/Kg		90	70 - 130		
Ethylbenzene	<0.00202	U	0.100	0.08753		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1965		mg/Kg		98	70 - 130		
o-Xylene	<0.00202	U *+	0.100	0.1116		mg/Kg		112	70 - 130		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

**Lab Sample ID: 890-6973-1 MSD**

**Matrix: Solid**

**Analysis Batch: 87458**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00202	U	0.100	0.1153		mg/Kg		115	70 - 130	18	35
Toluene	<0.00202	U	0.100	0.1053		mg/Kg		105	70 - 130	16	35
Ethylbenzene	<0.00202	U	0.100	0.1005		mg/Kg		101	70 - 130	14	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.2305		mg/Kg		115	70 - 130	16	35
o-Xylene	<0.00202	U *+	0.100	0.1296		mg/Kg		130	70 - 130	15	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

**Lab Sample ID: MB 880-87488/5-A**

**Matrix: Solid**

**Analysis Batch: 87590**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 12:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 12:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 12:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 12:21	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: MB 880-87488/5-A****Matrix: Solid****Analysis Batch: 87590****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87488**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:16	08/06/24 12:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:16	08/06/24 12:21	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	119		70 - 130				08/05/24 10:16	08/06/24 12:21	1
1,4-Difluorobenzene (Surr)	91		70 - 130				08/05/24 10:16	08/06/24 12:21	1

**Lab Sample ID: LCS 880-87488/1-A****Matrix: Solid****Analysis Batch: 87590****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87488**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier			%Rec		
Benzene	0.100	0.1092		mg/Kg		109	70 - 130	
Toluene	0.100	0.1056		mg/Kg		106	70 - 130	
Ethylbenzene	0.100	0.1042		mg/Kg		104	70 - 130	
m-Xylene & p-Xylene	0.200	0.2223		mg/Kg		111	70 - 130	
o-Xylene	0.100	0.1303		mg/Kg		130	70 - 130	
<b>Surrogate</b>								
4-Bromofluorobenzene (Surr)	105		70 - 130					
1,4-Difluorobenzene (Surr)	100		70 - 130					

**Lab Sample ID: LCSD 880-87488/2-A****Matrix: Solid****Analysis Batch: 87590****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87488**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier			%Rec		
Benzene	0.100	0.1116		mg/Kg		112	70 - 130	2
Toluene	0.100	0.1050		mg/Kg		105	70 - 130	1
Ethylbenzene	0.100	0.09744		mg/Kg		97	70 - 130	7
m-Xylene & p-Xylene	0.200	0.1834		mg/Kg		92	70 - 130	19
o-Xylene	0.100	0.1128		mg/Kg		113	70 - 130	14
<b>Surrogate</b>								
4-Bromofluorobenzene (Surr)	89		70 - 130					
1,4-Difluorobenzene (Surr)	109		70 - 130					

**Lab Sample ID: 890-6973-21 MS****Matrix: Solid****Analysis Batch: 87590****Client Sample ID: CS 21****Prep Type: Total/NA****Prep Batch: 87488**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier			%Rec	
Benzene	<0.00202	U	0.100	0.1018		mg/Kg		102	70 - 130
Toluene	<0.00202	U	0.100	0.08731		mg/Kg		87	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.07767		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1681		mg/Kg		84	70 - 130
o-Xylene	<0.00202	U	0.100	0.09852		mg/Kg		99	70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

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

Lab Sample ID: 890-6973-21 MS

Matrix: Solid

Analysis Batch: 87590

Client Sample ID: CS 21

Prep Type: Total/NA

Prep Batch: 87488

Surrogate	MS	MS	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95				70 - 130
1,4-Difluorobenzene (Surr)	106				70 - 130

Lab Sample ID: 890-6973-21 MSD

Matrix: Solid

Analysis Batch: 87590

Client Sample ID: CS 21

Prep Type: Total/NA

Prep Batch: 87488

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00202	U	0.100	0.09673		mg/Kg	97	70 - 130	5	35	
Toluene	<0.00202	U	0.100	0.08467		mg/Kg	85	70 - 130	3	35	
Ethylbenzene	<0.00202	U	0.100	0.07313		mg/Kg	73	70 - 130	6	35	
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1588		mg/Kg	79	70 - 130	6	35	
o-Xylene	<0.00202	U	0.100	0.09039		mg/Kg	90	70 - 130	9	35	

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97				70 - 130
1,4-Difluorobenzene (Surr)	101				70 - 130

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

Lab Sample ID: MB 880-87401/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87619

Prep Batch: 87401

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U			50.0		mg/Kg	08/02/24 15:06	08/06/24 08:46		1
Diesel Range Organics (Over C10-C28)	<50.0	U			50.0		mg/Kg	08/02/24 15:06	08/06/24 08:46		1
Oil Range Organics (Over C28-C36)	<50.0	U			50.0		mg/Kg	08/02/24 15:06	08/06/24 08:46		1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+			70 - 130	08/02/24 15:06	08/06/24 08:46	1
o-Terphenyl	140	S1+			70 - 130	08/02/24 15:06	08/06/24 08:46	1

Lab Sample ID: LCS 880-87401/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87619

Prep Batch: 87401

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10		1000		1095		mg/Kg	110	70 - 130	
Diesel Range Organics (Over C10-C28)		1000		1179		mg/Kg	118	70 - 130	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1-Chlorooctane	115				70 - 130
o-Terphenyl	128				70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

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

**Lab Sample ID: LCSD 880-87401/3-A** Client Sample ID: Lab Control Sample Dup  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 87619** Prep Batch: 87401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1055		mg/Kg		105	70 - 130	4 20
Diesel Range Organics (Over C10-C28)	1000	1122		mg/Kg		112	70 - 130	5 20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	120		70 - 130

**Lab Sample ID: MB 880-87445/1-A** Client Sample ID: Method Blank  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 87619** Prep Batch: 87445

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		08/03/24 15:56	08/06/24 20:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 20:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:56	08/06/24 20:14	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	08/03/24 15:56	08/06/24 20:14	1
o-Terphenyl	103		70 - 130	08/03/24 15:56	08/06/24 20:14	1

**Lab Sample ID: LCS 880-87445/2-A** Client Sample ID: Lab Control Sample  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 87619** Prep Batch: 87445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1166		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1236		mg/Kg		124	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	134	S1+	70 - 130

**Lab Sample ID: LCSD 880-87445/3-A** Client Sample ID: Lab Control Sample Dup  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 87619** Prep Batch: 87445

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1153		mg/Kg		115	70 - 130	1 20
Diesel Range Organics (Over C10-C28)	1000	1258		mg/Kg		126	70 - 130	2 20

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-87445/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87619

Prep Batch: 87445

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
<i>o</i> -Terphenyl	133	S1+	70 - 130

Lab Sample ID: 890-6973-9 MS

Client Sample ID: CS 09

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87619

Prep Batch: 87445

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	998	916.8		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	966.2		mg/Kg		97	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	MS Limits								
1-Chlorooctane	110		70 - 130								
<i>o</i> -Terphenyl	120		70 - 130								

Lab Sample ID: 890-6973-9 MSD

Client Sample ID: CS 09

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87619

Prep Batch: 87445

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	998	925.8		mg/Kg		93	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	983.2		mg/Kg		99	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
1-Chlorooctane	111		70 - 130								
<i>o</i> -Terphenyl	122		70 - 130								

Lab Sample ID: MB 880-87446/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87450

Prep Batch: 87446

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		08/03/24 15:59	08/05/24 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 19:55	1
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	141	S1+	70 - 130				08/03/24 15:59	08/05/24 19:55	1
<i>o</i> -Terphenyl	172	S1+	70 - 130				08/03/24 15:59	08/05/24 19:55	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: LCS 880-87446/2-A****Matrix: Solid****Analysis Batch: 87450****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87446**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1190		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130
<b>Surrogate</b>							
<b>LCS %Recovery Qualifier Limits</b>							
1-Chlorooctane	125		70 - 130				
o-Terphenyl	135	S1+	70 - 130				

**Lab Sample ID: LCSD 880-87446/3-A****Matrix: Solid****Analysis Batch: 87450****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87446**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1123		mg/Kg		112	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	3	20
<b>Surrogate</b>									
<b>LCSD %Recovery Qualifier Limits</b>									
1-Chlorooctane	129		70 - 130						
o-Terphenyl	149	S1+	70 - 130						

**Lab Sample ID: 890-6973-29 MS****Matrix: Solid****Analysis Batch: 87450****Client Sample ID: CS 29****Prep Type: Total/NA****Prep Batch: 87446**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	999	840.5		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U F1	999	786.0		mg/Kg		79	70 - 130
<b>Surrogate</b>									
<b>MS %Recovery Qualifier Limits</b>									
1-Chlorooctane	129		70 - 130						
o-Terphenyl	125		70 - 130						

**Lab Sample ID: 890-6973-29 MSD****Matrix: Solid****Analysis Batch: 87450****Client Sample ID: CS 29****Prep Type: Total/NA****Prep Batch: 87446**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	999	1010		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U F1	999	671.3	F1	mg/Kg		67	70 - 130
<b>Surrogate</b>									
<b>MSD %Recovery Qualifier Limits</b>									
1-Chlorooctane	106		70 - 130						

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

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

Lab Sample ID: 890-6973-29 MSD

Client Sample ID: CS 29

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87450

Prep Batch: 87446

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
o-Terphenyl			113		70 - 130

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-87552/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87626

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			<5.00	U	5.00		mg/Kg			08/07/24 15:14	1

Lab Sample ID: LCS 880-87552/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87626

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	Limits
	Added					mg/Kg				
Chloride				250		245.5		98	90 - 110	

Lab Sample ID: LCSD 880-87552/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87626

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	RPD	Limit
	Added					mg/Kg				RPD	Limit
Chloride				250		245.9		98	90 - 110	0	20

Lab Sample ID: MB 880-87553/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87649

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
							mg/Kg				
Chloride			<5.00	U	5.00		mg/Kg			08/07/24 07:06	1

Lab Sample ID: LCS 880-87553/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87649

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added					mg/Kg				
Chloride				250		235.0		94	90 - 110	

Lab Sample ID: LCSD 880-87553/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87649

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	RPD	Limit
	Added					mg/Kg				RPD	Limit
Chloride				250		235.3		94	90 - 110	0	20

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)****Lab Sample ID: 890-6973-4 MS****Matrix: Solid****Analysis Batch: 87649**

**Client Sample ID: CS 04**  
**Prep Type: Soluble**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier				mg/Kg		
Chloride	76.4	F1	248	270.3	F1			78	90 - 110		

**Lab Sample ID: 890-6973-4 MSD****Matrix: Solid****Analysis Batch: 87649**

**Client Sample ID: CS 04**  
**Prep Type: Soluble**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				mg/Kg		
Chloride	76.4	F1	248	271.4	F1			79	90 - 110	0	20

**Lab Sample ID: 890-6973-14 MS****Matrix: Solid****Analysis Batch: 87649**

**Client Sample ID: CS 14**  
**Prep Type: Soluble**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier				mg/Kg		
Chloride	40.6		251	296.3				102	90 - 110		

**Lab Sample ID: 890-6973-14 MSD****Matrix: Solid****Analysis Batch: 87649**

**Client Sample ID: CS 14**  
**Prep Type: Soluble**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				mg/Kg		
Chloride	40.6		251	296.4				102	90 - 110	0	20

**Lab Sample ID: MB 880-87554/1-A**

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

**Matrix: Solid****Analysis Batch: 87655**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<5.00	U	5.00					08/07/24 19:51	1

**Lab Sample ID: LCS 880-87554/2-A**

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

**Matrix: Solid****Analysis Batch: 87655**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Chloride	250	246.8				99	90 - 110

**Lab Sample ID: LCSD 880-87554/3-A**

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

**Matrix: Solid****Analysis Batch: 87655**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Chloride	250	247.5				99	90 - 110	0	20

**Lab Sample ID: 890-6973-24 MS**

**Client Sample ID: CS 24**  
**Prep Type: Soluble**

**Matrix: Solid****Analysis Batch: 87655**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				mg/Kg	
Chloride	8.33	F1	251	337.1	F1			131	90 - 110	

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography**

**Lab Sample ID: 890-6973-24 MSD**

**Matrix: Solid**

**Analysis Batch: 87655**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	8.33	F1	251	334.8	F1	mg/Kg	130	90 - 110	1	20	

**Lab Sample ID: 890-6973-34 MS**

**Matrix: Solid**

**Analysis Batch: 87655**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	40.8	F1	250	327.1	F1	mg/Kg	115	90 - 110	—	—	—

**Lab Sample ID: 890-6973-34 MSD**

**Matrix: Solid**

**Analysis Batch: 87655**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Chloride	40.8	F1	250	321.0	F1	mg/Kg	112	90 - 110	2	20	

**Client Sample ID: CS 24**

**Prep Type: Soluble**

**Client Sample ID: CS 34**

**Prep Type: Soluble**

**Client Sample ID: CS 34**

**Prep Type: Soluble**

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC VOA****Analysis Batch: 87458**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	8021B	87487
890-6973-2	CS 02	Total/NA	Solid	8021B	87487
890-6973-3	CS 03	Total/NA	Solid	8021B	87487
890-6973-4	CS 04	Total/NA	Solid	8021B	87487
890-6973-5	CS 05	Total/NA	Solid	8021B	87487
890-6973-6	CS 06	Total/NA	Solid	8021B	87487
890-6973-7	CS 07	Total/NA	Solid	8021B	87487
890-6973-8	CS 08	Total/NA	Solid	8021B	87487
890-6973-9	CS 09	Total/NA	Solid	8021B	87487
890-6973-10	CS 10	Total/NA	Solid	8021B	87487
890-6973-11	CS 11	Total/NA	Solid	8021B	87487
890-6973-12	CS 12	Total/NA	Solid	8021B	87487
890-6973-13	CS 13	Total/NA	Solid	8021B	87487
890-6973-14	CS 14	Total/NA	Solid	8021B	87487
890-6973-15	CS 15	Total/NA	Solid	8021B	87487
890-6973-16	CS 16	Total/NA	Solid	8021B	87487
890-6973-17	CS 17	Total/NA	Solid	8021B	87487
890-6973-18	CS 18	Total/NA	Solid	8021B	87487
890-6973-19	CS 19	Total/NA	Solid	8021B	87487
890-6973-20	CS 20	Total/NA	Solid	8021B	87487
MB 880-87475/5-A	Method Blank	Total/NA	Solid	8021B	87475
MB 880-87487/5-A	Method Blank	Total/NA	Solid	8021B	87487
LCS 880-87487/1-A	Lab Control Sample	Total/NA	Solid	8021B	87487
LCSD 880-87487/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87487
890-6973-1 MS	CS 01	Total/NA	Solid	8021B	87487
890-6973-1 MSD	CS 01	Total/NA	Solid	8021B	87487

**Prep Batch: 87475**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-87475/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 87487**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	5035	
890-6973-2	CS 02	Total/NA	Solid	5035	
890-6973-3	CS 03	Total/NA	Solid	5035	
890-6973-4	CS 04	Total/NA	Solid	5035	
890-6973-5	CS 05	Total/NA	Solid	5035	
890-6973-6	CS 06	Total/NA	Solid	5035	
890-6973-7	CS 07	Total/NA	Solid	5035	
890-6973-8	CS 08	Total/NA	Solid	5035	
890-6973-9	CS 09	Total/NA	Solid	5035	
890-6973-10	CS 10	Total/NA	Solid	5035	
890-6973-11	CS 11	Total/NA	Solid	5035	
890-6973-12	CS 12	Total/NA	Solid	5035	
890-6973-13	CS 13	Total/NA	Solid	5035	
890-6973-14	CS 14	Total/NA	Solid	5035	
890-6973-15	CS 15	Total/NA	Solid	5035	
890-6973-16	CS 16	Total/NA	Solid	5035	
890-6973-17	CS 17	Total/NA	Solid	5035	
890-6973-18	CS 18	Total/NA	Solid	5035	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC VOA (Continued)****Prep Batch: 87487 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-19	CS 19	Total/NA	Solid	5035	
890-6973-20	CS 20	Total/NA	Solid	5035	
MB 880-87487/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87487/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87487/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6973-1 MS	CS 01	Total/NA	Solid	5035	
890-6973-1 MSD	CS 01	Total/NA	Solid	5035	

**Prep Batch: 87488**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-21	CS 21	Total/NA	Solid	5035	
890-6973-22	CS 22	Total/NA	Solid	5035	
890-6973-23	CS 23	Total/NA	Solid	5035	
890-6973-24	CS 24	Total/NA	Solid	5035	
890-6973-25	CS 25	Total/NA	Solid	5035	
890-6973-26	CS 26	Total/NA	Solid	5035	
890-6973-27	CS 27	Total/NA	Solid	5035	
890-6973-28	CS 28	Total/NA	Solid	5035	
890-6973-29	CS 29	Total/NA	Solid	5035	
890-6973-30	CS 30	Total/NA	Solid	5035	
890-6973-31	CS 31	Total/NA	Solid	5035	
890-6973-32	CS 32	Total/NA	Solid	5035	
890-6973-33	CS 33	Total/NA	Solid	5035	
890-6973-34	CS 34	Total/NA	Solid	5035	
890-6973-35	CS 35	Total/NA	Solid	5035	
890-6973-36	CS 36	Total/NA	Solid	5035	
MB 880-87488/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87488/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87488/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6973-21 MS	CS 21	Total/NA	Solid	5035	
890-6973-21 MSD	CS 21	Total/NA	Solid	5035	

**Analysis Batch: 87590**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-21	CS 21	Total/NA	Solid	8021B	87488
890-6973-22	CS 22	Total/NA	Solid	8021B	87488
890-6973-23	CS 23	Total/NA	Solid	8021B	87488
890-6973-24	CS 24	Total/NA	Solid	8021B	87488
890-6973-25	CS 25	Total/NA	Solid	8021B	87488
890-6973-26	CS 26	Total/NA	Solid	8021B	87488
890-6973-27	CS 27	Total/NA	Solid	8021B	87488
890-6973-28	CS 28	Total/NA	Solid	8021B	87488
890-6973-29	CS 29	Total/NA	Solid	8021B	87488
890-6973-30	CS 30	Total/NA	Solid	8021B	87488
890-6973-31	CS 31	Total/NA	Solid	8021B	87488
890-6973-32	CS 32	Total/NA	Solid	8021B	87488
890-6973-33	CS 33	Total/NA	Solid	8021B	87488
890-6973-34	CS 34	Total/NA	Solid	8021B	87488
890-6973-35	CS 35	Total/NA	Solid	8021B	87488
890-6973-36	CS 36	Total/NA	Solid	8021B	87488
MB 880-87488/5-A	Method Blank	Total/NA	Solid	8021B	87488

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC VOA (Continued)****Analysis Batch: 87590 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-87488/1-A	Lab Control Sample	Total/NA	Solid	8021B	87488
LCSD 880-87488/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87488
890-6973-21 MS	CS 21	Total/NA	Solid	8021B	87488
890-6973-21 MSD	CS 21	Total/NA	Solid	8021B	87488

**Analysis Batch: 87673**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	Total BTEX	8
890-6973-2	CS 02	Total/NA	Solid	Total BTEX	9
890-6973-3	CS 03	Total/NA	Solid	Total BTEX	10
890-6973-4	CS 04	Total/NA	Solid	Total BTEX	11
890-6973-5	CS 05	Total/NA	Solid	Total BTEX	12
890-6973-6	CS 06	Total/NA	Solid	Total BTEX	13
890-6973-7	CS 07	Total/NA	Solid	Total BTEX	14
890-6973-8	CS 08	Total/NA	Solid	Total BTEX	
890-6973-9	CS 09	Total/NA	Solid	Total BTEX	
890-6973-10	CS 10	Total/NA	Solid	Total BTEX	
890-6973-11	CS 11	Total/NA	Solid	Total BTEX	
890-6973-12	CS 12	Total/NA	Solid	Total BTEX	
890-6973-13	CS 13	Total/NA	Solid	Total BTEX	
890-6973-14	CS 14	Total/NA	Solid	Total BTEX	
890-6973-15	CS 15	Total/NA	Solid	Total BTEX	
890-6973-16	CS 16	Total/NA	Solid	Total BTEX	
890-6973-17	CS 17	Total/NA	Solid	Total BTEX	
890-6973-18	CS 18	Total/NA	Solid	Total BTEX	
890-6973-19	CS 19	Total/NA	Solid	Total BTEX	
890-6973-20	CS 20	Total/NA	Solid	Total BTEX	
890-6973-21	CS 21	Total/NA	Solid	Total BTEX	
890-6973-22	CS 22	Total/NA	Solid	Total BTEX	
890-6973-23	CS 23	Total/NA	Solid	Total BTEX	
890-6973-24	CS 24	Total/NA	Solid	Total BTEX	
890-6973-25	CS 25	Total/NA	Solid	Total BTEX	
890-6973-26	CS 26	Total/NA	Solid	Total BTEX	
890-6973-27	CS 27	Total/NA	Solid	Total BTEX	
890-6973-28	CS 28	Total/NA	Solid	Total BTEX	
890-6973-29	CS 29	Total/NA	Solid	Total BTEX	
890-6973-30	CS 30	Total/NA	Solid	Total BTEX	
890-6973-31	CS 31	Total/NA	Solid	Total BTEX	
890-6973-32	CS 32	Total/NA	Solid	Total BTEX	
890-6973-33	CS 33	Total/NA	Solid	Total BTEX	
890-6973-34	CS 34	Total/NA	Solid	Total BTEX	
890-6973-35	CS 35	Total/NA	Solid	Total BTEX	
890-6973-36	CS 36	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87401**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	8015NM Prep	
890-6973-2	CS 02	Total/NA	Solid	8015NM Prep	
890-6973-3	CS 03	Total/NA	Solid	8015NM Prep	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC Semi VOA (Continued)****Prep Batch: 87401 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-4	CS 04	Total/NA	Solid	8015NM Prep	1
890-6973-5	CS 05	Total/NA	Solid	8015NM Prep	2
890-6973-6	CS 06	Total/NA	Solid	8015NM Prep	3
890-6973-7	CS 07	Total/NA	Solid	8015NM Prep	4
890-6973-8	CS 08	Total/NA	Solid	8015NM Prep	5
MB 880-87401/1-A	Method Blank	Total/NA	Solid	8015NM Prep	6
LCS 880-87401/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	7
LCSD 880-87401/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	8

**Prep Batch: 87445**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-9	CS 09	Total/NA	Solid	8015NM Prep	9
890-6973-10	CS 10	Total/NA	Solid	8015NM Prep	10
890-6973-11	CS 11	Total/NA	Solid	8015NM Prep	11
890-6973-12	CS 12	Total/NA	Solid	8015NM Prep	12
890-6973-13	CS 13	Total/NA	Solid	8015NM Prep	13
890-6973-14	CS 14	Total/NA	Solid	8015NM Prep	14
890-6973-15	CS 15	Total/NA	Solid	8015NM Prep	
890-6973-16	CS 16	Total/NA	Solid	8015NM Prep	
890-6973-17	CS 17	Total/NA	Solid	8015NM Prep	
890-6973-18	CS 18	Total/NA	Solid	8015NM Prep	
890-6973-19	CS 19	Total/NA	Solid	8015NM Prep	
890-6973-20	CS 20	Total/NA	Solid	8015NM Prep	
890-6973-21	CS 21	Total/NA	Solid	8015NM Prep	
890-6973-22	CS 22	Total/NA	Solid	8015NM Prep	
890-6973-23	CS 23	Total/NA	Solid	8015NM Prep	
890-6973-24	CS 24	Total/NA	Solid	8015NM Prep	
890-6973-25	CS 25	Total/NA	Solid	8015NM Prep	
890-6973-26	CS 26	Total/NA	Solid	8015NM Prep	
890-6973-27	CS 27	Total/NA	Solid	8015NM Prep	
890-6973-28	CS 28	Total/NA	Solid	8015NM Prep	
MB 880-87445/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87445/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87445/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6973-9 MS	CS 09	Total/NA	Solid	8015NM Prep	
890-6973-9 MSD	CS 09	Total/NA	Solid	8015NM Prep	

**Prep Batch: 87446**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-29	CS 29	Total/NA	Solid	8015NM Prep	1
890-6973-30	CS 30	Total/NA	Solid	8015NM Prep	2
890-6973-31	CS 31	Total/NA	Solid	8015NM Prep	3
890-6973-32	CS 32	Total/NA	Solid	8015NM Prep	4
890-6973-33	CS 33	Total/NA	Solid	8015NM Prep	5
890-6973-34	CS 34	Total/NA	Solid	8015NM Prep	6
890-6973-35	CS 35	Total/NA	Solid	8015NM Prep	7
890-6973-36	CS 36	Total/NA	Solid	8015NM Prep	8
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015NM Prep	9
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	10
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	11
890-6973-29 MS	CS 29	Total/NA	Solid	8015NM Prep	12

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC Semi VOA (Continued)****Prep Batch: 87446 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-29 MSD	CS 29	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 87450**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-29	CS 29	Total/NA	Solid	8015B NM	87446
890-6973-30	CS 30	Total/NA	Solid	8015B NM	87446
890-6973-31	CS 31	Total/NA	Solid	8015B NM	87446
890-6973-32	CS 32	Total/NA	Solid	8015B NM	87446
890-6973-33	CS 33	Total/NA	Solid	8015B NM	87446
890-6973-34	CS 34	Total/NA	Solid	8015B NM	87446
890-6973-35	CS 35	Total/NA	Solid	8015B NM	87446
890-6973-36	CS 36	Total/NA	Solid	8015B NM	87446
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015B NM	87446
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87446
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87446
890-6973-29 MS	CS 29	Total/NA	Solid	8015B NM	87446
890-6973-29 MSD	CS 29	Total/NA	Solid	8015B NM	87446

**Analysis Batch: 87619**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	8015B NM	87401
890-6973-2	CS 02	Total/NA	Solid	8015B NM	87401
890-6973-3	CS 03	Total/NA	Solid	8015B NM	87401
890-6973-4	CS 04	Total/NA	Solid	8015B NM	87401
890-6973-5	CS 05	Total/NA	Solid	8015B NM	87401
890-6973-6	CS 06	Total/NA	Solid	8015B NM	87401
890-6973-7	CS 07	Total/NA	Solid	8015B NM	87401
890-6973-8	CS 08	Total/NA	Solid	8015B NM	87401
890-6973-9	CS 09	Total/NA	Solid	8015B NM	87445
890-6973-10	CS 10	Total/NA	Solid	8015B NM	87445
890-6973-11	CS 11	Total/NA	Solid	8015B NM	87445
890-6973-12	CS 12	Total/NA	Solid	8015B NM	87445
890-6973-13	CS 13	Total/NA	Solid	8015B NM	87445
890-6973-14	CS 14	Total/NA	Solid	8015B NM	87445
890-6973-15	CS 15	Total/NA	Solid	8015B NM	87445
890-6973-16	CS 16	Total/NA	Solid	8015B NM	87445
890-6973-17	CS 17	Total/NA	Solid	8015B NM	87445
890-6973-18	CS 18	Total/NA	Solid	8015B NM	87445
890-6973-19	CS 19	Total/NA	Solid	8015B NM	87445
890-6973-20	CS 20	Total/NA	Solid	8015B NM	87445
890-6973-21	CS 21	Total/NA	Solid	8015B NM	87445
890-6973-22	CS 22	Total/NA	Solid	8015B NM	87445
890-6973-23	CS 23	Total/NA	Solid	8015B NM	87445
890-6973-24	CS 24	Total/NA	Solid	8015B NM	87445
890-6973-25	CS 25	Total/NA	Solid	8015B NM	87445
890-6973-26	CS 26	Total/NA	Solid	8015B NM	87445
890-6973-27	CS 27	Total/NA	Solid	8015B NM	87445
890-6973-28	CS 28	Total/NA	Solid	8015B NM	87445
MB 880-87401/1-A	Method Blank	Total/NA	Solid	8015B NM	87401
MB 880-87445/1-A	Method Blank	Total/NA	Solid	8015B NM	87445
LCS 880-87401/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87401

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**GC Semi VOA (Continued)****Analysis Batch: 87619 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-87445/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87445
LCSD 880-87401/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87401
LCSD 880-87445/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87445
890-6973-9 MS	CS 09	Total/NA	Solid	8015B NM	87445
890-6973-9 MSD	CS 09	Total/NA	Solid	8015B NM	87445

**Analysis Batch: 87661**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Total/NA	Solid	8015 NM	8
890-6973-2	CS 02	Total/NA	Solid	8015 NM	9
890-6973-3	CS 03	Total/NA	Solid	8015 NM	10
890-6973-4	CS 04	Total/NA	Solid	8015 NM	11
890-6973-5	CS 05	Total/NA	Solid	8015 NM	12
890-6973-6	CS 06	Total/NA	Solid	8015 NM	13
890-6973-7	CS 07	Total/NA	Solid	8015 NM	14
890-6973-8	CS 08	Total/NA	Solid	8015 NM	
890-6973-9	CS 09	Total/NA	Solid	8015 NM	
890-6973-10	CS 10	Total/NA	Solid	8015 NM	
890-6973-11	CS 11	Total/NA	Solid	8015 NM	
890-6973-12	CS 12	Total/NA	Solid	8015 NM	
890-6973-13	CS 13	Total/NA	Solid	8015 NM	
890-6973-14	CS 14	Total/NA	Solid	8015 NM	
890-6973-15	CS 15	Total/NA	Solid	8015 NM	
890-6973-16	CS 16	Total/NA	Solid	8015 NM	
890-6973-17	CS 17	Total/NA	Solid	8015 NM	
890-6973-18	CS 18	Total/NA	Solid	8015 NM	
890-6973-19	CS 19	Total/NA	Solid	8015 NM	
890-6973-20	CS 20	Total/NA	Solid	8015 NM	
890-6973-21	CS 21	Total/NA	Solid	8015 NM	
890-6973-22	CS 22	Total/NA	Solid	8015 NM	
890-6973-23	CS 23	Total/NA	Solid	8015 NM	
890-6973-24	CS 24	Total/NA	Solid	8015 NM	
890-6973-25	CS 25	Total/NA	Solid	8015 NM	
890-6973-26	CS 26	Total/NA	Solid	8015 NM	
890-6973-27	CS 27	Total/NA	Solid	8015 NM	
890-6973-28	CS 28	Total/NA	Solid	8015 NM	
890-6973-29	CS 29	Total/NA	Solid	8015 NM	
890-6973-30	CS 30	Total/NA	Solid	8015 NM	
890-6973-31	CS 31	Total/NA	Solid	8015 NM	
890-6973-32	CS 32	Total/NA	Solid	8015 NM	
890-6973-33	CS 33	Total/NA	Solid	8015 NM	
890-6973-34	CS 34	Total/NA	Solid	8015 NM	
890-6973-35	CS 35	Total/NA	Solid	8015 NM	
890-6973-36	CS 36	Total/NA	Solid	8015 NM	

**HPLC/IC****Leach Batch: 87552**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Soluble	Solid	DI Leach	
890-6973-2	CS 02	Soluble	Solid	DI Leach	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**HPLC/IC (Continued)****Leach Batch: 87552 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-3	CS 03	Soluble	Solid	DI Leach	
MB 880-87552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Leach Batch: 87553**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-4	CS 04	Soluble	Solid	DI Leach	
890-6973-5	CS 05	Soluble	Solid	DI Leach	
890-6973-6	CS 06	Soluble	Solid	DI Leach	
890-6973-7	CS 07	Soluble	Solid	DI Leach	
890-6973-8	CS 08	Soluble	Solid	DI Leach	
890-6973-9	CS 09	Soluble	Solid	DI Leach	
890-6973-10	CS 10	Soluble	Solid	DI Leach	
890-6973-11	CS 11	Soluble	Solid	DI Leach	
890-6973-12	CS 12	Soluble	Solid	DI Leach	
890-6973-13	CS 13	Soluble	Solid	DI Leach	
890-6973-14	CS 14	Soluble	Solid	DI Leach	
890-6973-15	CS 15	Soluble	Solid	DI Leach	
890-6973-16	CS 16	Soluble	Solid	DI Leach	
890-6973-17	CS 17	Soluble	Solid	DI Leach	
890-6973-18	CS 18	Soluble	Solid	DI Leach	
890-6973-19	CS 19	Soluble	Solid	DI Leach	
890-6973-20	CS 20	Soluble	Solid	DI Leach	
890-6973-21	CS 21	Soluble	Solid	DI Leach	
890-6973-22	CS 22	Soluble	Solid	DI Leach	
890-6973-23	CS 23	Soluble	Solid	DI Leach	
MB 880-87553/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87553/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87553/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6973-4 MS	CS 04	Soluble	Solid	DI Leach	
890-6973-4 MSD	CS 04	Soluble	Solid	DI Leach	
890-6973-14 MS	CS 14	Soluble	Solid	DI Leach	
890-6973-14 MSD	CS 14	Soluble	Solid	DI Leach	

**Leach Batch: 87554**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-24	CS 24	Soluble	Solid	DI Leach	
890-6973-25	CS 25	Soluble	Solid	DI Leach	
890-6973-26	CS 26	Soluble	Solid	DI Leach	
890-6973-27	CS 27	Soluble	Solid	DI Leach	
890-6973-28	CS 28	Soluble	Solid	DI Leach	
890-6973-29	CS 29	Soluble	Solid	DI Leach	
890-6973-30	CS 30	Soluble	Solid	DI Leach	
890-6973-31	CS 31	Soluble	Solid	DI Leach	
890-6973-32	CS 32	Soluble	Solid	DI Leach	
890-6973-33	CS 33	Soluble	Solid	DI Leach	
890-6973-34	CS 34	Soluble	Solid	DI Leach	
890-6973-35	CS 35	Soluble	Solid	DI Leach	
890-6973-36	CS 36	Soluble	Solid	DI Leach	
MB 880-87554/1-A	Method Blank	Soluble	Solid	DI Leach	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**HPLC/IC (Continued)****Leach Batch: 87554 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-87554/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87554/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6973-24 MS	CS 24	Soluble	Solid	DI Leach	
890-6973-24 MSD	CS 24	Soluble	Solid	DI Leach	
890-6973-34 MS	CS 34	Soluble	Solid	DI Leach	
890-6973-34 MSD	CS 34	Soluble	Solid	DI Leach	

**Analysis Batch: 87626**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-1	CS 01	Soluble	Solid	300.0	87552
890-6973-2	CS 02	Soluble	Solid	300.0	87552
890-6973-3	CS 03	Soluble	Solid	300.0	87552
MB 880-87552/1-A	Method Blank	Soluble	Solid	300.0	87552
LCS 880-87552/2-A	Lab Control Sample	Soluble	Solid	300.0	87552
LCSD 880-87552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87552

**Analysis Batch: 87649**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-4	CS 04	Soluble	Solid	300.0	87553
890-6973-5	CS 05	Soluble	Solid	300.0	87553
890-6973-6	CS 06	Soluble	Solid	300.0	87553
890-6973-7	CS 07	Soluble	Solid	300.0	87553
890-6973-8	CS 08	Soluble	Solid	300.0	87553
890-6973-9	CS 09	Soluble	Solid	300.0	87553
890-6973-10	CS 10	Soluble	Solid	300.0	87553
890-6973-11	CS 11	Soluble	Solid	300.0	87553
890-6973-12	CS 12	Soluble	Solid	300.0	87553
890-6973-13	CS 13	Soluble	Solid	300.0	87553
890-6973-14	CS 14	Soluble	Solid	300.0	87553
890-6973-15	CS 15	Soluble	Solid	300.0	87553
890-6973-16	CS 16	Soluble	Solid	300.0	87553
890-6973-17	CS 17	Soluble	Solid	300.0	87553
890-6973-18	CS 18	Soluble	Solid	300.0	87553
890-6973-19	CS 19	Soluble	Solid	300.0	87553
890-6973-20	CS 20	Soluble	Solid	300.0	87553
890-6973-21	CS 21	Soluble	Solid	300.0	87553
890-6973-22	CS 22	Soluble	Solid	300.0	87553
890-6973-23	CS 23	Soluble	Solid	300.0	87553
MB 880-87553/1-A	Method Blank	Soluble	Solid	300.0	87553
LCS 880-87553/2-A	Lab Control Sample	Soluble	Solid	300.0	87553
LCSD 880-87553/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87553
890-6973-4 MS	CS 04	Soluble	Solid	300.0	87553
890-6973-4 MSD	CS 04	Soluble	Solid	300.0	87553
890-6973-14 MS	CS 14	Soluble	Solid	300.0	87553
890-6973-14 MSD	CS 14	Soluble	Solid	300.0	87553

**Analysis Batch: 87655**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-24	CS 24	Soluble	Solid	300.0	87554
890-6973-25	CS 25	Soluble	Solid	300.0	87554
890-6973-26	CS 26	Soluble	Solid	300.0	87554

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

**HPLC/IC (Continued)****Analysis Batch: 87655 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6973-27	CS 27	Soluble	Solid	300.0	87554
890-6973-28	CS 28	Soluble	Solid	300.0	87554
890-6973-29	CS 29	Soluble	Solid	300.0	87554
890-6973-30	CS 30	Soluble	Solid	300.0	87554
890-6973-31	CS 31	Soluble	Solid	300.0	87554
890-6973-32	CS 32	Soluble	Solid	300.0	87554
890-6973-33	CS 33	Soluble	Solid	300.0	87554
890-6973-34	CS 34	Soluble	Solid	300.0	87554
890-6973-35	CS 35	Soluble	Solid	300.0	87554
890-6973-36	CS 36	Soluble	Solid	300.0	87554
MB 880-87554/1-A	Method Blank	Soluble	Solid	300.0	87554
LCS 880-87554/2-A	Lab Control Sample	Soluble	Solid	300.0	87554
LCSD 880-87554/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87554
890-6973-24 MS	CS 24	Soluble	Solid	300.0	87554
890-6973-24 MSD	CS 24	Soluble	Solid	300.0	87554
890-6973-34 MS	CS 34	Soluble	Solid	300.0	87554
890-6973-34 MSD	CS 34	Soluble	Solid	300.0	87554

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 01**

Date Collected: 08/02/24 09:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 00:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 00:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 16:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 16:02	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87552	08/05/24 14:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87626	08/07/24 18:03	CH	EET MID

**Client Sample ID: CS 02**

Date Collected: 08/02/24 09:10

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-2**

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			5.01 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 00:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 00:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 16:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 16:20	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	87552	08/05/24 14:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87626	08/07/24 18:09	CH	EET MID

**Client Sample ID: CS 03**

Date Collected: 08/02/24 09:20

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-3**

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			5.00 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 00:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 00:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 16:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 16:38	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	87552	08/05/24 14:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87626	08/07/24 18:15	CH	EET MID

**Client Sample ID: CS 04**

Date Collected: 08/02/24 09:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-4**

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			4.98 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 01:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 01:10	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 04**

Date Collected: 08/02/24 09:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			87661	08/06/24 16:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 16:56	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 07:24	CH	EET MID

**Client Sample ID: CS 05**

Date Collected: 08/02/24 09:40

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-5**

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	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 01:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 01:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 17:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 17:14	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 07:42	CH	EET MID

**Client Sample ID: CS 06**

Date Collected: 08/02/24 09:50

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-6**

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			4.98 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 01:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 01:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 17:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 17:33	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 07:48	CH	EET MID

**Client Sample ID: CS 07**

Date Collected: 08/02/24 10:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-7**

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			5.01 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 02:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 02:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 17:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 17:51	TKC	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 07**

Date Collected: 08/02/24 10:00  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 07:54	CH	EET MID

**Client Sample ID: CS 08**

Date Collected: 08/02/24 10:10  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-8**

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	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 02:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 02:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 18:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87401	08/02/24 15:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 18:09	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:00	CH	EET MID

**Client Sample ID: CS 09**

Date Collected: 08/02/24 10:20  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-9**

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			5.00 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 02:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 02:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 21:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 21:07	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:18	CH	EET MID

**Client Sample ID: CS 10**

Date Collected: 08/02/24 10:30  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-10**

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	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 03:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 03:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 21:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 21:58	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:24	CH	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 11**

Date Collected: 08/02/24 10:40

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-11**

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			5.01 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 05:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 05:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 22:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 22:15	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:30	CH	EET MID

**Client Sample ID: CS 12**

Date Collected: 08/02/24 10:50

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-12**

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			5.00 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 05:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 05:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 22:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 22:32	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:36	CH	EET MID

**Client Sample ID: CS 13**

Date Collected: 08/02/24 11:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-13**

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			4.98 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 05:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 05:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 22:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 22:49	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:42	CH	EET MID

**Client Sample ID: CS 14**

Date Collected: 08/02/24 11:10

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-14**

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			5.01 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 06:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 06:04	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 14**

Date Collected: 08/02/24 11:10  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			87661	08/06/24 23:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 23:05	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 08:48	CH	EET MID

**Client Sample ID: CS 15**

Date Collected: 08/02/24 11:20  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-15**

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			5.00 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 06:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 06:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 23:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 23:22	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:07	CH	EET MID

**Client Sample ID: CS 16**

Date Collected: 08/02/24 11:30  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-16**

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	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 06:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 06:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 23:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 23:38	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:13	CH	EET MID

**Client Sample ID: CS 17**

Date Collected: 08/02/24 11:40  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-17**

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	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 07:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 07:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 23:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/06/24 23:55	TKC	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 17**

Date Collected: 08/02/24 11:40  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-17**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:31	CH	EET MID

**Client Sample ID: CS 18**

Date Collected: 08/02/24 11:50  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-18**

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			5.01 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 07:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 07:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 00:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 00:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:37	CH	EET MID

**Client Sample ID: CS 19**

Date Collected: 08/02/24 12:00  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-19**

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			5.00 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 07:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 07:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 00:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 00:44	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:43	CH	EET MID

**Client Sample ID: CS 20**

Date Collected: 08/02/24 12:10  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-20**

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			4.98 g	5 mL	87487	08/05/24 10:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87458	08/06/24 08:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 08:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 01:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 01:01	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:49	CH	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 21**

Date Collected: 08/02/24 12:20

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-21**

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	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 12:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 12:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 01:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 01:17	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 09:55	CH	EET MID

**Client Sample ID: CS 22**

Date Collected: 08/02/24 12:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-22**

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			5.01 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 14:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 14:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 01:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 01:34	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 10:01	CH	EET MID

**Client Sample ID: CS 23**

Date Collected: 08/02/24 12:40

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-23**

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			5.00 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 14:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 14:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 01:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 01:50	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87553	08/05/24 14:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87649	08/07/24 10:07	CH	EET MID

**Client Sample ID: CS 24**

Date Collected: 08/02/24 12:50

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-24**

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			4.98 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 15:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 15:14	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 24**

Date Collected: 08/02/24 12:50

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-24**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			87661	08/07/24 09:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 09:41	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:06	CH	EET MID

**Client Sample ID: CS 25**

Date Collected: 08/02/24 13:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-25**

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	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 15:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 15:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 09:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 09:59	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:22	CH	EET MID

**Client Sample ID: CS 26**

Date Collected: 08/02/24 13:10

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-26**

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			4.98 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 15:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 15:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 10:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 10:16	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:27	CH	EET MID

**Client Sample ID: CS 27**

Date Collected: 08/02/24 13:20

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-27**

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			5.01 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 17:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 17:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 10:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 10:35	TKC	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 27**

Date Collected: 08/02/24 13:20  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-27**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:32	CH	EET MID

**Client Sample ID: CS 28**

Date Collected: 08/02/24 13:30  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-28**

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	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 18:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 18:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/07/24 10:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87445	08/03/24 15:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87619	08/07/24 10:53	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:38	CH	EET MID

**Client Sample ID: CS 29**

Date Collected: 08/02/24 13:40  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-29**

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			5.00 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 18:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 18:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 20:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 20:57	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:53	CH	EET MID

**Client Sample ID: CS 30**

Date Collected: 08/02/24 13:50  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-30**

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	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 18:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 18:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 21:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 21:58	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 20:58	CH	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 31**

Date Collected: 08/02/24 14:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-31**

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			5.01 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 19:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 19:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 22:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 22:19	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:04	CH	EET MID

**Client Sample ID: CS 32**

Date Collected: 08/02/24 14:10

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-32**

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			5.00 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 19:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 19:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 22:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 22:39	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:09	CH	EET MID

**Client Sample ID: CS 33**

Date Collected: 08/02/24 14:20

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-33**

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			4.98 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 19:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 19:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 23:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 23:00	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:14	CH	EET MID

**Client Sample ID: CS 34**

Date Collected: 08/02/24 14:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-34**

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			5.01 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 20:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 20:10	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County, NM

**Client Sample ID: CS 34**

Date Collected: 08/02/24 14:30  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-34**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			87661	08/05/24 23:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 23:20	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:19	CH	EET MID

**Client Sample ID: CS 35**

Date Collected: 08/02/24 14:40  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-35**

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			5.00 g	5 mL	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 20:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 20:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/05/24 23:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/05/24 23:40	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:35	CH	EET MID

**Client Sample ID: CS 36**

Date Collected: 08/02/24 14:50  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6973-36**

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	87488	08/05/24 10:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87590	08/06/24 20:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87673	08/06/24 20:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			87661	08/06/24 00:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 00:00	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:40	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

**Accreditation/Certification Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6973-1  
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

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

Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6973-1  
 SDG: Lea County,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-6973-1	CS 01	Solid	08/02/24 09:00	08/02/24 15:31	4'	1
890-6973-2	CS 02	Solid	08/02/24 09:10	08/02/24 15:31	4'	2
890-6973-3	CS 03	Solid	08/02/24 09:20	08/02/24 15:31	4'	3
890-6973-4	CS 04	Solid	08/02/24 09:30	08/02/24 15:31	4'	4
890-6973-5	CS 05	Solid	08/02/24 09:40	08/02/24 15:31	4'	5
890-6973-6	CS 06	Solid	08/02/24 09:50	08/02/24 15:31	4'	6
890-6973-7	CS 07	Solid	08/02/24 10:00	08/02/24 15:31	4'	7
890-6973-8	CS 08	Solid	08/02/24 10:10	08/02/24 15:31	4'	8
890-6973-9	CS 09	Solid	08/02/24 10:20	08/02/24 15:31	4'	9
890-6973-10	CS 10	Solid	08/02/24 10:30	08/02/24 15:31	4'	10
890-6973-11	CS 11	Solid	08/02/24 10:40	08/02/24 15:31	4'	11
890-6973-12	CS 12	Solid	08/02/24 10:50	08/02/24 15:31	4'	12
890-6973-13	CS 13	Solid	08/02/24 11:00	08/02/24 15:31	4'	13
890-6973-14	CS 14	Solid	08/02/24 11:10	08/02/24 15:31	4'	14
890-6973-15	CS 15	Solid	08/02/24 11:20	08/02/24 15:31	4'	
890-6973-16	CS 16	Solid	08/02/24 11:30	08/02/24 15:31	4'	
890-6973-17	CS 17	Solid	08/02/24 11:40	08/02/24 15:31	4'	
890-6973-18	CS 18	Solid	08/02/24 11:50	08/02/24 15:31	4'	
890-6973-19	CS 19	Solid	08/02/24 12:00	08/02/24 15:31	4'	
890-6973-20	CS 20	Solid	08/02/24 12:10	08/02/24 15:31	4'	
890-6973-21	CS 21	Solid	08/02/24 12:20	08/02/24 15:31	4'	
890-6973-22	CS 22	Solid	08/02/24 12:30	08/02/24 15:31	4'	
890-6973-23	CS 23	Solid	08/02/24 12:40	08/02/24 15:31	4'	
890-6973-24	CS 24	Solid	08/02/24 12:50	08/02/24 15:31	4'	
890-6973-25	CS 25	Solid	08/02/24 13:00	08/02/24 15:31	4'	
890-6973-26	CS 26	Solid	08/02/24 13:10	08/02/24 15:31	4'	
890-6973-27	CS 27	Solid	08/02/24 13:20	08/02/24 15:31	4'	
890-6973-28	CS 28	Solid	08/02/24 13:30	08/02/24 15:31	4'	
890-6973-29	CS 29	Solid	08/02/24 13:40	08/02/24 15:31	4'	
890-6973-30	CS 30	Solid	08/02/24 13:50	08/02/24 15:31	4'	
890-6973-31	CS 31	Solid	08/02/24 14:00	08/02/24 15:31	4'	
890-6973-32	CS 32	Solid	08/02/24 14:10	08/02/24 15:31	4'	
890-6973-33	CS 33	Solid	08/02/24 14:20	08/02/24 15:31	4'	
890-6973-34	CS 34	Solid	08/02/24 14:30	08/02/24 15:31	4'	
890-6973-35	CS 35	Solid	08/02/24 14:40	08/02/24 15:31	4'	
890-6973-36	CS 36	Solid	08/02/24 14:50	08/02/24 15:31	4'	


**Environment Testing  
Xenco**
**Chain of Custody**

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

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

www.xenco.com Page 1 of 4

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@earthsyst.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:		Turn Around			ANALYSIS REQUEST										Preservative Codes				
Project Number:	2288	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			Parameters	Pres. Code											None: NO	DI Water: H <sub>2</sub> O	
Project Location:	Lea County, NM	Due Date: 5 day TAT															Cool	MeOH: Me	
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm															H <sub>2</sub> C	HNO <sub>3</sub> : HN	
PO #:																	: H <sub>2</sub>	NaOH: Na	
SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: Yes No															: HP	O <sub>4</sub> : NABIS	
Samples Received Intact:	Yes No	Thermometer ID:	Twin 100														Zn Acetate+NaOH: Zn	NaOH+Ascorbic Acid: SAPC	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2														Sample Comments		
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.4																
Total Containers:		Corrected Temperature:	3.2																
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth			Grab/ Comp	# of Cont	TPH	Chloride	BTEX								
CS01	S	8/2/2024	9:00	4'	C	1	X	X	X										
CS02	S	8/2/2024	9:10	4'	C	1	X	X	X										
CS03	S	8/2/2024	9:20	4'	C	1	X	X	X										
CS04	S	8/2/2024	9:30	4'	C	1	X	X	X										
CS05	S	8/2/2024	9:40	4'	C	1	X	X	X										
CS06	S	8/2/2024	9:50	4'	C	1	X	X	X										
CS07	S	8/2/2024	10:00	4'	C	1	X	X	X										
CS08	S	8/2/2024	10:10	4'	C	1	X	X	X										
CS09	S	8/2/2024	10:20	4'	C	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  
 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 \$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
0 <i>Gilbert</i>	<i>Burns</i>		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

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

[www.xenco.com](http://www.xenco.com) Page 2 of 4

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@earthsyst.net

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RPC <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:		Turn Around			ANALYSIS REQUEST										Preservative Codes		
Project Number:	2288	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code													
Project Location:	Lea County, NM	Due Date:			5 day TAT												
Sampler's Name:	Gilbert Moreno			TAT starts the day received by the lab, if received by 4:30pm													
PO #:																	
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Parameters											
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		T/W/MOC 7													
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Correction Factor:		-0.2													
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	Temperature Reading:		3.4													
Total Containers:				Corrected Temperature:		3.2											
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX						Sample Comments	
CS10	S	8/2/2024	10:30	4'	C	1	X	X	X							Incident Number	
CS11	S	8/2/2024	10:40	4'	C	1	X	X	X							nAPP2327037534	
CS12	S	8/2/2024	10:50	4'	C	1	X	X	X								
CS13	S	8/2/2024	11:00	4'	C	1	X	X	X								
CS14	S	8/2/2024	11:10	4'	C	1	X	X	X								
CS15	S	8/2/2024	11:20	4'	C	1	X	X	X								
CS16	S	8/2/2024	11:30	4'	C	1	X	X	X								
CS17	S	8/2/2024	11:40	4'	C	1	X	X	X								
CS18	S	8/2/2024	11:50	4'	C	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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0 <i>Eurofins</i>	<i>Bauer</i>		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

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

[www.xenco.com](http://www.xenco.com) Page 3 of 4

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@earthsyst.net

Work Order Comments			
Program: UST/PST <input type="checkbox"/> PPR <input type="checkbox"/> Brownfields <input type="checkbox"/> RPC <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:		The Contest CTB		Turn Around		ANALYSIS REQUEST										Preservative Codes	
Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code										None: NO	DI Water: H <sub>2</sub> O		
Project Location:	Lea County, NM	Due Date:	5 day TAT	Parameters										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 #:																	
SAMPLE RECEIPT	Temp Blank:	Yes <input type="checkbox"/>	No <input type="checkbox"/>		Wet Ice:	Yes <input type="checkbox"/>	No <input type="checkbox"/>								H <sub>3</sub> PO <sub>4</sub> : HP		
Samples Received Intact:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Thermometer ID:		Tmoc									NaHSO <sub>4</sub> : NABIS			
Cooler Custody Seals:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>		Correction Factor:		-0.2								Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>		
Sample Custody Seals:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>		Temperature Reading:		3.4								Zn Acetate+NaOH: Zn		
Total Containers:				Corrected Temperature:		3.2								NaOH+Ascorbic Acid: SAPC			
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX						Sample Comments	
CS19	S	8/2/2024	12:00	4'	C	1	X	X	X						Incident Number		
CS20	S	8/2/2024	12:10	4'	C	1	X	X	X						nAPP2327037534		
CS21	S	8/2/2024	12:20	4'	C	1	X	X	X								
CS22	S	8/2/2024	12:30	4'	C	1	X	X	X								
CS23	S	8/2/2024	12:40	4'	C	1	X	X	X								
CS24	S	8/2/2024	12:50	4'	C	1	X	X	X								
CS25	S	8/2/2024	13:00	4'	C	1	X	X	X								
CS26	S	8/2/2024	13:10	4'	C	1	X	X	X								
CS27	S	8/2/2024	13:20	4'	C	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  
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 <i>Gilbert</i>	<i>Burk</i>		2		
3			4		
5			6		

Environment Testing  
Xenco

## Chain of Custody

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

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

www.xenco.com Page 4 of 4

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@earthsyst.net

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PPR <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:	The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes																		
	Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush												None: NO	DI Water: H <sub>2</sub> O																	
Project Location:	Lea County, NM		Due Date:	5 day TAT	Parameters										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	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>												H <sub>3</sub> PO <sub>4</sub> : HP																		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		TNm005												NaHSO <sub>4</sub> : NABIS																		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		-0.2												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>																		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:		3.4												Zn Acetate+NaOH: Zn																		
Total Containers:		Corrected Temperature:		3.2												NaOH+Ascorbic Acid: SAPC																		
Sample Identification		Matrix	Date Sampled	Time Sampled		Depth	Grab/Comp	# of Cont	TPH	Chloride	BTEX						Sample Comments																	
CS28	S	8/2/2024	13:25	4'		C	1	X	X	X							Incident Number																	
CS29	S	8/2/2024	13:30	4'	C	1	X	X	X							nAPP2327037534																		
CS30	S	8/2/2024	13:35	4'	C	1	X	X	X																									
CS31	S	8/2/2024	13:40	4'	C	1	X	X	X																									
CS32	S	8/2/2024	13:45	4'	C	1	X	X	X																									
CS33	S	8/2/2024	13:50	4'	C	1	X	X	X																									
CS34	S	8/2/2024	13:55	4'	C	1	X	X	X																									
CS35	S	8/2/2024	14:00	4'	C	1	X	X	X																									
CS36	S	8/2/2024	14:05	4'	C	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	Tl	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			2		
3			4		
5			6		

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6973-1

SDG Number: Lea County,NM

**Login Number:** 6973**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Bruns, Shannon

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6973-1

SDG Number: Lea County,NM

**Login Number:** 6973**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/03/24 09:49 AM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 8/8/2024 9:56:17 AM

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6974-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

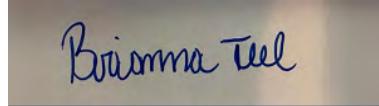
# Eurofins Carlsbad

## 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  
8/8/2024 9:56:17 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: The Contest CTB

Laboratory Job ID: 890-6974-1  
SDG: Lea County,NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: The Contest CTB

Job ID: 890-6974-1

**Job ID: 890-6974-1**

**Eurofins Carlsbad**

### Job Narrative 890-6974-1

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 8/2/2024 3:31 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 3.2°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SW01 (890-6974-1), SW02 (890-6974-2), SW03 (890-6974-3), SW04 (890-6974-4), SW05 (890-6974-5), SW06 (890-6974-6), SW07 (890-6974-7), SW08 (890-6974-8) and SW09 (890-6974-9).

### **GC VOA**

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-87457 recovered under the lower control limit for Toluene and Ethylbenzene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

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

### **Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SW01 (890-6974-1), SW02 (890-6974-2), SW03 (890-6974-3), SW04 (890-6974-4), SW05 (890-6974-5), SW06 (890-6974-6), SW07 (890-6974-7), SW08 (890-6974-8), SW09 (890-6974-9), (LCS 880-87446/2-A), (LCSD 880-87446/3-A) and (890-6973-A-29-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87446 and analytical batch 880-87450 was outside the upper control limits.

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

### **HPLC/IC**

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

Eurofins Carlsbad

**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW01****Lab Sample ID: 890-6974-1**

Matrix: Solid

Date Collected: 08/02/24 09:00  
 Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 03:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 03:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 03:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				08/05/24 10:51	08/06/24 03:32	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/05/24 10:51	08/06/24 03:32	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			08/06/24 03:32	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			08/06/24 00:21	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		08/03/24 15:59	08/06/24 00:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 00:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130				08/03/24 15:59	08/06/24 00:21	1
o-Terphenyl	146	S1+	70 - 130				08/03/24 15:59	08/06/24 00:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.4		5.01		mg/Kg			08/07/24 21:56	1

**Client Sample ID: SW02****Lab Sample ID: 890-6974-2**

Matrix: Solid

Date Collected: 08/02/24 09:10  
 Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 03:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 03:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 03:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 03:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:51	08/06/24 03:52	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/05/24 10:51	08/06/24 03:52	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6974-1  
SDG: Lea County, NM

**Client Sample ID: SW02****Lab Sample ID: 890-6974-2**

Matrix: Solid

Date Collected: 08/02/24 09:10  
Date Received: 08/02/24 15:31

**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			08/06/24 03:52	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			08/06/24 00:41	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		08/03/24 15:59	08/06/24 00:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 00:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 00:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130				08/03/24 15:59	08/06/24 00:41	1
<i>o</i> -Terphenyl	148	S1+	70 - 130				08/03/24 15:59	08/06/24 00:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.6		5.02		mg/Kg			08/07/24 22:01	1

**Client Sample ID: SW03****Lab Sample ID: 890-6974-3**

Matrix: Solid

Date Collected: 08/02/24 09:20  
Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 04:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:51	08/06/24 04:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:51	08/06/24 04:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 10:51	08/06/24 04:13	1
<i>o</i> -Xylene	<0.00201	U	0.00201		mg/Kg		08/05/24 10:51	08/06/24 04:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 10:51	08/06/24 04:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:51	08/06/24 04:13	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/05/24 10:51	08/06/24 04:13	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			08/06/24 04:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 01:22	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		08/03/24 15:59	08/06/24 01:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 01:22	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW03****Lab Sample ID: 890-6974-3**

Matrix: Solid

Date Collected: 08/02/24 09:20  
 Date Received: 08/02/24 15:31

**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)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 01:22	1
<b>Surrogate</b>									
1-Chlorooctane	147	S1+	70 - 130				08/03/24 15:59	08/06/24 01:22	1
o-Terphenyl	160	S1+	70 - 130				08/03/24 15:59	08/06/24 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.6		4.97		mg/Kg			08/07/24 22:06	1

**Client Sample ID: SW04****Lab Sample ID: 890-6974-4**

Matrix: Solid

Date Collected: 08/02/24 09:30  
 Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 04:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 04:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 04:33	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:51	08/06/24 04:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/05/24 10:51	08/06/24 04:33	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			08/06/24 04:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/06/24 01:42	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		08/03/24 15:59	08/06/24 01:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 01:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/03/24 15:59	08/06/24 01:42	1
<b>Surrogate</b>									
1-Chlorooctane	129		70 - 130				08/03/24 15:59	08/06/24 01:42	1
o-Terphenyl	142	S1+	70 - 130				08/03/24 15:59	08/06/24 01:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.8		4.98		mg/Kg			08/07/24 22:12	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6974-1  
SDG: Lea County, NM

**Client Sample ID: SW05****Lab Sample ID: 890-6974-5**

Matrix: Solid

Date Collected: 08/02/24 09:40

Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 04:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 04:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 04:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 04:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				08/05/24 10:51	08/06/24 04:53	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/05/24 10:51	08/06/24 04:53	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			08/06/24 04:53	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			08/06/24 02:02	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		08/03/24 15:59	08/06/24 02:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 02:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 02:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130				08/03/24 15:59	08/06/24 02:02	1
o-Terphenyl	153	S1+	70 - 130				08/03/24 15:59	08/06/24 02:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.2		5.02		mg/Kg			08/07/24 22:17	1

**Client Sample ID: SW06****Lab Sample ID: 890-6974-6**

Matrix: Solid

Date Collected: 08/02/24 09:50

Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 05:14	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:14	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:14	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 10:51	08/06/24 05:14	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:14	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 10:51	08/06/24 05:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/05/24 10:51	08/06/24 05:14	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/05/24 10:51	08/06/24 05:14	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6974-1  
SDG: Lea County, NM

**Client Sample ID: SW06****Lab Sample ID: 890-6974-6**

Matrix: Solid

Date Collected: 08/02/24 09:50  
Date Received: 08/02/24 15:31

**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			08/06/24 05:14	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			08/06/24 02:22	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		08/03/24 15:59	08/06/24 02:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 02:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 02:22	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	08/03/24 15:59	08/06/24 02:22	1
<i>o</i> -Terphenyl	146	S1+	70 - 130	08/03/24 15:59	08/06/24 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		5.03		mg/Kg			08/07/24 22:22	1

**Client Sample ID: SW07****Lab Sample ID: 890-6974-7**

Matrix: Solid

Date Collected: 08/02/24 10:00  
Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 05:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:34	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/05/24 10:51	08/06/24 05:34	1
<i>o</i> -Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 10:51	08/06/24 05:34	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/05/24 10:51	08/06/24 05:34	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	08/05/24 10:51	08/06/24 05:34	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/05/24 10:51	08/06/24 05:34	1

**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			08/06/24 05:34	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			08/06/24 02:43	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		08/03/24 15:59	08/06/24 02:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/06/24 02:43	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW07****Lab Sample ID: 890-6974-7**

Matrix: Solid

Date Collected: 08/02/24 10:00  
 Date Received: 08/02/24 15:31

**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)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/06/24 02:43	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				08/03/24 15:59	08/06/24 02:43	1
o-Terphenyl	139	S1+	70 - 130				08/03/24 15:59	08/06/24 02:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.1		5.05		mg/Kg			08/07/24 22:27	1

**Client Sample ID: SW08****Lab Sample ID: 890-6974-8**

Matrix: Solid

Date Collected: 08/02/24 10:10  
 Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 05:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 05:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 05:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 05:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 05:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 10:51	08/06/24 05:55	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				08/05/24 10:51	08/06/24 05:55	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/05/24 10:51	08/06/24 05:55	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			08/06/24 05:55	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			08/06/24 03:03	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		08/03/24 15:59	08/06/24 03:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 03:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/03/24 15:59	08/06/24 03:03	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130				08/03/24 15:59	08/06/24 03:03	1
o-Terphenyl	161	S1+	70 - 130				08/03/24 15:59	08/06/24 03:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.0		4.98		mg/Kg			08/07/24 21:16	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW09****Lab Sample ID: 890-6974-9**

Matrix: Solid

Date Collected: 08/02/24 10:20  
 Date Received: 08/02/24 15:31

**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		08/05/24 10:51	08/06/24 06:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 06:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 06:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 06:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 10:51	08/06/24 06:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 10:51	08/06/24 06:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109		70 - 130				08/05/24 10:51	08/06/24 06:15	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/05/24 10:51	08/06/24 06:15	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			08/06/24 06:15	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			08/06/24 03:23	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		08/03/24 15:59	08/06/24 03:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 03:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 03:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	130		70 - 130				08/03/24 15:59	08/06/24 03:23	1
o-Terphenyl	148	S1+	70 - 130				08/03/24 15:59	08/06/24 03:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		5.03		mg/Kg			08/07/24 21:22	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)									
890-6974-1	SW01	107	99									
890-6974-2	SW02	110	98									
890-6974-3	SW03	110	98									
890-6974-4	SW04	110	98									
890-6974-5	SW05	111	99									
890-6974-6	SW06	110	98									
890-6974-7	SW07	107	98									
890-6974-8	SW08	113	99									
890-6974-9	SW09	109	98									
LCS 880-87498/1-A	Lab Control Sample	103	98									
LCSD 880-87498/2-A	Lab Control Sample Dup	100	99									
MB 880-87470/5-A	Method Blank	107	92									
MB 880-87498/5-A	Method Blank	109	92									

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)									
890-6974-1	SW01	135 S1+	146 S1+									
890-6974-2	SW02	130	148 S1+									
890-6974-3	SW03	147 S1+	160 S1+									
890-6974-4	SW04	129	142 S1+									
890-6974-5	SW05	137 S1+	153 S1+									
890-6974-6	SW06	133 S1+	146 S1+									
890-6974-7	SW07	128	139 S1+									
890-6974-8	SW08	148 S1+	161 S1+									
890-6974-9	SW09	130	148 S1+									
LCS 880-87446/2-A	Lab Control Sample	125	135 S1+									
LCSD 880-87446/3-A	Lab Control Sample Dup	129	149 S1+									
MB 880-87446/1-A	Method Blank	141 S1+	172 S1+									

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-87470/5-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87470**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	107		70 - 130		08/05/24 09:23	08/05/24 11:34	1				
1,4-Difluorobenzene (Surr)	92		70 - 130		08/05/24 09:23	08/05/24 11:34	1				

**Lab Sample ID: MB 880-87498/5-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87498**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 10:51	08/05/24 22:33	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	109		70 - 130		08/05/24 10:51	08/05/24 22:33	1				
1,4-Difluorobenzene (Surr)	92		70 - 130		08/05/24 10:51	08/05/24 22:33	1				

**Lab Sample ID: LCS 880-87498/1-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87498**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec		
	Added	Result	Qualifier						Limits	Limits	
Benzene	0.100	0.1028		mg/Kg	103	70 - 130					
Toluene	0.100	0.09261		mg/Kg	93	70 - 130					
Ethylbenzene	0.100	0.09478		mg/Kg	95	70 - 130					
m-Xylene & p-Xylene	0.200	0.1978		mg/Kg	99	70 - 130					
o-Xylene	0.100	0.09865		mg/Kg	99	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	103		70 - 130			08/05/24 10:51	08/05/24 22:33	1			
1,4-Difluorobenzene (Surr)	98		70 - 130			08/05/24 10:51	08/05/24 22:33	1			

**Lab Sample ID: LCSD 880-87498/2-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87498**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	RPD
Benzene	0.100	0.1130		mg/Kg	113	70 - 130	9	35		

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-87498/2-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 87457				Prep Batch: 87498						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit	Limit
Toluene	0.100	0.1016		mg/Kg	102	70 - 130	9	35		
Ethylbenzene	0.100	0.1040		mg/Kg	104	70 - 130	9	35		
m-Xylene & p-Xylene	0.200	0.2174		mg/Kg	109	70 - 130	9	35		
o-Xylene	0.100	0.1083		mg/Kg	108	70 - 130	9	35		
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits							
4-Bromofluorobenzene (Surr)	100		70 - 130							
1,4-Difluorobenzene (Surr)	99		70 - 130							

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

Lab Sample ID: MB 880-87446/1-A				Client Sample ID: Method Blank						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 87450				Prep Batch: 87446						
Analyte	MB Result	MB Qualifier	MB RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	13
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg	08/03/24 15:59	08/05/24 19:55		1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg	08/03/24 15:59	08/05/24 19:55		1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	08/03/24 15:59	08/05/24 19:55		1	
Surrogate	MB %Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac	14
1-Chlorooctane	141	S1+	70 - 130				08/03/24 15:59	08/05/24 19:55		
o-Terphenyl	172	S1+	70 - 130				08/03/24 15:59	08/05/24 19:55		

Lab Sample ID: LCS 880-87446/2-A				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 87450				Prep Batch: 87446						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	1000	1190		mg/Kg	119	70 - 130				
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg	104	70 - 130				
Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits							
1-Chlorooctane	125		70 - 130							
o-Terphenyl	135	S1+	70 - 130							

Lab Sample ID: LCSD 880-87446/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 87450				Prep Batch: 87446						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1123		mg/Kg	112	70 - 130	6	20		
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg	107	70 - 130	3	20		

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County,NM

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

Lab Sample ID: LCSD 880-87446/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 87450

Prep Batch: 87446

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	129		70 - 130
<i>o</i> -Terphenyl	149	S1+	70 - 130

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-87554/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87655

Analyte	MB	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Chloride	<5.00	U		5.00		mg/Kg			08/07/24 19:51	1

Lab Sample ID: LCS 880-87554/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87655

Analyte	Spike	LCSD	LCSD		%Rec
	Added	Result	Qualifier	Unit	Limits
Chloride	250	246.8		mg/Kg	90 - 110

Lab Sample ID: LCSD 880-87554/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87655

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	%Rec
Chloride	250	247.5		mg/Kg	99	90 - 110

Lab Sample ID: MB 880-87658/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87682

Analyte	MB	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Chloride	<5.00	U		5.00		mg/Kg			08/07/24 18:45	1

Lab Sample ID: LCS 880-87658/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87682

Analyte	Spike	LCSD	LCSD		%Rec
	Added	Result	Qualifier	Unit	Limits
Chloride	250	246.6		mg/Kg	99 - 110

Lab Sample ID: LCSD 880-87658/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 87682

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	%Rec
Chloride	250	246.8		mg/Kg	99	90 - 110

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County,NM

**GC VOA****Analysis Batch: 87457**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	8021B	87498
890-6974-2	SW02	Total/NA	Solid	8021B	87498
890-6974-3	SW03	Total/NA	Solid	8021B	87498
890-6974-4	SW04	Total/NA	Solid	8021B	87498
890-6974-5	SW05	Total/NA	Solid	8021B	87498
890-6974-6	SW06	Total/NA	Solid	8021B	87498
890-6974-7	SW07	Total/NA	Solid	8021B	87498
890-6974-8	SW08	Total/NA	Solid	8021B	87498
890-6974-9	SW09	Total/NA	Solid	8021B	87498
MB 880-87470/5-A	Method Blank	Total/NA	Solid	8021B	87470
MB 880-87498/5-A	Method Blank	Total/NA	Solid	8021B	87498
LCS 880-87498/1-A	Lab Control Sample	Total/NA	Solid	8021B	87498
LCSD 880-87498/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87498

**Prep Batch: 87470**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-87470/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 87498**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	5035	
890-6974-2	SW02	Total/NA	Solid	5035	
890-6974-3	SW03	Total/NA	Solid	5035	
890-6974-4	SW04	Total/NA	Solid	5035	
890-6974-5	SW05	Total/NA	Solid	5035	
890-6974-6	SW06	Total/NA	Solid	5035	
890-6974-7	SW07	Total/NA	Solid	5035	
890-6974-8	SW08	Total/NA	Solid	5035	
890-6974-9	SW09	Total/NA	Solid	5035	
MB 880-87498/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87498/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87498/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

**Analysis Batch: 87646**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	Total BTEX	
890-6974-2	SW02	Total/NA	Solid	Total BTEX	
890-6974-3	SW03	Total/NA	Solid	Total BTEX	
890-6974-4	SW04	Total/NA	Solid	Total BTEX	
890-6974-5	SW05	Total/NA	Solid	Total BTEX	
890-6974-6	SW06	Total/NA	Solid	Total BTEX	
890-6974-7	SW07	Total/NA	Solid	Total BTEX	
890-6974-8	SW08	Total/NA	Solid	Total BTEX	
890-6974-9	SW09	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87446**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	8015NM Prep	
890-6974-2	SW02	Total/NA	Solid	8015NM Prep	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County,NM

**GC Semi VOA (Continued)****Prep Batch: 87446 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-3	SW03	Total/NA	Solid	8015NM Prep	
890-6974-4	SW04	Total/NA	Solid	8015NM Prep	
890-6974-5	SW05	Total/NA	Solid	8015NM Prep	
890-6974-6	SW06	Total/NA	Solid	8015NM Prep	
890-6974-7	SW07	Total/NA	Solid	8015NM Prep	
890-6974-8	SW08	Total/NA	Solid	8015NM Prep	
890-6974-9	SW09	Total/NA	Solid	8015NM Prep	
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 87450**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	8015B NM	87446
890-6974-2	SW02	Total/NA	Solid	8015B NM	87446
890-6974-3	SW03	Total/NA	Solid	8015B NM	87446
890-6974-4	SW04	Total/NA	Solid	8015B NM	87446
890-6974-5	SW05	Total/NA	Solid	8015B NM	87446
890-6974-6	SW06	Total/NA	Solid	8015B NM	87446
890-6974-7	SW07	Total/NA	Solid	8015B NM	87446
890-6974-8	SW08	Total/NA	Solid	8015B NM	87446
890-6974-9	SW09	Total/NA	Solid	8015B NM	87446
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015B NM	87446
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87446
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87446

**Analysis Batch: 87662**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Total/NA	Solid	8015 NM	
890-6974-2	SW02	Total/NA	Solid	8015 NM	
890-6974-3	SW03	Total/NA	Solid	8015 NM	
890-6974-4	SW04	Total/NA	Solid	8015 NM	
890-6974-5	SW05	Total/NA	Solid	8015 NM	
890-6974-6	SW06	Total/NA	Solid	8015 NM	
890-6974-7	SW07	Total/NA	Solid	8015 NM	
890-6974-8	SW08	Total/NA	Solid	8015 NM	
890-6974-9	SW09	Total/NA	Solid	8015 NM	

**HPLC/IC****Leach Batch: 87554**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Soluble	Solid	DI Leach	
890-6974-2	SW02	Soluble	Solid	DI Leach	
890-6974-3	SW03	Soluble	Solid	DI Leach	
890-6974-4	SW04	Soluble	Solid	DI Leach	
890-6974-5	SW05	Soluble	Solid	DI Leach	
890-6974-6	SW06	Soluble	Solid	DI Leach	
890-6974-7	SW07	Soluble	Solid	DI Leach	
MB 880-87554/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87554/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County,NM

**HPLC/IC (Continued)****Leach Batch: 87554 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-87554/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Analysis Batch: 87655**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-1	SW01	Soluble	Solid	300.0	87554
890-6974-2	SW02	Soluble	Solid	300.0	87554
890-6974-3	SW03	Soluble	Solid	300.0	87554
890-6974-4	SW04	Soluble	Solid	300.0	87554
890-6974-5	SW05	Soluble	Solid	300.0	87554
890-6974-6	SW06	Soluble	Solid	300.0	87554
890-6974-7	SW07	Soluble	Solid	300.0	87554
MB 880-87554/1-A	Method Blank	Soluble	Solid	300.0	87554
LCS 880-87554/2-A	Lab Control Sample	Soluble	Solid	300.0	87554
LCSD 880-87554/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87554

**Leach Batch: 87658**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-8	SW08	Soluble	Solid	DI Leach	
890-6974-9	SW09	Soluble	Solid	DI Leach	
MB 880-87658/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Analysis Batch: 87682**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6974-8	SW08	Soluble	Solid	300.0	87658
890-6974-9	SW09	Soluble	Solid	300.0	87658
MB 880-87658/1-A	Method Blank	Soluble	Solid	300.0	87658
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	300.0	87658
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87658

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW01**

Date Collected: 08/02/24 09:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-1**

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			5.01 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 03:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 03:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 00:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 00:21	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 21:56	CH	EET MID

**Client Sample ID: SW02**

Date Collected: 08/02/24 09:10

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-2**

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			5.00 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 03:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 03:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 00:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 00:41	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:01	CH	EET MID

**Client Sample ID: SW03**

Date Collected: 08/02/24 09:20

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-3**

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			4.98 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 04:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 04:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 01:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 01:22	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:06	CH	EET MID

**Client Sample ID: SW04**

Date Collected: 08/02/24 09:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-4**

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			5.01 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 04:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 04:33	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW04**

Date Collected: 08/02/24 09:30

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			87662	08/06/24 01:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 01:42	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:12	CH	EET MID

**Client Sample ID: SW05**

Date Collected: 08/02/24 09:40

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-5**

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			5.00 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 04:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 04:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 02:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 02:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:17	CH	EET MID

**Client Sample ID: SW06**

Date Collected: 08/02/24 09:50

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-6**

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	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 05:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 05:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 02:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 02:22	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:22	CH	EET MID

**Client Sample ID: SW07**

Date Collected: 08/02/24 10:00

Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-7**

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	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 05:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 05:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 02:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 02:43	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County, NM

**Client Sample ID: SW07**

Date Collected: 08/02/24 10:00  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-7**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	87554	08/05/24 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87655	08/07/24 22:27	CH	EET MID

**Client Sample ID: SW08**

Date Collected: 08/02/24 10:10  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-8**

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			5.01 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 05:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 05:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 03:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 03:03	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:16	CH	EET MID

**Client Sample ID: SW09**

Date Collected: 08/02/24 10:20  
 Date Received: 08/02/24 15:31

**Lab Sample ID: 890-6974-9**

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			5.00 g	5 mL	87498	08/05/24 10:51	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/06/24 06:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87646	08/06/24 06:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			87662	08/06/24 03:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 03:23	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:22	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

**Accreditation/Certification Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6974-1  
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

Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6974-1  
 SDG: Lea County,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6974-1	SW01	Solid	08/02/24 09:00	08/02/24 15:31
890-6974-2	SW02	Solid	08/02/24 09:10	08/02/24 15:31
890-6974-3	SW03	Solid	08/02/24 09:20	08/02/24 15:31
890-6974-4	SW04	Solid	08/02/24 09:30	08/02/24 15:31
890-6974-5	SW05	Solid	08/02/24 09:40	08/02/24 15:31
890-6974-6	SW06	Solid	08/02/24 09:50	08/02/24 15:31
890-6974-7	SW07	Solid	08/02/24 10:00	08/02/24 15:31
890-6974-8	SW08	Solid	08/02/24 10:10	08/02/24 15:31
890-6974-9	SW09	Solid	08/02/24 10:20	08/02/24 15:31

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**Environment Testing  
Xenco**

## Chain of Custody

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

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

www.xenco.com Page 1 of 1

Project Manager:	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@earthsyst.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: The Contest CTB			Turn Around		ANALYSIS REQUEST						Preservative Codes								
Project Number:	2288		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	<b>Parameters</b>		890-6974 Chain of Custody							None: NO DI Water: H <sub>2</sub> O						
Project Location:	Lea County, NM		Due Date: 5 day 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:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																H <sub>3</sub> PO <sub>4</sub> : HP
Samples Received Intact:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID: 11M00																	NaHSO <sub>4</sub> : NABIS
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor: C.2																	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading: 3.1								Zn Acetate+NaOH: Zn									
Total Containers:		Corrected Temperature: 3.2								NaOH+Ascorbic Acid: SAPC									
Sample Identification			Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Chloride	BTEX			Sample Comments					
SW01	S	8/2/2024	9:00	0-6'	C	1	X	X	X					Incident Number					
SW02	S	8/2/2024	9:10	0-4'	C	1	X	X	X					nAPP2327037534					
SW03	S	8/2/2024	9:20	0-4'	C	1	X	X	X										
SW04	S	8/2/2024	9:30	0-4'	C	1	X	X	X										
SW05	S	8/2/2024	9:40	0-4'	C	1	X	X	X										
SW06	S	8/2/2024	9:50	0-4'	C	1	X	X	X										
SW07	S	8/2/2024	10:00	0-4'	C	1	X	X	X										
SW08	S	8/2/2024	10:10	0-4'	C	1	X	X	X										
SW09	S	8/2/2024	10:20	0-4'	C	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  
 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 \$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
0 <i>Gilbert Moreno</i>	3 <i>Bruno</i>	8/2 1531	2		
3			4		
5			6		

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6974-1

SDG Number: Lea County,NM

**Login Number:** 6974**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6974-1

SDG Number: Lea County,NM

**Login Number:** 6974**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/03/24 09:49 AM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 8/8/2024 9:56:32 AM

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6975-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

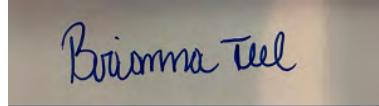
# Eurofins Carlsbad

## 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  
8/8/2024 9:56:32 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: The Contest CTB

Laboratory Job ID: 890-6975-1  
SDG: Lea County, NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

## Case Narrative

Client: Earth Systems Response and Restoration  
Project: The Contest CTB

Job ID: 890-6975-1

**Job ID: 890-6975-1****Eurofins Carlsbad**

### Job Narrative 890-6975-1

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 8/2/2024 4:35 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 3.2°C.

### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS37 (890-6975-1) and CS38 (890-6975-2).

### GC VOA

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: CS37 (890-6975-1), CS38 (890-6975-2), (LCS 880-87446/2-A), (LCSD 880-87446/3-A) and (890-6973-A-29-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87446 and analytical batch 880-87450 was outside the upper control limits.

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

### HPLC/IC

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**Client Sample ID: CS37****Lab Sample ID: 890-6975-1**

Matrix: Solid

Date Collected: 08/02/24 14:10  
 Date Received: 08/02/24 16:35  
 Sample Depth: 6'

**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		08/05/24 09:23	08/05/24 16:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/05/24 09:23	08/05/24 16:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/05/24 09:23	08/05/24 16:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/05/24 09:23	08/05/24 16:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/05/24 09:23	08/05/24 16:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/05/24 09:23	08/05/24 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	08/05/24 09:23	08/05/24 16:56	1
1,4-Difluorobenzene (Surr)	97		70 - 130	08/05/24 09:23	08/05/24 16:56	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			08/05/24 16:56	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			08/06/24 03:44	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		08/03/24 15:59	08/06/24 03:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/06/24 03:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/06/24 03:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	08/03/24 15:59	08/06/24 03:44	1
1-Chlorooctane	142	S1+	70 - 130	08/03/24 15:59	08/06/24 04:24	1
o-Terphenyl	167	S1+	70 - 130	08/03/24 15:59	08/06/24 03:44	1
o-Terphenyl	156	S1+	70 - 130	08/03/24 15:59	08/06/24 04:24	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			08/07/24 21:28	1

**Client Sample ID: CS38****Lab Sample ID: 890-6975-2**

Matrix: Solid

Date Collected: 08/02/24 14:15  
 Date Received: 08/02/24 16:35  
 Sample Depth: 6'

**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		08/05/24 09:23	08/05/24 17:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/05/24 09:23	08/05/24 17:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:16	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/05/24 09:23	08/05/24 17:16	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**Client Sample ID: CS38****Lab Sample ID: 890-6975-2**

Matrix: Solid

Date Collected: 08/02/24 14:15  
 Date Received: 08/02/24 16:35  
 Sample Depth: 6'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	08/05/24 09:23	08/05/24 17:16	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/05/24 09:23	08/05/24 17:16	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			08/05/24 17:16	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			08/06/24 04:04	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		08/03/24 15:59	08/06/24 04:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 04:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/03/24 15:59	08/06/24 04:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	08/03/24 15:59	08/06/24 04:04	1
o-Terphenyl	142	S1+	70 - 130	08/03/24 15:59	08/06/24 04:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.2		4.96		mg/Kg			08/07/24 21:34	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)									
890-6975-1	CS37	103	97									
890-6975-2	CS38	109	98									
LCS 880-87470/1-A	Lab Control Sample	106	101									
LCSD 880-87470/2-A	Lab Control Sample Dup	103	98									
MB 880-87470/5-A	Method Blank	107	92									

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)									
890-6975-1	CS37	144 S1+	167 S1+									
890-6975-1	CS37	142 S1+	156 S1+									
890-6975-2	CS38	115	142 S1+									
LCS 880-87446/2-A	Lab Control Sample	125	135 S1+									
LCSD 880-87446/3-A	Lab Control Sample Dup	129	149 S1+									
MB 880-87446/1-A	Method Blank	141 S1+	172 S1+									

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-87470/5-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87470**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	107		70 - 130		08/05/24 09:23	08/05/24 11:34	1				
1,4-Difluorobenzene (Surr)	92		70 - 130		08/05/24 09:23	08/05/24 11:34	1				

**Lab Sample ID: LCS 880-87470/1-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87470**

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits		
	Added	Result	Qualifier								
Benzene	0.100	0.1067		mg/Kg	107	70 - 130					
Toluene	0.100	0.09724		mg/Kg	97	70 - 130					
Ethylbenzene	0.100	0.1012		mg/Kg	101	70 - 130					
m-Xylene & p-Xylene	0.200	0.2126		mg/Kg	106	70 - 130					
o-Xylene	0.100	0.1051		mg/Kg	105	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits						
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	106		70 - 130								
1,4-Difluorobenzene (Surr)	101		70 - 130								

**Lab Sample ID: LCSD 880-87470/2-A****Matrix: Solid****Analysis Batch: 87457****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87470**

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1046		mg/Kg	105	70 - 130	2	35			
Toluene	0.100	0.09521		mg/Kg	95	70 - 130	2	35			
Ethylbenzene	0.100	0.09822		mg/Kg	98	70 - 130	3	35			
m-Xylene & p-Xylene	0.200	0.2056		mg/Kg	103	70 - 130	3	35			
o-Xylene	0.100	0.1022		mg/Kg	102	70 - 130	3	35			
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits						
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	103		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

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

**Lab Sample ID: MB 880-87446/1-A**

**Matrix: Solid**

**Analysis Batch: 87450**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 87446**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/03/24 15:59	08/05/24 19:55	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	141	S1+	70 - 130	08/03/24 15:59	08/05/24 19:55	1			
o-Terphenyl	172	S1+	70 - 130	08/03/24 15:59	08/05/24 19:55	1			

**Lab Sample ID: LCS 880-87446/2-A**

**Matrix: Solid**

**Analysis Batch: 87450**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 87446**

Analyte	Spikes	LCS	LCS	Unit	D	%Rec		Limits
	Added	Result	Qualifier			%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1190		mg/Kg		119	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130	
Surrogate	LCS	LCS	Limits					
	%Recovery	Qualifier	Limits					
1-Chlorooctane	125		70 - 130					
o-Terphenyl	135	S1+	70 - 130					

**Lab Sample ID: LCSD 880-87446/3-A**

**Matrix: Solid**

**Analysis Batch: 87450**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 87446**

Analyte	Spikes	LCSD	LCSD	Unit	D	%Rec		RPD	Limit
	Added	Result	Qualifier			%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1123		mg/Kg		112	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	3	20
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier	Limits						
1-Chlorooctane	129		70 - 130						
o-Terphenyl	149	S1+	70 - 130						

**Method: 300.0 - Anions, Ion Chromatography**

**Lab Sample ID: MB 880-87658/1-A**

**Matrix: Solid**

**Analysis Batch: 87682**

**Client Sample ID: Method Blank**

**Prep Type: Soluble**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg		08/07/24 18:45		1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: LCS 880-87658/2-A**

**Matrix: Solid**

**Analysis Batch: 87682**

**Client Sample ID: Lab Control Sample**

**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
Chloride	250	246.6		mg/Kg	99	90 - 110		

**Lab Sample ID: LCSD 880-87658/3-A**

**Matrix: Solid**

**Analysis Batch: 87682**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250	246.8		mg/Kg	99	90 - 110		0	20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**GC VOA****Analysis Batch: 87457**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	8021B	87470
890-6975-2	CS38	Total/NA	Solid	8021B	87470
MB 880-87470/5-A	Method Blank	Total/NA	Solid	8021B	87470
LCS 880-87470/1-A	Lab Control Sample	Total/NA	Solid	8021B	87470
LCSD 880-87470/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87470

**Prep Batch: 87470**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	5035	8
890-6975-2	CS38	Total/NA	Solid	5035	9
MB 880-87470/5-A	Method Blank	Total/NA	Solid	5035	10
LCS 880-87470/1-A	Lab Control Sample	Total/NA	Solid	5035	11
LCSD 880-87470/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	12

**Analysis Batch: 87643**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	Total BTEX	12
890-6975-2	CS38	Total/NA	Solid	Total BTEX	13

**GC Semi VOA****Prep Batch: 87446**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	8015NM Prep	14
890-6975-1	CS37	Total/NA	Solid	8015NM Prep	14
890-6975-2	CS38	Total/NA	Solid	8015NM Prep	14
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015NM Prep	14
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	14
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	14

**Analysis Batch: 87450**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	8015B NM	87446
890-6975-1	CS37	Total/NA	Solid	8015B NM	87446
890-6975-2	CS38	Total/NA	Solid	8015B NM	87446
MB 880-87446/1-A	Method Blank	Total/NA	Solid	8015B NM	87446
LCS 880-87446/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87446
LCSD 880-87446/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87446

**Analysis Batch: 87663**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Total/NA	Solid	8015 NM	14
890-6975-2	CS38	Total/NA	Solid	8015 NM	14

**HPLC/IC****Leach Batch: 87658**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Soluble	Solid	DI Leach	1
890-6975-2	CS38	Soluble	Solid	DI Leach	2
MB 880-87658/1-A	Method Blank	Soluble	Solid	DI Leach	3
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	DI Leach	4

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**HPLC/IC (Continued)****Leach Batch: 87658 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Analysis Batch: 87682**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6975-1	CS37	Soluble	Solid	300.0	87658
890-6975-2	CS38	Soluble	Solid	300.0	87658
MB 880-87658/1-A	Method Blank	Soluble	Solid	300.0	87658
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	300.0	87658
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87658

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Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

**Client Sample ID: CS37**

Date Collected: 08/02/24 14:10

Date Received: 08/02/24 16:35

**Lab Sample ID: 890-6975-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	87470	08/05/24 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/05/24 16:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87643	08/05/24 16:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			87663	08/06/24 03:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 03:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 04:24	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:28	CH	EET MID

**Client Sample ID: CS38**

Date Collected: 08/02/24 14:15

Date Received: 08/02/24 16:35

**Lab Sample ID: 890-6975-2**

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			5.01 g	5 mL	87470	08/05/24 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/05/24 17:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87643	08/05/24 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			87663	08/06/24 04:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87446	08/03/24 15:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87450	08/06/24 04:04	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:34	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 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

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Eurofins Carlsbad

**Method Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6975-1  
 SDG: Lea County, NM

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6975-1  
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6975-1	CS37	Solid	08/02/24 14:10	08/02/24 16:35	6'
890-6975-2	CS38	Solid	08/02/24 14:15	08/02/24 16:35	6'

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Environment Testing  
Xenco

## Chain of Custody

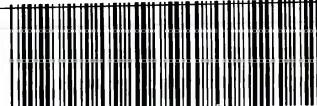
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
 El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

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

www.xenco.com Page 1 of 1

Project Manager:	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@earthsyst.net

Work Order Comments	
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:	Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes				
	Routine	Rush																
Project Number:	2288													None: NO DI Water: H <sub>2</sub> O				
Project Location:	Lea County, NM		Due Date:	5 day 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 #:																		
SAMPLE RECEIPT	Temp Blank	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	 890-6975 Chain of Custody												H <sub>3</sub> PO <sub>4</sub> : HP	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		TAMCO														
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		-C-2														Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:		3.4														Zn Acetate+NaOH: Zn
Total Containers:		Corrected Temperature:		3.2														NaOH+Ascorbic Acid: SAPC
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX						Sample Comments		
CS37		S	8/2/2024	14:10	6'	C	1	X	X	X						Incident Number		
CS38		S	8/2/2024	14:15	6'	C	1	X	X	X						nAPP2327037534		
<i>Calibration</i>																		

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 \$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
0 <i>Gilbert</i>	<i>Beurk</i>		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: 890-6975-1

SDG Number: Lea County, NM

**Login Number:** 6975**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6975-1

SDG Number: Lea County, NM

**Login Number:** 6975**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/03/24 09:49 AM**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 8/13/2024 8:22:34 AM Revision 1

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6976-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

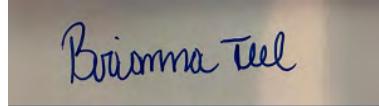
# Eurofins Carlsbad

## 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



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

Generated  
8/13/2024 8:22:34 AM  
Revision 1

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Laboratory Job ID: 890-6976-1  
SDG: Lea County, NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 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
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

## Case Narrative

Client: Earth Systems Response and Restoration  
Project: The Contest CTB

Job ID: 890-6976-1

**Job ID: 890-6976-1****Eurofins Carlsbad**

**Job Narrative**  
**890-6976-1**

### REVISION

The report being provided is a revision of the original report sent on 8/8/2024. The report (revision 1) is being revised due to Per client email to change sample depth to 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 8/2/2024 4:41 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 3.2°C.

### **GC VOA**

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

### **Diesel Range Organics**

Method 8015MOD\_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-87468 and analytical batch 880-87517 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD\_NM: The continuing calibration verification (CCV) associated with batch 880-87517 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour limit, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-87517/58).

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: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Client Sample ID: CS39**

Date Collected: 08/02/24 14:20  
 Date Received: 08/02/24 16:41  
 Sample Depth: 1'

**Lab Sample ID: 890-6976-1**

Matrix: Solid

**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		08/05/24 09:23	08/05/24 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/05/24 09:23	08/05/24 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/05/24 09:23	08/05/24 17:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/05/24 09:23	08/05/24 17:37	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		116		70 - 130			08/05/24 09:23	08/05/24 17:37	1
1,4-Difluorobenzene (Surr)		93		70 - 130			08/05/24 09:23	08/05/24 17:37	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			08/05/24 17:37	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			08/05/24 22:50	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		08/05/24 09:23	08/05/24 22:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U F1	49.8		mg/Kg		08/05/24 09:23	08/05/24 22:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/05/24 09:23	08/05/24 22:50	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane			99	70 - 130			08/05/24 09:23	08/05/24 22:50	1
<i>o</i> -Terphenyl			87	70 - 130			08/05/24 09:23	08/05/24 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.8		5.02		mg/Kg			08/07/24 21:40	1

**Client Sample ID: CS40**

Date Collected: 08/02/24 14:25  
 Date Received: 08/02/24 16:41  
 Sample Depth: 1'

**Lab Sample ID: 890-6976-2**

Matrix: Solid

**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		08/05/24 09:23	08/05/24 17:57	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/05/24 09:23	08/05/24 17:57	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/05/24 09:23	08/05/24 17:57	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/05/24 09:23	08/05/24 17:57	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/05/24 09:23	08/05/24 17:57	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/05/24 09:23	08/05/24 17:57	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		107		70 - 130			08/05/24 09:23	08/05/24 17:57	1

Eurofins Carlsbad

# Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Client Sample ID: CS40**

Date Collected: 08/02/24 14:25  
 Date Received: 08/02/24 16:41  
 Sample Depth: 1'

**Lab Sample ID: 890-6976-2**

Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	08/05/24 09:23	08/05/24 17:57	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			08/05/24 17:57	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			08/05/24 23:39	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		08/05/24 09:23	08/05/24 23:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/05/24 09:23	08/05/24 23:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/05/24 09:23	08/05/24 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	08/05/24 09:23	08/05/24 23:39	1
o-Terphenyl	96		70 - 130	08/05/24 09:23	08/05/24 23:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.8		5.01		mg/Kg			08/07/24 21:46	1

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## Surrogate Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-46842-A-1-A MS	Matrix Spike	107	100
880-46842-A-1-B MSD	Matrix Spike Duplicate	104	100
890-6976-1	CS39	116	93
890-6976-2	CS40	107	97
LCS 880-87470/1-A	Lab Control Sample	106	101
LCSD 880-87470/2-A	Lab Control Sample Dup	103	98
MB 880-87470/5-A	Method Blank	107	92

#### 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-6976-1	CS39	99	87
890-6976-1 MS	CS39	98	89
890-6976-1 MSD	CS39	100	91
890-6976-2	CS40	110	96
LCS 880-87468/2-A	Lab Control Sample	95	88
LCSD 880-87468/3-A	Lab Control Sample Dup	99	92
MB 880-87468/1-A	Method Blank	88	76

#### Surrogate Legend

1CO = 1-Chlorooctane  
 OTPH = o-Terphenyl

Eurofins Carlsbad

**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-87470/5-A****Matrix: Solid****Analysis Batch: 87457**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34		1
Toluene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/05/24 09:23	08/05/24 11:34		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/05/24 09:23	08/05/24 11:34		1

**Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87470****Lab Sample ID: LCS 880-87470/1-A****Matrix: Solid****Analysis Batch: 87457**

Analyte	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	107		70 - 130	08/05/24 09:23	08/05/24 11:34	1
1,4-Difluorobenzene (Surr)	92		70 - 130	08/05/24 09:23	08/05/24 11:34	1

**Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87470****Lab Sample ID: LCSD 880-87470/2-A****Matrix: Solid****Analysis Batch: 87457**

Analyte	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac	%Rec	RPD
	Added	Result					Unit	
Benzene	0.100	0.1067		08/05/24 09:23	08/05/24 11:34		107	70 - 130
Toluene	0.100	0.09724					97	70 - 130
Ethylbenzene	0.100	0.1012					101	70 - 130
m-Xylene & p-Xylene	0.200	0.2126					106	70 - 130
o-Xylene	0.100	0.1051					105	70 - 130

Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		70 - 130	08/05/24 09:23	08/05/24 11:34	
1,4-Difluorobenzene (Surr)	101		70 - 130			

**Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87470****Lab Sample ID: 880-46842-A-1-A MS****Matrix: Solid****Analysis Batch: 87457**

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Dil Fac	
	Result	Qualifier						Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.100	0.1071		mg/Kg	08/05/24 09:23	107	70 - 130	
Toluene	<0.00202	U	0.100	0.09569		mg/Kg		96	70 - 130	

**Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 87470**

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 880-46842-A-1-A MS****Matrix: Solid****Analysis Batch: 87457**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 87470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00202	U	0.100	0.09860		mg/Kg	99	70 - 130	
m-Xylene & p-Xylene	<0.00404	U	0.200	0.2065		mg/Kg	103	70 - 130	
o-Xylene	<0.00202	U	0.100	0.1026		mg/Kg	103	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

**Lab Sample ID: 880-46842-A-1-B MSD****Matrix: Solid****Analysis Batch: 87457**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 87470**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Benzene	<0.00202	U	0.100	0.1095		mg/Kg	109	70 - 130	2
Toluene	<0.00202	U	0.100	0.09789		mg/Kg	98	70 - 130	2
Ethylbenzene	<0.00202	U	0.100	0.09892		mg/Kg	99	70 - 130	0
m-Xylene & p-Xylene	<0.00404	U	0.200	0.2049		mg/Kg	102	70 - 130	1
o-Xylene	<0.00202	U	0.100	0.1013		mg/Kg	101	70 - 130	1

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-87468/1-A****Matrix: Solid****Analysis Batch: 87517**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 87468**

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	08/05/24 09:22	08/05/24 22:00		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg	08/05/24 09:22	08/05/24 22:00		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg	08/05/24 09:22	08/05/24 22:00		1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	08/05/24 09:22	08/05/24 22:00	1
o-Terphenyl	76		70 - 130	08/05/24 09:22	08/05/24 22:00	1

**Lab Sample ID: LCS 880-87468/2-A****Matrix: Solid****Analysis Batch: 87517**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 87468**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec
Gasoline Range Organics (GRO)-C6-C10	1000	1026		mg/Kg	103	70 - 130
Diesel Range Organics (Over C10-C28)	1000	861.9		mg/Kg	86	70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

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

Lab Sample ID: LCS 880-87468/2-A

Matrix: Solid

Analysis Batch: 87517

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87468

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
<i>o</i> -Terphenyl	88		70 - 130

Lab Sample ID: LCSD 880-87468/3-A

Matrix: Solid

Analysis Batch: 87517

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87468

Analyte		Spike	LCSD	LCSD		%Rec	RPD
		Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	1049		mg/Kg	105	70 - 130
Diesel Range Organics (Over C10-C28)		1000	897.5		mg/Kg	90	70 - 130

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
<i>o</i> -Terphenyl	92		70 - 130

Lab Sample ID: 890-6976-1 MS

Matrix: Solid

Analysis Batch: 87517

Client Sample ID: CS39

Prep Type: Total/NA

Prep Batch: 87468

Analyte	Sample	Sample	Spike	MS	MS		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	769.1		mg/Kg	77
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	707.4		mg/Kg	71

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	98		70 - 130
<i>o</i> -Terphenyl	89		70 - 130

Lab Sample ID: 890-6976-1 MSD

Matrix: Solid

Analysis Batch: 87517

Client Sample ID: CS39

Prep Type: Total/NA

Prep Batch: 87468

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec
	Result	Qualifier	Added	Result	Qualifier	Unit	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	789.5		mg/Kg	79
Diesel Range Organics (Over C10-C28)	<49.8	U F1	998	682.3	F1	mg/Kg	68

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
<i>o</i> -Terphenyl	91		70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography****Lab Sample ID: MB 880-87658/1-A****Matrix: Solid****Analysis Batch: 87682**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/07/24 18:45	1

**Lab Sample ID: LCS 880-87658/2-A****Matrix: Solid****Analysis Batch: 87682**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	246.6		mg/Kg		99	90 - 110

**Lab Sample ID: LCSD 880-87658/3-A****Matrix: Solid****Analysis Batch: 87682**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chloride	250	246.8		mg/Kg		99	90 - 110	0	20

**Lab Sample ID: 880-46897-A-1-C MS****Matrix: Solid****Analysis Batch: 87682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	57.0		248	304.1		mg/Kg		100	90 - 110

**Lab Sample ID: 880-46897-A-1-D MSD****Matrix: Solid****Analysis Batch: 87682**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chloride	57.0		248	304.0		mg/Kg		100	90 - 110	0	20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**GC VOA****Analysis Batch: 87457**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	8021B	87470
890-6976-2	CS40	Total/NA	Solid	8021B	87470
MB 880-87470/5-A	Method Blank	Total/NA	Solid	8021B	87470
LCS 880-87470/1-A	Lab Control Sample	Total/NA	Solid	8021B	87470
LCSD 880-87470/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87470
880-46842-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	87470
880-46842-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	87470

**Prep Batch: 87470**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	5035	9
890-6976-2	CS40	Total/NA	Solid	5035	10
MB 880-87470/5-A	Method Blank	Total/NA	Solid	5035	11
LCS 880-87470/1-A	Lab Control Sample	Total/NA	Solid	5035	12
LCSD 880-87470/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	13
880-46842-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	14
880-46842-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 87644**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	Total BTEX	
890-6976-2	CS40	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87468**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	8015NM Prep	
890-6976-2	CS40	Total/NA	Solid	8015NM Prep	
MB 880-87468/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87468/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6976-1 MS	CS39	Total/NA	Solid	8015NM Prep	
890-6976-1 MSD	CS39	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 87517**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	8015B NM	87468
890-6976-2	CS40	Total/NA	Solid	8015B NM	87468
MB 880-87468/1-A	Method Blank	Total/NA	Solid	8015B NM	87468
LCS 880-87468/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87468
LCSD 880-87468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87468
890-6976-1 MS	CS39	Total/NA	Solid	8015B NM	87468
890-6976-1 MSD	CS39	Total/NA	Solid	8015B NM	87468

**Analysis Batch: 87623**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Total/NA	Solid	8015 NM	
890-6976-2	CS40	Total/NA	Solid	8015 NM	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**HPLC/IC****Leach Batch: 87658**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Soluble	Solid	DI Leach	
890-6976-2	CS40	Soluble	Solid	DI Leach	
MB 880-87658/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-46897-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-46897-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 87682**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6976-1	CS39	Soluble	Solid	300.0	87658
890-6976-2	CS40	Soluble	Solid	300.0	87658
MB 880-87658/1-A	Method Blank	Soluble	Solid	300.0	87658
LCS 880-87658/2-A	Lab Control Sample	Soluble	Solid	300.0	87658
LCSD 880-87658/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87658
880-46897-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	87658
880-46897-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	87658

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 SDG: Lea County, NM

**Client Sample ID: CS39**

Date Collected: 08/02/24 14:20

Date Received: 08/02/24 16:41

**Lab Sample ID: 890-6976-1**

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			5.00 g	5 mL	87470	08/05/24 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/05/24 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87644	08/05/24 17:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			87623	08/05/24 22:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87468	08/05/24 09:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87517	08/05/24 22:50	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:40	CH	EET MID

**Client Sample ID: CS40**

Date Collected: 08/02/24 14:25

Date Received: 08/02/24 16:41

**Lab Sample ID: 890-6976-2**

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			4.95 g	5 mL	87470	08/05/24 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87457	08/05/24 17:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87644	08/05/24 17:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			87623	08/05/24 23:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87468	08/05/24 09:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87517	08/05/24 23:39	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87658	08/06/24 14:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87682	08/07/24 21:46	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6976-1  
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



Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6976-1  
 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

Eurofins Carlsbad

## Sample Summary

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6976-1  
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6976-1	CS39	Solid	08/02/24 14:20	08/02/24 16:41	1'
890-6976-2	CS40	Solid	08/02/24 14:25	08/02/24 16:41	1'

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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@earthsyst.net

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRR <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:	The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes							
	Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush												None: NO	DI Water: H <sub>2</sub> O						
Project Location:	Lea County, NM		Due Date:	5 day TAT	Parameters											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:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>												H <sub>3</sub> PO <sub>4</sub> : HP							
Samples Received Intact:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Thermometer ID: <i>TNN007</i>												NaHSO <sub>4</sub> : NABIS									
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Correction Factor: <i>-0.2</i>												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>									
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	Temperature Reading: <i>3.4</i>												Zn Acetate+NaOH: Zn									
Total Containers:		Corrected Temperature: <i>3.2</i>												NaOH+Ascorbic Acid: SAPC									
Sample Identification		Matrix	Date Sampled	Time Sampled		Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX											Sample Comments	
CS39		S	8/2/2024	14:20		4'	C	1	X	X	X											Incident Number	
CS40		S	8/2/2024	14:25	4'	C	1	X	X	X											<i>nAPP2327037534</i>		
<i>Gilbert</i>																							

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 \$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>Gilbert</i>	<i>B Seen</i>		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: 890-6976-1  
SDG Number: Lea County, NM**Login Number:** 6976**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6976-1  
SDG Number: Lea County, NM**Login Number:** 6976**List Source:** Eurofins Midland  
**List Creation:** 08/03/24 09:49 AM**List Number:** 2**Creator:** Kramer, Jessica

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 8/14/2024 12:43:20 PM

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6988-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

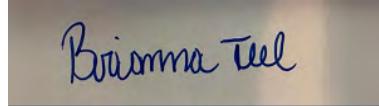
# Eurofins Carlsbad

## 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  
8/14/2024 12:43:20 PM

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: The Contest CTB

Laboratory Job ID: 890-6988-1  
SDG: Lea County, NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 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
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

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

**Case Narrative**

Client: Earth Systems Response and Restoration  
Project: The Contest CTB

Job ID: 890-6988-1

**Job ID: 890-6988-1****Eurofins Carlsbad****Job Narrative  
890-6988-1**

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 8/7/2024 1:51 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 1.8°C.

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SW10 (890-6988-1), SW11 (890-6988-2), SW12 (890-6988-3), SW13 (890-6988-4), SW14 (890-6988-5) and SW15 (890-6988-6).

**GC VOA**

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

**Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SW11 (890-6988-2), SW12 (890-6988-3), SW13 (890-6988-4), SW14 (890-6988-5), SW15 (890-6988-6) and (890-6987-A-79-A). Evidence of matrix interferences is not obvious.

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

**HPLC/IC**

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW10**

Date Collected: 08/07/24 08:30  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**Lab Sample ID: 890-6988-1**

Matrix: Solid

**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		08/08/24 14:29	08/13/24 14:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:29	08/13/24 14:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:29	08/13/24 14:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/08/24 14:29	08/13/24 14:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:29	08/13/24 14:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/08/24 14:29	08/13/24 14:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				08/08/24 14:29	08/13/24 14:17	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/08/24 14:29	08/13/24 14:17	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			08/13/24 14:17	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			08/08/24 23:39	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		08/07/24 16:36	08/08/24 23:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 23:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 23:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				08/07/24 16:36	08/08/24 23:39	1
<i>o</i> -Terphenyl	115		70 - 130				08/07/24 16:36	08/08/24 23:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.09		4.95		mg/Kg			08/09/24 16:12	1

**Client Sample ID: SW11**

Date Collected: 08/07/24 08:35  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**Lab Sample ID: 890-6988-2**

Matrix: Solid

**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		08/08/24 14:29	08/13/24 14:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 14:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 14:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/24 14:29	08/13/24 14:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 14:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/24 14:29	08/13/24 14:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				08/08/24 14:29	08/13/24 14:38	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6988-1  
SDG: Lea County, NM

**Client Sample ID: SW11****Lab Sample ID: 890-6988-2**

Matrix: Solid

Date Collected: 08/07/24 08:35  
Date Received: 08/07/24 13:51  
Sample Depth: 0 - 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	08/08/24 14:29	08/13/24 14:38	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			08/13/24 14:38	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			08/09/24 00:00	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		08/07/24 16:36	08/09/24 00:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 00:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 00:00	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	08/07/24 16:36	08/09/24 00:00	1
o-Terphenyl	136	S1+	70 - 130	08/07/24 16:36	08/09/24 00:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.0		5.05		mg/Kg			08/09/24 16:18	1

**Client Sample ID: SW12****Lab Sample ID: 890-6988-3**

Matrix: Solid

Date Collected: 08/07/24 08:40  
Date Received: 08/07/24 13:51  
Sample Depth: 0 - 4'

**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		08/08/24 14:29	08/13/24 14:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:29	08/13/24 14:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:29	08/13/24 14:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/08/24 14:29	08/13/24 14:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:29	08/13/24 14:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/08/24 14:29	08/13/24 14:58	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	08/08/24 14:29	08/13/24 14:58	1
1,4-Difluorobenzene (Surr)	96		70 - 130	08/08/24 14:29	08/13/24 14:58	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			08/13/24 14:58	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			08/09/24 00:41	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW12****Lab Sample ID: 890-6988-3**

Matrix: Solid

Date Collected: 08/07/24 08:40  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**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		08/07/24 16:36	08/09/24 00:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 00:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 00:41	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130				08/07/24 16:36	08/09/24 00:41	1
o-Terphenyl	138	S1+	70 - 130				08/07/24 16:36	08/09/24 00:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.6		5.04		mg/Kg			08/09/24 16:24	1

**Client Sample ID: SW13****Lab Sample ID: 890-6988-4**

Matrix: Solid

Date Collected: 08/07/24 08:45  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**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		08/08/24 14:29	08/13/24 16:33	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:29	08/13/24 16:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:29	08/13/24 16:33	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/08/24 14:29	08/13/24 16:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:29	08/13/24 16:33	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/08/24 14:29	08/13/24 16:33	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				08/08/24 14:29	08/13/24 16:33	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/08/24 14:29	08/13/24 16:33	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			08/13/24 16:33	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			08/09/24 01:01	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		08/07/24 16:36	08/09/24 01:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 01:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 01:01	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				08/07/24 16:36	08/09/24 01:01	1
o-Terphenyl	146	S1+	70 - 130				08/07/24 16:36	08/09/24 01:01	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW13****Lab Sample ID: 890-6988-4**

Matrix: Solid

Date Collected: 08/07/24 08:45  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34.0		4.99		mg/Kg			08/09/24 16:30	1

**Client Sample ID: SW14****Lab Sample ID: 890-6988-5**

Matrix: Solid

Date Collected: 08/07/24 08:50  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**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		08/08/24 14:29	08/13/24 16:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 16:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 16:53	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/08/24 14:29	08/13/24 16:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 16:53	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/08/24 14:29	08/13/24 16:53	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	106		70 - 130				08/08/24 14:29	08/13/24 16:53	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/08/24 14:29	08/13/24 16:53	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			08/13/24 16:53	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			08/09/24 01:21	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		08/07/24 16:36	08/09/24 01:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 01:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 01:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	142	S1+	70 - 130				08/07/24 16:36	08/09/24 01:21	1
<i>o-Terphenyl</i>	149	S1+	70 - 130				08/07/24 16:36	08/09/24 01:21	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			08/09/24 16:36	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW15**

Date Collected: 08/07/24 08:55  
 Date Received: 08/07/24 13:51  
 Sample Depth: 0 - 4'

**Lab Sample ID: 890-6988-6**

Matrix: Solid

**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		08/08/24 15:00	08/13/24 17:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 15:00	08/13/24 17:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 15:00	08/13/24 17:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/24 15:00	08/13/24 17:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/24 15:00	08/13/24 17:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/24 15:00	08/13/24 17:14	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		107		70 - 130			08/08/24 15:00	08/13/24 17:14	1
1,4-Difluorobenzene (Surr)		96		70 - 130			08/08/24 15:00	08/13/24 17:14	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			08/13/24 17:14	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			08/09/24 01:42	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		08/07/24 16:36	08/09/24 01:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/09/24 01:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/09/24 01:42	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane		143	S1+	70 - 130			08/07/24 16:36	08/09/24 01:42	1
o-Terphenyl		151	S1+	70 - 130			08/07/24 16:36	08/09/24 01:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.57		4.96		mg/Kg			08/09/24 16:42	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
890-6988-1	SW10	106	96										
890-6988-2	SW11	108	96										
890-6988-3	SW12	107	96										
890-6988-4	SW13	113	96										
890-6988-5	SW14	106	97										
890-6988-6	SW15	107	96										
LCS 880-87925/1-A	Lab Control Sample	104	98										
LCSD 880-87925/2-A	Lab Control Sample Dup	103	98										
MB 880-87925/5-A	Method Blank	108	91										

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-6988-1	SW10	107	115										
890-6988-2	SW11	121	136 S1+										
890-6988-3	SW12	130	138 S1+										
890-6988-4	SW13	134 S1+	146 S1+										
890-6988-5	SW14	142 S1+	149 S1+										
890-6988-6	SW15	143 S1+	151 S1+										
LCS 880-87800/2-A	Lab Control Sample	117	117										
LCSD 880-87800/3-A	Lab Control Sample Dup	111	111										
MB 880-87800/1-A	Method Blank	83	85										

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-87925/5-A****Matrix: Solid****Analysis Batch: 88255****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 87925**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/08/24 14:29	08/13/24 11:32	1			

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
4-Bromofluorobenzene (Surr)	108		70 - 130		08/08/24 14:29	08/13/24 11:32	1	
1,4-Difluorobenzene (Surr)	91		70 - 130		08/08/24 14:29	08/13/24 11:32	1	

**Lab Sample ID: LCS 880-87925/1-A****Matrix: Solid****Analysis Batch: 88255****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87925**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	%Rec
	Added	Result	Qualifier							
Benzene	0.100	0.09107		mg/Kg	91	70 - 130				
Toluene	0.100	0.08216		mg/Kg	82	70 - 130				
Ethylbenzene	0.100	0.08486		mg/Kg	85	70 - 130				
m-Xylene & p-Xylene	0.200	0.1795		mg/Kg	90	70 - 130				
o-Xylene	0.100	0.09017		mg/Kg	90	70 - 130				

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
	Result	Qualifier			
4-Bromofluorobenzene (Surr)	104		70 - 130		
1,4-Difluorobenzene (Surr)	98		70 - 130		

**Lab Sample ID: LCSD 880-87925/2-A****Matrix: Solid****Analysis Batch: 88255****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87925**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1005		mg/Kg	100	70 - 130	10	35			
Toluene	0.100	0.08988		mg/Kg	90	70 - 130	9	35			
Ethylbenzene	0.100	0.09251		mg/Kg	93	70 - 130	9	35			
m-Xylene & p-Xylene	0.200	0.1955		mg/Kg	98	70 - 130	9	35			
o-Xylene	0.100	0.09780		mg/Kg	98	70 - 130	8	35			

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

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

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

Lab Sample ID: MB 880-87800/1-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87800

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		08/07/24 16:36	08/08/24 19:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 19:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 19:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				08/07/24 16:36	08/08/24 19:12	1
<i>o</i> -Terphenyl	85		70 - 130				08/07/24 16:36	08/08/24 19:12	1

Lab Sample ID: LCS 880-87800/2-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	968.2		mg/Kg		97	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	975.4		mg/Kg		98	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
1-Chlorooctane	117		70 - 130					
<i>o</i> -Terphenyl	117		70 - 130					

Lab Sample ID: LCSD 880-87800/3-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87800

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	943.1		mg/Kg		94	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	976.0		mg/Kg		98	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
<i>o</i> -Terphenyl	111		70 - 130						

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-87862/1-A

Matrix: Solid

Analysis Batch: 87936

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		08/09/24 10:15		1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: LCS 880-87862/2-A**

**Matrix: Solid**

**Analysis Batch: 87936**

**Client Sample ID: Lab Control Sample**

**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
Chloride	250	254.4		mg/Kg	102	90 - 110		

**Lab Sample ID: LCSD 880-87862/3-A**

**Matrix: Solid**

**Analysis Batch: 87936**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250	254.5		mg/Kg	102	90 - 110		0	20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**GC VOA****Prep Batch: 87925**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	5035	
890-6988-2	SW11	Total/NA	Solid	5035	
890-6988-3	SW12	Total/NA	Solid	5035	
890-6988-4	SW13	Total/NA	Solid	5035	
890-6988-5	SW14	Total/NA	Solid	5035	
890-6988-6	SW15	Total/NA	Solid	5035	
MB 880-87925/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87925/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87925/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

**Analysis Batch: 88255**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	8021B	87925
890-6988-2	SW11	Total/NA	Solid	8021B	87925
890-6988-3	SW12	Total/NA	Solid	8021B	87925
890-6988-4	SW13	Total/NA	Solid	8021B	87925
890-6988-5	SW14	Total/NA	Solid	8021B	87925
890-6988-6	SW15	Total/NA	Solid	8021B	87925
MB 880-87925/5-A	Method Blank	Total/NA	Solid	8021B	87925
LCS 880-87925/1-A	Lab Control Sample	Total/NA	Solid	8021B	87925
LCSD 880-87925/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87925

**Analysis Batch: 88421**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	Total BTEX	
890-6988-2	SW11	Total/NA	Solid	Total BTEX	
890-6988-3	SW12	Total/NA	Solid	Total BTEX	
890-6988-4	SW13	Total/NA	Solid	Total BTEX	
890-6988-5	SW14	Total/NA	Solid	Total BTEX	
890-6988-6	SW15	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87800**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	8015NM Prep	
890-6988-2	SW11	Total/NA	Solid	8015NM Prep	
890-6988-3	SW12	Total/NA	Solid	8015NM Prep	
890-6988-4	SW13	Total/NA	Solid	8015NM Prep	
890-6988-5	SW14	Total/NA	Solid	8015NM Prep	
890-6988-6	SW15	Total/NA	Solid	8015NM Prep	
MB 880-87800/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87800/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87800/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 87812**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	8015B NM	87800
890-6988-2	SW11	Total/NA	Solid	8015B NM	87800
890-6988-3	SW12	Total/NA	Solid	8015B NM	87800
890-6988-4	SW13	Total/NA	Solid	8015B NM	87800

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**GC Semi VOA (Continued)****Analysis Batch: 87812 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-5	SW14	Total/NA	Solid	8015B NM	87800
890-6988-6	SW15	Total/NA	Solid	8015B NM	87800
MB 880-87800/1-A	Method Blank	Total/NA	Solid	8015B NM	87800
LCS 880-87800/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87800
LCSD 880-87800/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87800

**Analysis Batch: 88125**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Total/NA	Solid	8015 NM	88125
890-6988-2	SW11	Total/NA	Solid	8015 NM	88125
890-6988-3	SW12	Total/NA	Solid	8015 NM	88125
890-6988-4	SW13	Total/NA	Solid	8015 NM	88125
890-6988-5	SW14	Total/NA	Solid	8015 NM	88125
890-6988-6	SW15	Total/NA	Solid	8015 NM	88125

**HPLC/IC****Leach Batch: 87862**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Soluble	Solid	DI Leach	87862
890-6988-2	SW11	Soluble	Solid	DI Leach	87862
890-6988-3	SW12	Soluble	Solid	DI Leach	87862
890-6988-4	SW13	Soluble	Solid	DI Leach	87862
890-6988-5	SW14	Soluble	Solid	DI Leach	87862
890-6988-6	SW15	Soluble	Solid	DI Leach	87862
MB 880-87862/1-A	Method Blank	Soluble	Solid	DI Leach	87862
LCS 880-87862/2-A	Lab Control Sample	Soluble	Solid	DI Leach	87862
LCSD 880-87862/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	87862

**Analysis Batch: 87936**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6988-1	SW10	Soluble	Solid	300.0	87862
890-6988-2	SW11	Soluble	Solid	300.0	87862
890-6988-3	SW12	Soluble	Solid	300.0	87862
890-6988-4	SW13	Soluble	Solid	300.0	87862
890-6988-5	SW14	Soluble	Solid	300.0	87862
890-6988-6	SW15	Soluble	Solid	300.0	87862
MB 880-87862/1-A	Method Blank	Soluble	Solid	300.0	87862
LCS 880-87862/2-A	Lab Control Sample	Soluble	Solid	300.0	87862
LCSD 880-87862/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87862

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW10**

Date Collected: 08/07/24 08:30

Date Received: 08/07/24 13:51

**Lab Sample ID: 890-6988-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	87925	08/08/24 14:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 14:17	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 14:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			88125	08/08/24 23:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/08/24 23:39	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:12	CH	EET MID

**Client Sample ID: SW11**

Date Collected: 08/07/24 08:35

Date Received: 08/07/24 13:51

**Lab Sample ID: 890-6988-2**

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			5.01 g	5 mL	87925	08/08/24 14:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 14:38	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 14:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			88125	08/09/24 00:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 00:00	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:18	CH	EET MID

**Client Sample ID: SW12**

Date Collected: 08/07/24 08:40

Date Received: 08/07/24 13:51

**Lab Sample ID: 890-6988-3**

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			5.03 g	5 mL	87925	08/08/24 14:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 14:58	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 14:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			88125	08/09/24 00:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 00:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:24	CH	EET MID

**Client Sample ID: SW13**

Date Collected: 08/07/24 08:45

Date Received: 08/07/24 13:51

**Lab Sample ID: 890-6988-4**

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	87925	08/08/24 14:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 16:33	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 16:33	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

**Client Sample ID: SW13****Lab Sample ID: 890-6988-4**

Matrix: Solid

Date Collected: 08/07/24 08:45  
 Date Received: 08/07/24 13:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88125	08/09/24 01:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 01:01	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:30	CH	EET MID

**Client Sample ID: SW14****Lab Sample ID: 890-6988-5**

Matrix: Solid

Date Collected: 08/07/24 08:50  
 Date Received: 08/07/24 13:51

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	87925	08/08/24 14:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 16:53	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 16:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			88125	08/09/24 01:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 01:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:36	CH	EET MID

**Client Sample ID: SW15****Lab Sample ID: 890-6988-6**

Matrix: Solid

Date Collected: 08/07/24 08:55  
 Date Received: 08/07/24 13:51

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	87925	08/08/24 15:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 17:14	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88421	08/13/24 17:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			88125	08/09/24 01:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 01:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:42	CH	EET MID

**Laboratory References:**

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

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## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 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

Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6988-1  
 SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6988-1	SW10	Solid	08/07/24 08:30	08/07/24 13:51	0 - 4'
890-6988-2	SW11	Solid	08/07/24 08:35	08/07/24 13:51	0 - 4'
890-6988-3	SW12	Solid	08/07/24 08:40	08/07/24 13:51	0 - 4'
890-6988-4	SW13	Solid	08/07/24 08:45	08/07/24 13:51	0 - 4'
890-6988-5	SW14	Solid	08/07/24 08:50	08/07/24 13:51	0 - 4'
890-6988-6	SW15	Solid	08/07/24 08:55	08/07/24 13:51	0 - 4'

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Environment Testing  
Xenco

## **Chain of Custody**

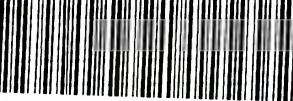
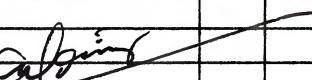
Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

**Work Order No:**

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

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	

Work Order Comments										
<b>Program:</b>	UST/PST	<input type="checkbox"/>	PRP	<input type="checkbox"/>	Brownfields	<input type="checkbox"/>	RRC	<input type="checkbox"/>	Superfund	<input type="checkbox"/>
<b>State of Project:</b>										
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:	The Contest CTB		Turn Around			 ANALYSIS REQUEST 890-6988 Chain of Custody	Preservative Codes						
Project Number:	2288		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush				Pres. Code	None: NO DI Water: H <sub>2</sub> O					
Project Location:	Lea County, NM		Due Date:	5 day 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> S0 <sub>4</sub> : H <sub>2</sub> NaOH: Na					
SAMPLE RECEIPT		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			H <sub>3</sub> PO <sub>4</sub> : HP					
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID: (WMO)					NaHSO <sub>4</sub> : NABIS					
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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 type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading: 1-8					Zn Acetate+NaOH: Zn					
Total Containers:		Corrected Temperature: 1-6						NaOH+Ascorbic Acid: SAPC					
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters	TPH	Chloride	BTEX	Sample Comments	Incident Number
SW10		S	8/7/2024	8:30	0-4'	C	1	X	X	X			nAPP2327037534
SW11		S	8/7/2024	8:35	0-4'	C	1	X	X	X			
SW12		S	8/7/2024	8:40	0-4'	C	1	X	X	X			
SW13		S	8/7/2024	8:45	0-4'	C	1	X	X	X			
SW14		S	8/7/2024	8:50	0-4'	C	1	X	X	X			
SW15		S	8/7/2024	8:55	0-4'	C	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

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

Hq: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0 <i>Captain</i>	<i>Burns</i>	8/7/13 49 <sup>2</sup>			
3			4		
5			6		

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6988-1

**Login Number:** 6988

SDG Number: Lea County, NM

**List Number:** 1**List Source:** Eurofins Carlsbad**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6988-1

SDG Number: Lea County, NM

**Login Number:** 6988**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/07/24 10:00 PM**Creator:** Laing, Edmundo

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.			1
Sample custody seals, if present, are intact.			2
The cooler or samples do not appear to have been compromised or tampered with.			3
Samples were received on ice.			4
Cooler Temperature is acceptable.			5
Cooler Temperature is recorded.			6
COC is present			7
COC is filled out in ink and legible.			8
COC is filled out with all pertinent information			9
Is the Field Sampler's name present on COC?			10
There are no discrepancies between the containers received and the COC.			11
Samples are received within Holding Time (excluding tests with immediate HTs)			12
Sample containers have legible labels.			13
Containers are not broken or leaking.			14
Sample collection date/times are provided.			
Appropriate sample containers are used.			
Sample bottles are completely filled.			
Sample Preservation Verified.			
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs			
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").			



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 8/14/2024 12:49:18 PM

## JOB DESCRIPTION

The Contest CTB  
Lea County, NM

## JOB NUMBER

890-6989-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

See page two for job notes and contact information

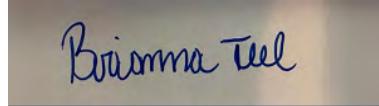
# Eurofins Carlsbad

## 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  
8/14/2024 12:49:18 PM

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: The Contest CTB

Laboratory Job ID: 890-6989-1  
SDG: Lea County, NM

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: The Contest CTB

Job ID: 890-6989-1

**Job ID: 890-6989-1**

**Eurofins Carlsbad**

### Job Narrative 890-6989-1

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 8/7/2024 1:49 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 1.6°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: CS 41 (890-6989-1), CS 42 (890-6989-2), CS 43 (890-6989-3), CS 44 (890-6989-4), CS 45 (890-6989-5), CS46 (890-6989-6), CS 47 (890-6989-7), CS 48 (890-6989-8), CS 49 (890-6989-9), CS 50 (890-6989-10), CS 51 (890-6989-11), CS 52 (890-6989-12), CS 53 (890-6989-13), CS 54 (890-6989-14) and CS 55 (890-6989-15).

### **GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-87924 and analytical batch 880-88135 was outside the upper control limits.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-87924 and analytical batch 880-88135 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

### **Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: CS 41 (890-6989-1), CS 42 (890-6989-2), CS 43 (890-6989-3), CS 44 (890-6989-4), CS 45 (890-6989-5), CS46 (890-6989-6) and (890-6987-A-79-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: CS 53 (890-6989-13). Percent recoveries are based on the amount spiked.

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

### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-87872 and analytical batch 880-87957 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 41**

Date Collected: 08/07/24 09:00

Date Received: 08/07/24 13:49

Sample Depth: 4'

**Lab Sample ID: 890-6989-1**

Matrix: Solid

**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		08/08/24 14:25	08/12/24 12:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 12:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 12:44	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 12:44	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/08/24 14:25	08/12/24 12:44	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 12:44	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		80		70 - 130			08/08/24 14:25	08/12/24 12:44	1
1,4-Difluorobenzene (Surr)		101		70 - 130			08/08/24 14:25	08/12/24 12:44	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			08/12/24 12:44	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			08/09/24 02:02	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		08/07/24 16:36	08/09/24 02:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 02:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 02:02	1
<b>Surrogate</b>									<b>Dil Fac</b>
1-Chlorooctane	148	S1+	70 - 130				08/07/24 16:36	08/09/24 02:02	1
<i>o</i> -Terphenyl	165	S1+	70 - 130				08/07/24 16:36	08/09/24 02:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.02	U	5.02		mg/Kg			08/09/24 16:48	1

**Client Sample ID: CS 42**

Date Collected: 08/07/24 09:10

Date Received: 08/07/24 13:49

Sample Depth: 4'

**Lab Sample ID: 890-6989-2**

Matrix: Solid

**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		08/08/24 14:25	08/12/24 13:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:25	08/12/24 13:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:25	08/12/24 13:05	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		08/08/24 14:25	08/12/24 13:05	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/08/24 14:25	08/12/24 13:05	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		08/08/24 14:25	08/12/24 13:05	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		105		70 - 130			08/08/24 14:25	08/12/24 13:05	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6989-1  
SDG: Lea County, NM

**Client Sample ID: CS 42**  
Date Collected: 08/07/24 09:10  
Date Received: 08/07/24 13:49  
Sample Depth: 4'

**Lab Sample ID: 890-6989-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	119		70 - 130	08/08/24 14:25	08/12/24 13:05	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			08/12/24 13:05	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			08/09/24 02:22	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		08/07/24 16:36	08/09/24 02:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 02:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 02:22	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130	08/07/24 16:36	08/09/24 02:22	1
o-Terphenyl	147	S1+	70 - 130	08/07/24 16:36	08/09/24 02:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.51		5.02		mg/Kg			08/09/24 19:31	1

**Client Sample ID: CS 43**

**Lab Sample ID: 890-6989-3**

Matrix: Solid

Date Collected: 08/07/24 09:20

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/08/24 14:25	08/12/24 13:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 13:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 13:25	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		08/08/24 14:25	08/12/24 13:25	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/08/24 14:25	08/12/24 13:25	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		08/08/24 14:25	08/12/24 13:25	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	08/08/24 14:25	08/12/24 13:25	1
1,4-Difluorobenzene (Surr)	114		70 - 130	08/08/24 14:25	08/12/24 13:25	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			08/12/24 13:25	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			08/09/24 02:43	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6989-1  
SDG: Lea County, NM

**Client Sample ID: CS 43****Lab Sample ID: 890-6989-3**

Date Collected: 08/07/24 09:20

Matrix: Solid

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/07/24 16:36	08/09/24 02:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/09/24 02:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/09/24 02:43	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130				08/07/24 16:36	08/09/24 02:43	1
o-Terphenyl	172	S1+	70 - 130				08/07/24 16:36	08/09/24 02:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.01	U	5.01		mg/Kg			08/09/24 19:50	1

**Client Sample ID: CS 44****Lab Sample ID: 890-6989-4**

Date Collected: 08/07/24 09:30

Matrix: Solid

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/08/24 14:25	08/12/24 13:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 13:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 13:46	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 13:46	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/08/24 14:25	08/12/24 13:46	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 13:46	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				08/08/24 14:25	08/12/24 13:46	1
1,4-Difluorobenzene (Surr)	109		70 - 130				08/08/24 14:25	08/12/24 13:46	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			08/12/24 13:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/09/24 03:03	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		08/07/24 16:36	08/09/24 03:03	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/07/24 16:36	08/09/24 03:03	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/07/24 16:36	08/09/24 03:03	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130				08/07/24 16:36	08/09/24 03:03	1
o-Terphenyl	160	S1+	70 - 130				08/07/24 16:36	08/09/24 03:03	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 44****Lab Sample ID: 890-6989-4**

Date Collected: 08/07/24 09:30  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.1		4.97		mg/Kg			08/09/24 19:56	1

**Client Sample ID: CS 45****Lab Sample ID: 890-6989-5**

Date Collected: 08/07/24 09:40  
 Date Received: 08/07/24 13:49  
 Sample Depth: 1'

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		08/08/24 14:25	08/12/24 14:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 14:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 14:06	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 14:06	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/08/24 14:25	08/12/24 14:06	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 14:06	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	109		70 - 130				08/08/24 14:25	08/12/24 14:06	1
1,4-Difluorobenzene (Surr)	111		70 - 130				08/08/24 14:25	08/12/24 14:06	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			08/12/24 14:06	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			08/09/24 03:23	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		08/07/24 16:36	08/09/24 03:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 03:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:36	08/09/24 03:23	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	125		70 - 130				08/07/24 16:36	08/09/24 03:23	1
<i>o</i> -Terphenyl	131	S1+	70 - 130				08/07/24 16:36	08/09/24 03:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.98		4.98		mg/Kg			08/09/24 20:02	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS46**

Date Collected: 08/07/24 09:50  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

**Lab Sample ID: 890-6989-6**

Matrix: Solid

**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		08/08/24 14:25	08/12/24 14:27	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 14:27	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 14:27	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 14:27	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/08/24 14:25	08/12/24 14:27	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 14:27	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		105		70 - 130			08/08/24 14:25	08/12/24 14:27	1
1,4-Difluorobenzene (Surr)		110		70 - 130			08/08/24 14:25	08/12/24 14:27	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			08/12/24 14:27	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			08/09/24 03:44	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		08/07/24 16:36	08/09/24 03:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 03:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/07/24 16:36	08/09/24 03:44	1
<b>Surrogate</b>									<b>Dil Fac</b>
1-Chlorooctane									1
<i>o-Terphenyl</i>									1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			08/09/24 20:08	1

**Client Sample ID: CS 47**

Date Collected: 08/07/24 10:00  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

**Lab Sample ID: 890-6989-7**

Matrix: Solid

**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		08/08/24 14:25	08/12/24 14:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:25	08/12/24 14:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/08/24 14:25	08/12/24 14:48	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		08/08/24 14:25	08/12/24 14:48	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/08/24 14:25	08/12/24 14:48	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		08/08/24 14:25	08/12/24 14:48	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		119		70 - 130			08/08/24 14:25	08/12/24 14:48	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 47**  
 Date Collected: 08/07/24 10:00  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

**Lab Sample ID: 890-6989-7**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	08/08/24 14:25	08/12/24 14:48	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			08/12/24 14:48	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			08/12/24 18:11	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		08/07/24 16:39	08/12/24 18:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 18:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 18:11	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	08/07/24 16:39	08/12/24 18:11	1
o-Terphenyl	97		70 - 130	08/07/24 16:39	08/12/24 18:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.10		4.95		mg/Kg			08/09/24 20:14	1

**Client Sample ID: CS 48****Lab Sample ID: 890-6989-8**

Date Collected: 08/07/24 10:10  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

Matrix: Solid

**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		08/08/24 14:25	08/12/24 15:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:08	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		08/08/24 14:25	08/12/24 15:08	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:08	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		08/08/24 14:25	08/12/24 15:08	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	08/08/24 14:25	08/12/24 15:08	1
1,4-Difluorobenzene (Surr)	109		70 - 130	08/08/24 14:25	08/12/24 15:08	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			08/12/24 15:08	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			08/12/24 19:00	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6989-1  
SDG: Lea County, NM

**Client Sample ID: CS 48****Lab Sample ID: 890-6989-8**

Matrix: Solid

Date Collected: 08/07/24 10:10  
Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/07/24 16:39	08/12/24 19:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/07/24 16:39	08/12/24 19:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/07/24 16:39	08/12/24 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				08/07/24 16:39	08/12/24 19:00	1
o-Terphenyl	90		70 - 130				08/07/24 16:39	08/12/24 19:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.3	F1	5.05		mg/Kg			08/09/24 20:20	1

**Client Sample ID: CS 49****Lab Sample ID: 890-6989-9**

Matrix: Solid

Date Collected: 08/07/24 10:20  
Date Received: 08/07/24 13:49

Sample Depth: 1'

**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		08/08/24 14:25	08/12/24 15:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:29	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		08/08/24 14:25	08/12/24 15:29	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/08/24 14:25	08/12/24 15:29	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		08/08/24 14:25	08/12/24 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				08/08/24 14:25	08/12/24 15:29	1
1,4-Difluorobenzene (Surr)	116		70 - 130				08/08/24 14:25	08/12/24 15:29	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			08/12/24 15:29	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			08/12/24 19:15	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		08/07/24 16:39	08/12/24 19:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 19:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				08/07/24 16:39	08/12/24 19:15	1
o-Terphenyl	89		70 - 130				08/07/24 16:39	08/12/24 19:15	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 49****Lab Sample ID: 890-6989-9**

Matrix: Solid

Date Collected: 08/07/24 10:20  
 Date Received: 08/07/24 13:49  
 Sample Depth: 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			08/09/24 20:38	1

**Client Sample ID: CS 50****Lab Sample ID: 890-6989-10**

Matrix: Solid

Date Collected: 08/07/24 10:30  
 Date Received: 08/07/24 13:49  
 Sample Depth: 2'

**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		08/08/24 14:25	08/12/24 15:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 15:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/08/24 14:25	08/12/24 15:49	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 15:49	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/08/24 14:25	08/12/24 15:49	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/08/24 14:25	08/12/24 15:49	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				08/08/24 14:25	08/12/24 15:49	1
1,4-Difluorobenzene (Surr)	110		70 - 130				08/08/24 14:25	08/12/24 15:49	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			08/12/24 15:49	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			08/12/24 19:31	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		08/07/24 16:39	08/12/24 19:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 19:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 19:31	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				08/07/24 16:39	08/12/24 19:31	1
<i>o</i> -Terphenyl	96		70 - 130				08/07/24 16:39	08/12/24 19:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.48		5.01		mg/Kg			08/09/24 20:44	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 51**

Date Collected: 08/07/24 10:40  
 Date Received: 08/07/24 13:49  
 Sample Depth: 2'

**Lab Sample ID: 890-6989-11**

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		08/10/24 14:25	08/12/24 18:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/10/24 14:25	08/12/24 18:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/10/24 14:25	08/12/24 18:22	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		08/10/24 14:25	08/12/24 18:22	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		08/10/24 14:25	08/12/24 18:22	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		08/10/24 14:25	08/12/24 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				08/10/24 14:25	08/12/24 18:22	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/10/24 14:25	08/12/24 18:22	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			08/12/24 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/12/24 19:46	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		08/07/24 16:39	08/12/24 19:46	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/07/24 16:39	08/12/24 19:46	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/07/24 16:39	08/12/24 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				08/07/24 16:39	08/12/24 19:46	1
<i>o</i> -Terphenyl	109		70 - 130				08/07/24 16:39	08/12/24 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.67		4.96		mg/Kg			08/09/24 21:02	1

**Client Sample ID: CS 52**

Date Collected: 08/07/24 10:50  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

**Lab Sample ID: 890-6989-12**

Matrix: Solid

**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		08/13/24 09:43	08/13/24 13:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/13/24 09:43	08/13/24 13:36	1
<b>Ethylbenzene</b>	<b>0.00216</b>		0.00201		mg/Kg		08/13/24 09:43	08/13/24 13:36	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.178</b>		0.00402		mg/Kg		08/13/24 09:43	08/13/24 13:36	1
<b>o-Xylene</b>	<b>0.269</b>		0.00201		mg/Kg		08/13/24 09:43	08/13/24 13:36	1
<b>Xylenes, Total</b>	<b>0.447</b>		0.00402		mg/Kg		08/13/24 09:43	08/13/24 13:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				08/13/24 09:43	08/13/24 13:36	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 52**  
 Date Collected: 08/07/24 10:50  
 Date Received: 08/07/24 13:49  
 Sample Depth: 4'

**Lab Sample ID: 890-6989-12**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	08/13/24 09:43	08/13/24 13:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.449		0.00402		mg/Kg			08/13/24 13:36	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			08/13/24 21:03	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		08/12/24 08:30	08/13/24 21:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/12/24 08:30	08/13/24 21:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/12/24 08:30	08/13/24 21:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	08/12/24 08:30	08/13/24 21:03	1
o-Terphenyl	130		70 - 130	08/12/24 08:30	08/13/24 21:03	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			08/09/24 21:08	1

**Client Sample ID: CS 53****Lab Sample ID: 890-6989-13**

Matrix: Solid

Date Collected: 08/07/24 11:00

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/13/24 09:43	08/13/24 13:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/13/24 09:43	08/13/24 13:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/13/24 09:43	08/13/24 13:57	1
m-Xylene & p-Xylene	0.00513		0.00398		mg/Kg		08/13/24 09:43	08/13/24 13:57	1
o-Xylene	0.00393		0.00199		mg/Kg		08/13/24 09:43	08/13/24 13:57	1
Xylenes, Total	0.00906		0.00398		mg/Kg		08/13/24 09:43	08/13/24 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	08/13/24 09:43	08/13/24 13:57	1
1,4-Difluorobenzene (Surr)	103		70 - 130	08/13/24 09:43	08/13/24 13:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00906		0.00398		mg/Kg			08/13/24 13:57	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			08/12/24 20:18	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 53****Lab Sample ID: 890-6989-13**

Matrix: Solid

Date Collected: 08/07/24 11:00

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/07/24 16:39	08/12/24 20:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 20:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 20:18	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	169	S1+	70 - 130				08/07/24 16:39	08/12/24 20:18	1
o-Terphenyl	186	S1+	70 - 130				08/07/24 16:39	08/12/24 20:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			08/09/24 21:14	1

**Client Sample ID: CS 54****Lab Sample ID: 890-6989-14**

Matrix: Solid

Date Collected: 08/07/24 11:10

Date Received: 08/07/24 13:49

Sample Depth: 4'

**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		08/08/24 14:25	08/12/24 18:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 18:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/08/24 14:25	08/12/24 18:42	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 18:42	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		08/08/24 14:25	08/12/24 18:42	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		08/08/24 14:25	08/12/24 18:42	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				08/08/24 14:25	08/12/24 18:42	1
1,4-Difluorobenzene (Surr)	107		70 - 130				08/08/24 14:25	08/12/24 18:42	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			08/12/24 18:42	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			08/12/24 20:33	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		08/07/24 16:39	08/12/24 20:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 20:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/07/24 16:39	08/12/24 20:33	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				08/07/24 16:39	08/12/24 20:33	1
o-Terphenyl	121		70 - 130				08/07/24 16:39	08/12/24 20:33	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6989-1  
SDG: Lea County, NM

**Client Sample ID: CS 54**

Date Collected: 08/07/24 11:10  
Date Received: 08/07/24 13:49  
Sample Depth: 4'

**Lab Sample ID: 890-6989-14**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			08/09/24 21:20	1

**Client Sample ID: CS 55**

Date Collected: 08/07/24 11:20  
Date Received: 08/07/24 13:49  
Sample Depth: 4'

**Lab Sample ID: 890-6989-15**

Matrix: Solid

**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				1
Toluene	<0.00200	U	0.00200		mg/Kg				1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg				1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg				1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg				1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg				1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	103		70 - 130				08/08/24 14:25	08/12/24 19:03	1
1,4-Difluorobenzene (Surr)	99		70 - 130				08/08/24 14:25	08/12/24 19:03	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			08/12/24 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/12/24 20:49	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		08/07/24 16:39	08/12/24 20:49	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/07/24 16:39	08/12/24 20:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/07/24 16:39	08/12/24 20:49	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane	99		70 - 130				08/07/24 16:39	08/12/24 20:49	1
<i>o</i> -Terphenyl	110		70 - 130				08/07/24 16:39	08/12/24 20:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.05	U	5.05		mg/Kg			08/09/24 21:26	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-6989-1	CS 41	80	101
890-6989-1 MS	CS 41	96	107
890-6989-1 MSD	CS 41	103	100
890-6989-2	CS 42	105	119
890-6989-3	CS 43	110	114
890-6989-4	CS 44	101	109
890-6989-5	CS 45	109	111
890-6989-6	CS46	105	110
890-6989-7	CS 47	119	109
890-6989-8	CS 48	106	109
890-6989-9	CS 49	112	116
890-6989-10	CS 50	108	110
890-6989-11	CS 51	117	98
890-6989-12	CS 52	113	104
890-6989-13	CS 53	122	103
890-6989-14	CS 54	104	107
890-6989-15	CS 55	103	99
LCS 880-87924/1-A	Lab Control Sample	108	107
LCS 880-87925/1-A	Lab Control Sample	104	98
LCSD 880-87924/2-A	Lab Control Sample Dup	97	103
LCSD 880-87925/2-A	Lab Control Sample Dup	103	98
MB 880-87924/5-A	Method Blank	183 S1+	146 S1+
MB 880-87925/5-A	Method Blank	108	91

**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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-6989-1	CS 41	148 S1+	165 S1+
890-6989-2	CS 42	134 S1+	147 S1+
890-6989-3	CS 43	159 S1+	172 S1+
890-6989-4	CS 44	142 S1+	160 S1+
890-6989-5	CS 45	125	131 S1+
890-6989-6	CS46	139 S1+	152 S1+
890-6989-7	CS 47	88	97
890-6989-7 MS	CS 47	91	92
890-6989-7 MSD	CS 47	97	96
890-6989-8	CS 48	81	90
890-6989-9	CS 49	82	89
890-6989-10	CS 50	86	96
890-6989-11	CS 51	99	109
890-6989-12	CS 52	126	130
890-6989-13	CS 53	169 S1+	186 S1+
890-6989-14	CS 54	112	121

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		1CO1 (70-130)	OTPH1 (70-130)	
890-6989-15	CS 55	99	110	
LCS 880-87800/2-A	Lab Control Sample	117	117	
LCS 880-87801/2-A	Lab Control Sample	86	83	
LCS 880-88142/2-A	Lab Control Sample	111	126	
LCSD 880-87800/3-A	Lab Control Sample Dup	111	111	
LCSD 880-87801/3-A	Lab Control Sample Dup	86	83	
LCSD 880-88142/3-A	Lab Control Sample Dup	108	120	
MB 880-87800/1-A	Method Blank	83	85	
MB 880-87801/1-A	Method Blank	74	89	
MB 880-88142/1-A	Method Blank	120	110	

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

1

2

3

4

5

6

7

8

9

10

11

12

13

14

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Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

**Lab Sample ID: MB 880-87924/5-A**

**Matrix: Solid**

**Analysis Batch: 88135**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 87924**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/24 14:25	08/12/24 12:15	1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier					Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130	08/08/24 14:25	08/12/24 12:15	1			
1,4-Difluorobenzene (Surr)	146	S1+	70 - 130	08/08/24 14:25	08/12/24 12:15	1			

**Lab Sample ID: LCS 880-87924/1-A**

**Matrix: Solid**

**Analysis Batch: 88135**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 87924**

Analyte	Spike		Unit	D	%Rec	
	Added	Result			%Rec	Limits
Benzene	0.100	0.1261	mg/Kg		126	70 - 130
Toluene	0.100	0.1133	mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.1148	mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2666 *+	mg/Kg		133	70 - 130
o-Xylene	0.100	0.1496 *+	mg/Kg		150	70 - 130
Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		70 - 130	08/08/24 14:25	08/12/24 12:15	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/08/24 14:25	08/12/24 12:15	1

**Lab Sample ID: LCSD 880-87924/2-A**

**Matrix: Solid**

**Analysis Batch: 88135**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 87924**

Analyte	Spike		Unit	D	%Rec		RPD	Limit
	Added	Result			%Rec	Limits		
Benzene	0.100	0.1117	mg/Kg		112	70 - 130	12	35
Toluene	0.100	0.1084	mg/Kg		108	70 - 130	4	35
Ethylbenzene	0.100	0.09931	mg/Kg		99	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.2185	mg/Kg		109	70 - 130	20	35
o-Xylene	0.100	0.1240	mg/Kg		124	70 - 130	19	35
Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	97		70 - 130	08/08/24 14:25	08/12/24 12:15	1		
1,4-Difluorobenzene (Surr)	103		70 - 130	08/08/24 14:25	08/12/24 12:15	1		

**Lab Sample ID: 890-6989-1 MS**

**Matrix: Solid**

**Analysis Batch: 88135**

**Client Sample ID: CS 41**

**Prep Type: Total/NA**

**Prep Batch: 87924**

Analyte	Sample		Spike	MS Result	MS Qualifier	Unit	D	%Rec	
	Result	Qualifier						%Rec	Limits
Benzene	<0.00202	U	0.100	0.1059		mg/Kg		106	70 - 130
Toluene	<0.00202	U	0.100	0.09855		mg/Kg		99	70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Lab Sample ID: 890-6989-1 MS

Matrix: Solid

Analysis Batch: 88135

Client Sample ID: CS 41  
 Prep Type: Total/NA  
 Prep Batch: 87924

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Ethylbenzene	<0.00202	U	0.100	0.07130		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1967		mg/Kg		98	70 - 130
o-Xylene	<0.00202	U *+	0.100	0.1174		mg/Kg		117	70 - 130

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	96		70 - 130		
1,4-Difluorobenzene (Surr)	107		70 - 130		

Lab Sample ID: 890-6989-1 MSD

Matrix: Solid

Analysis Batch: 88135

Client Sample ID: CS 41  
 Prep Type: Total/NA  
 Prep Batch: 87924

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				RPD
Benzene	<0.00202	U	0.100	0.1044		mg/Kg		104	70 - 130
Toluene	<0.00202	U	0.100	0.09262		mg/Kg		93	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.07098		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1695		mg/Kg		85	70 - 130
o-Xylene	<0.00202	U *+	0.100	0.1075		mg/Kg		107	70 - 130

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	103		70 - 130		
1,4-Difluorobenzene (Surr)	100		70 - 130		

Lab Sample ID: MB 880-87925/5-A

Matrix: Solid

Analysis Batch: 88255

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 87925

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 11:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 11:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 11:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/24 14:29	08/13/24 11:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/24 14:29	08/13/24 11:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/24 14:29	08/13/24 11:32	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	108		70 - 130			08/08/24 14:29	08/13/24 11:32	1
1,4-Difluorobenzene (Surr)	91		70 - 130			08/08/24 14:29	08/13/24 11:32	1

Lab Sample ID: LCS 880-87925/1-A

Matrix: Solid

Analysis Batch: 88255

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 87925

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Benzene	0.100	0.09107		mg/Kg		91	70 - 130
Toluene	0.100	0.08216		mg/Kg		82	70 - 130
Ethylbenzene	0.100	0.08486		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1795		mg/Kg		90	70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Lab Sample ID: LCS 880-87925/1-A

Matrix: Solid

Analysis Batch: 88255

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87925

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD	Limit
o-Xylene	0.100	0.09017		mg/Kg		90	70 - 130	
Surrogate	%Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	104		70 - 130					
1,4-Difluorobenzene (Surr)	98		70 - 130					

Lab Sample ID: LCSD 880-87925/2-A

Matrix: Solid

Analysis Batch: 88255

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87925

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
Benzene	0.100	0.1005		mg/Kg		100	70 - 130	10
Toluene	0.100	0.08988		mg/Kg		90	70 - 130	9
Ethylbenzene	0.100	0.09251		mg/Kg		93	70 - 130	9
m-Xylene & p-Xylene	0.200	0.1955		mg/Kg		98	70 - 130	9
o-Xylene	0.100	0.09780		mg/Kg		98	70 - 130	8
Surrogate	%Recovery	LCSD Qualifier	Limits					
4-Bromofluorobenzene (Surr)	103		70 - 130					
1,4-Difluorobenzene (Surr)	98		70 - 130					

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

Lab Sample ID: MB 880-87800/1-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87800

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		08/07/24 16:36	08/08/24 19:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 19:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:36	08/08/24 19:12	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				08/07/24 16:36	08/08/24 19:12	1
o-Terphenyl	85		70 - 130				08/07/24 16:36	08/08/24 19:12	1

Lab Sample ID: LCS 880-87800/2-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	968.2		mg/Kg		97	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	975.4		mg/Kg		98	70 - 130	

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Lab Sample ID: LCS 880-87800/2-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87800

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
<i>o</i> -Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-87800/3-A

Matrix: Solid

Analysis Batch: 87812

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87800

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	943.1		mg/Kg	94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	976.0		mg/Kg	98	70 - 130

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	111		70 - 130
<i>o</i> -Terphenyl	111		70 - 130

Lab Sample ID: MB 880-87801/1-A

Matrix: Solid

Analysis Batch: 88174

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87801

Analyte	MB	MB		MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL		mg/Kg				
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 12:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 12:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/07/24 16:39	08/12/24 12:30	1

Surrogate	MB	MB		Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Limits			
1-Chlorooctane	74		70 - 130		08/07/24 16:39	08/12/24 12:30
<i>o</i> -Terphenyl	89		70 - 130		08/07/24 16:39	08/12/24 12:30

Lab Sample ID: LCS 880-87801/2-A

Matrix: Solid

Analysis Batch: 88174

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87801

Analyte	Spike	LCS	LCS		%Rec	
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	782.6		mg/Kg	78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	789.5		mg/Kg	79	70 - 130

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	86		70 - 130
<i>o</i> -Terphenyl	83		70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

**Lab Sample ID: LCSD 880-87801/3-A** Client Sample ID: Lab Control Sample Dup  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 88174** Prep Batch: 87801

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	788.9		mg/Kg		79	70 - 130	1 20
Diesel Range Organics (Over C10-C28)	1000	779.3		mg/Kg		78	70 - 130	1 20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	83		70 - 130

**Lab Sample ID: 890-6989-7 MS** Client Sample ID: CS 47  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 88174** Prep Batch: 87801

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	783.3		mg/Kg		78	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	998	792.9		mg/Kg		79	70 - 130	

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	92		70 - 130

**Lab Sample ID: 890-6989-7 MSD** Client Sample ID: CS 47  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 88174** Prep Batch: 87801

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	833.3		mg/Kg		83	70 - 130	6 20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	858.7		mg/Kg		86	70 - 130	8 20

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	96		70 - 130

**Lab Sample ID: MB 880-88142/1-A** Client Sample ID: Method Blank  
**Matrix: Solid** Prep Type: Total/NA  
**Analysis Batch: 88292** Prep Batch: 88142

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		08/12/24 08:30	08/13/24 09:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/12/24 08:30	08/13/24 09:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/12/24 08:30	08/13/24 09:44	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

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

Lab Sample ID: MB 880-88142/1-A

Matrix: Solid

Analysis Batch: 88292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 88142

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane			120		70 - 130	08/12/24 08:30	08/13/24 09:44	1
o-Terphenyl			110		70 - 130	08/12/24 08:30	08/13/24 09:44	1

Lab Sample ID: LCS 880-88142/2-A

Matrix: Solid

Analysis Batch: 88292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 88142

Analyte	Spike	LCS	LCS	%Rec				
Surrogate	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1138		mg/Kg		114	70 - 130	
Surrogate	%Recovery	LCS	LCS					
1-Chlorooctane	111		70 - 130					
o-Terphenyl	126		70 - 130					

Lab Sample ID: LCSD 880-88142/3-A

Matrix: Solid

Analysis Batch: 88292

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 88142

Analyte	Spike	LCSD	LCSD	%Rec					
Surrogate	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1072		mg/Kg		107	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1097		mg/Kg		110	70 - 130	4	20
Surrogate	%Recovery	LCSD	LCSD						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	120		70 - 130						

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-87862/1-A

Matrix: Solid

Analysis Batch: 87936

Client Sample ID: Method Blank

Prep Type: Soluble

Analyst	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			<5.00	U	5.00		mg/Kg		08/09/24 10:15		1

Lab Sample ID: LCS 880-87862/2-A

Matrix: Solid

Analysis Batch: 87936

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyst	Spike	LCS	LCS	%Rec				
Surrogate	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	254.4		mg/Kg		102	90 - 110	

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: LCSD 880-87862/3-A** Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87936**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD
Chloride	250	254.5		mg/Kg	102	Limits 90 - 110	0
							20

**Lab Sample ID: MB 880-87872/1-A** Client Sample ID: Method Blank  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87957**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/09/24 18:37	1

**Lab Sample ID: LCS 880-87872/2-A** Client Sample ID: Lab Control Sample  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87957**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec
Chloride	250	251.0		mg/Kg	100	Limits 90 - 110

**Lab Sample ID: LCSD 880-87872/3-A** Client Sample ID: Lab Control Sample Dup  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87957**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec
Chloride	250	251.4		mg/Kg	101	Limits 90 - 110

**Lab Sample ID: 890-6989-8 MS** Client Sample ID: CS 48  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87957**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec
Chloride	44.3	F1	253	244.9	F1	mg/Kg	79	Limits 90 - 110

**Lab Sample ID: 890-6989-8 MSD** Client Sample ID: CS 48  
Prep Type: Soluble  
**Matrix: Solid**  
**Analysis Batch: 87957**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec
Chloride	44.3	F1	253	244.5	F1	mg/Kg	79	Limits 90 - 110

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**GC VOA****Prep Batch: 87924**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	5035	1
890-6989-2	CS 42	Total/NA	Solid	5035	2
890-6989-3	CS 43	Total/NA	Solid	5035	3
890-6989-4	CS 44	Total/NA	Solid	5035	4
890-6989-5	CS 45	Total/NA	Solid	5035	5
890-6989-6	CS46	Total/NA	Solid	5035	6
890-6989-7	CS 47	Total/NA	Solid	5035	7
890-6989-8	CS 48	Total/NA	Solid	5035	8
890-6989-9	CS 49	Total/NA	Solid	5035	9
890-6989-10	CS 50	Total/NA	Solid	5035	10
890-6989-11	CS 51	Total/NA	Solid	5035	11
890-6989-14	CS 54	Total/NA	Solid	5035	12
890-6989-15	CS 55	Total/NA	Solid	5035	13
MB 880-87924/5-A	Method Blank	Total/NA	Solid	5035	14
LCS 880-87924/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87924/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6989-1 MS	CS 41	Total/NA	Solid	5035	
890-6989-1 MSD	CS 41	Total/NA	Solid	5035	

**Prep Batch: 87925**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-12	CS 52	Total/NA	Solid	5035	1
890-6989-13	CS 53	Total/NA	Solid	5035	2
MB 880-87925/5-A	Method Blank	Total/NA	Solid	5035	3
LCS 880-87925/1-A	Lab Control Sample	Total/NA	Solid	5035	4
LCSD 880-87925/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	5

**Analysis Batch: 88135**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	8021B	1
890-6989-2	CS 42	Total/NA	Solid	8021B	2
890-6989-3	CS 43	Total/NA	Solid	8021B	3
890-6989-4	CS 44	Total/NA	Solid	8021B	4
890-6989-5	CS 45	Total/NA	Solid	8021B	5
890-6989-6	CS46	Total/NA	Solid	8021B	6
890-6989-7	CS 47	Total/NA	Solid	8021B	7
890-6989-8	CS 48	Total/NA	Solid	8021B	8
890-6989-9	CS 49	Total/NA	Solid	8021B	9
890-6989-10	CS 50	Total/NA	Solid	8021B	10
890-6989-11	CS 51	Total/NA	Solid	8021B	11
890-6989-14	CS 54	Total/NA	Solid	8021B	12
890-6989-15	CS 55	Total/NA	Solid	8021B	13
MB 880-87924/5-A	Method Blank	Total/NA	Solid	8021B	14
LCS 880-87924/1-A	Lab Control Sample	Total/NA	Solid	8021B	
LCSD 880-87924/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	
890-6989-1 MS	CS 41	Total/NA	Solid	8021B	
890-6989-1 MSD	CS 41	Total/NA	Solid	8021B	

**Analysis Batch: 88238**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	Total BTEX	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**GC VOA (Continued)****Analysis Batch: 88238 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-2	CS 42	Total/NA	Solid	Total BTEX	
890-6989-3	CS 43	Total/NA	Solid	Total BTEX	
890-6989-4	CS 44	Total/NA	Solid	Total BTEX	
890-6989-5	CS 45	Total/NA	Solid	Total BTEX	
890-6989-6	CS46	Total/NA	Solid	Total BTEX	
890-6989-7	CS 47	Total/NA	Solid	Total BTEX	
890-6989-8	CS 48	Total/NA	Solid	Total BTEX	
890-6989-9	CS 49	Total/NA	Solid	Total BTEX	
890-6989-10	CS 50	Total/NA	Solid	Total BTEX	
890-6989-11	CS 51	Total/NA	Solid	Total BTEX	
890-6989-12	CS 52	Total/NA	Solid	Total BTEX	
890-6989-13	CS 53	Total/NA	Solid	Total BTEX	
890-6989-14	CS 54	Total/NA	Solid	Total BTEX	
890-6989-15	CS 55	Total/NA	Solid	Total BTEX	

**Analysis Batch: 88255**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-12	CS 52	Total/NA	Solid	8021B	87925
890-6989-13	CS 53	Total/NA	Solid	8021B	87925
MB 880-87925/5-A	Method Blank	Total/NA	Solid	8021B	87925
LCS 880-87925/1-A	Lab Control Sample	Total/NA	Solid	8021B	87925
LCSD 880-87925/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87925

**GC Semi VOA****Prep Batch: 87800**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	8015NM Prep	
890-6989-2	CS 42	Total/NA	Solid	8015NM Prep	
890-6989-3	CS 43	Total/NA	Solid	8015NM Prep	
890-6989-4	CS 44	Total/NA	Solid	8015NM Prep	
890-6989-5	CS 45	Total/NA	Solid	8015NM Prep	
890-6989-6	CS46	Total/NA	Solid	8015NM Prep	
MB 880-87800/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87800/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87800/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Prep Batch: 87801**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-7	CS 47	Total/NA	Solid	8015NM Prep	
890-6989-8	CS 48	Total/NA	Solid	8015NM Prep	
890-6989-9	CS 49	Total/NA	Solid	8015NM Prep	
890-6989-10	CS 50	Total/NA	Solid	8015NM Prep	
890-6989-11	CS 51	Total/NA	Solid	8015NM Prep	
890-6989-13	CS 53	Total/NA	Solid	8015NM Prep	
890-6989-14	CS 54	Total/NA	Solid	8015NM Prep	
890-6989-15	CS 55	Total/NA	Solid	8015NM Prep	
MB 880-87801/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87801/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87801/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6989-7 MS	CS 47	Total/NA	Solid	8015NM Prep	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**GC Semi VOA (Continued)****Prep Batch: 87801 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-7 MSD	CS 47	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 87812**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	8015B NM	87800
890-6989-2	CS 42	Total/NA	Solid	8015B NM	87800
890-6989-3	CS 43	Total/NA	Solid	8015B NM	87800
890-6989-4	CS 44	Total/NA	Solid	8015B NM	87800
890-6989-5	CS 45	Total/NA	Solid	8015B NM	87800
890-6989-6	CS46	Total/NA	Solid	8015B NM	87800
MB 880-87800/1-A	Method Blank	Total/NA	Solid	8015B NM	87800
LCS 880-87800/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87800
LCSD 880-87800/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87800

**Analysis Batch: 88126**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Total/NA	Solid	8015 NM	12
890-6989-2	CS 42	Total/NA	Solid	8015 NM	13
890-6989-3	CS 43	Total/NA	Solid	8015 NM	14
890-6989-4	CS 44	Total/NA	Solid	8015 NM	
890-6989-5	CS 45	Total/NA	Solid	8015 NM	
890-6989-6	CS46	Total/NA	Solid	8015 NM	
890-6989-7	CS 47	Total/NA	Solid	8015 NM	
890-6989-8	CS 48	Total/NA	Solid	8015 NM	
890-6989-9	CS 49	Total/NA	Solid	8015 NM	
890-6989-10	CS 50	Total/NA	Solid	8015 NM	
890-6989-11	CS 51	Total/NA	Solid	8015 NM	
890-6989-12	CS 52	Total/NA	Solid	8015 NM	
890-6989-13	CS 53	Total/NA	Solid	8015 NM	
890-6989-14	CS 54	Total/NA	Solid	8015 NM	
890-6989-15	CS 55	Total/NA	Solid	8015 NM	

**Prep Batch: 88142**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-12	CS 52	Total/NA	Solid	8015NM Prep	
MB 880-88142/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-88142/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-88142/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88174**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-7	CS 47	Total/NA	Solid	8015B NM	87801
890-6989-8	CS 48	Total/NA	Solid	8015B NM	87801
890-6989-9	CS 49	Total/NA	Solid	8015B NM	87801
890-6989-10	CS 50	Total/NA	Solid	8015B NM	87801
890-6989-11	CS 51	Total/NA	Solid	8015B NM	87801
890-6989-13	CS 53	Total/NA	Solid	8015B NM	87801
890-6989-14	CS 54	Total/NA	Solid	8015B NM	87801
890-6989-15	CS 55	Total/NA	Solid	8015B NM	87801
MB 880-87801/1-A	Method Blank	Total/NA	Solid	8015B NM	87801
LCS 880-87801/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87801

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**GC Semi VOA (Continued)****Analysis Batch: 88174 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-87801/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87801
890-6989-7 MS	CS 47	Total/NA	Solid	8015B NM	87801
890-6989-7 MSD	CS 47	Total/NA	Solid	8015B NM	87801

**Analysis Batch: 88292**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-12	CS 52	Total/NA	Solid	8015B NM	88142
MB 880-88142/1-A	Method Blank	Total/NA	Solid	8015B NM	88142
LCS 880-88142/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	88142
LCSD 880-88142/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	88142

**HPLC/IC****Leach Batch: 87862**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Soluble	Solid	DI Leach	
MB 880-87862/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87862/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87862/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

**Leach Batch: 87872**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-2	CS 42	Soluble	Solid	DI Leach	
890-6989-3	CS 43	Soluble	Solid	DI Leach	
890-6989-4	CS 44	Soluble	Solid	DI Leach	
890-6989-5	CS 45	Soluble	Solid	DI Leach	
890-6989-6	CS 46	Soluble	Solid	DI Leach	
890-6989-7	CS 47	Soluble	Solid	DI Leach	
890-6989-8	CS 48	Soluble	Solid	DI Leach	
890-6989-9	CS 49	Soluble	Solid	DI Leach	
890-6989-10	CS 50	Soluble	Solid	DI Leach	
890-6989-11	CS 51	Soluble	Solid	DI Leach	
890-6989-12	CS 52	Soluble	Solid	DI Leach	
890-6989-13	CS 53	Soluble	Solid	DI Leach	
890-6989-14	CS 54	Soluble	Solid	DI Leach	
890-6989-15	CS 55	Soluble	Solid	DI Leach	
MB 880-87872/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87872/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87872/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6989-8 MS	CS 48	Soluble	Solid	DI Leach	
890-6989-8 MSD	CS 48	Soluble	Solid	DI Leach	

**Analysis Batch: 87936**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-1	CS 41	Soluble	Solid	300.0	87862
MB 880-87862/1-A	Method Blank	Soluble	Solid	300.0	87862
LCS 880-87862/2-A	Lab Control Sample	Soluble	Solid	300.0	87862
LCSD 880-87862/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87862

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**HPLC/IC****Analysis Batch: 87957**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6989-2	CS 42	Soluble	Solid	300.0	87872
890-6989-3	CS 43	Soluble	Solid	300.0	87872
890-6989-4	CS 44	Soluble	Solid	300.0	87872
890-6989-5	CS 45	Soluble	Solid	300.0	87872
890-6989-6	CS46	Soluble	Solid	300.0	87872
890-6989-7	CS 47	Soluble	Solid	300.0	87872
890-6989-8	CS 48	Soluble	Solid	300.0	87872
890-6989-9	CS 49	Soluble	Solid	300.0	87872
890-6989-10	CS 50	Soluble	Solid	300.0	87872
890-6989-11	CS 51	Soluble	Solid	300.0	87872
890-6989-12	CS 52	Soluble	Solid	300.0	87872
890-6989-13	CS 53	Soluble	Solid	300.0	87872
890-6989-14	CS 54	Soluble	Solid	300.0	87872
890-6989-15	CS 55	Soluble	Solid	300.0	87872
MB 880-87872/1-A	Method Blank	Soluble	Solid	300.0	87872
LCS 880-87872/2-A	Lab Control Sample	Soluble	Solid	300.0	87872
LCSD 880-87872/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87872
890-6989-8 MS	CS 48	Soluble	Solid	300.0	87872
890-6989-8 MSD	CS 48	Soluble	Solid	300.0	87872

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 41**

Date Collected: 08/07/24 09:00

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 12:44	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 12:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/09/24 02:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 02:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87862	08/08/24 10:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87936	08/09/24 16:48	CH	EET MID

**Client Sample ID: CS 42**

Date Collected: 08/07/24 09:10

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-2**

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			4.98 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 13:05	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 13:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/09/24 02:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 02:22	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 19:31	CH	EET MID

**Client Sample ID: CS 43**

Date Collected: 08/07/24 09:20

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-3**

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			5.01 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 13:25	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 13:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/09/24 02:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 02:43	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 19:50	CH	EET MID

**Client Sample ID: CS 44**

Date Collected: 08/07/24 09:30

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 13:46	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 13:46	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 44**

Date Collected: 08/07/24 09:30  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-4**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88126	08/09/24 03:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 03:03	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 19:56	CH	EET MID

**Client Sample ID: CS 45**

Date Collected: 08/07/24 09:40  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-5**

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	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 14:06	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 14:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/09/24 03:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 03:23	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:02	CH	EET MID

**Client Sample ID: CS46**

Date Collected: 08/07/24 09:50  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-6**

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	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 14:27	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 14:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/09/24 03:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87800	08/07/24 16:36	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87812	08/09/24 03:44	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:08	CH	EET MID

**Client Sample ID: CS 47**

Date Collected: 08/07/24 10:00  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-7**

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			4.98 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 14:48	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 14:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 18:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 18:11	TKC	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 47**

Date Collected: 08/07/24 10:00  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:14	CH	EET MID

**Client Sample ID: CS 48**

Date Collected: 08/07/24 10:10  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-8**  
**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			5.01 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 15:08	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 15:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 19:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 19:00	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:20	CH	EET MID

**Client Sample ID: CS 49**

Date Collected: 08/07/24 10:20  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-9**  
**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			5.00 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 15:29	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 15:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 19:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 19:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:38	CH	EET MID

**Client Sample ID: CS 50**

Date Collected: 08/07/24 10:30  
 Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-10**  
**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	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 15:49	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 15:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 19:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 19:31	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 20:44	CH	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 51**

Date Collected: 08/07/24 10:40

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-11**

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	87924	08/10/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 18:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 18:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 19:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 19:46	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 21:02	CH	EET MID

**Client Sample ID: CS 52**

Date Collected: 08/07/24 10:50

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-12**

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			4.98 g	5 mL	87925	08/13/24 09:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 13:36	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/13/24 13:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/13/24 21:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	88142	08/12/24 08:30	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88292	08/13/24 21:03	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 21:08	CH	EET MID

**Client Sample ID: CS 53**

Date Collected: 08/07/24 11:00

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-13**

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	87925	08/13/24 09:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88255	08/13/24 13:57	SM	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/13/24 13:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 20:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 20:18	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 21:14	CH	EET MID

**Client Sample ID: CS 54**

Date Collected: 08/07/24 11:10

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-14**

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	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 18:42	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 18:42	SM	EET MID

Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

**Client Sample ID: CS 54**

Date Collected: 08/07/24 11:10

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-14**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88126	08/12/24 20:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 20:33	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 21:20	CH	EET MID

**Client Sample ID: CS 55**

Date Collected: 08/07/24 11:20

Date Received: 08/07/24 13:49

**Lab Sample ID: 890-6989-15**

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			5.01 g	5 mL	87924	08/08/24 14:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88135	08/12/24 19:03	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88238	08/12/24 19:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			88126	08/12/24 20:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87801	08/07/24 16:39	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88174	08/12/24 20:49	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	87872	08/08/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87957	08/09/24 21:26	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 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

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

Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6989-1  
 SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6989-1	CS 41	Solid	08/07/24 09:00	08/07/24 13:49	4'
890-6989-2	CS 42	Solid	08/07/24 09:10	08/07/24 13:49	4'
890-6989-3	CS 43	Solid	08/07/24 09:20	08/07/24 13:49	4'
890-6989-4	CS 44	Solid	08/07/24 09:30	08/07/24 13:49	4'
890-6989-5	CS 45	Solid	08/07/24 09:40	08/07/24 13:49	1'
890-6989-6	CS46	Solid	08/07/24 09:50	08/07/24 13:49	4'
890-6989-7	CS 47	Solid	08/07/24 10:00	08/07/24 13:49	4'
890-6989-8	CS 48	Solid	08/07/24 10:10	08/07/24 13:49	4'
890-6989-9	CS 49	Solid	08/07/24 10:20	08/07/24 13:49	1'
890-6989-10	CS 50	Solid	08/07/24 10:30	08/07/24 13:49	2'
890-6989-11	CS 51	Solid	08/07/24 10:40	08/07/24 13:49	2'
890-6989-12	CS 52	Solid	08/07/24 10:50	08/07/24 13:49	4'
890-6989-13	CS 53	Solid	08/07/24 11:00	08/07/24 13:49	4'
890-6989-14	CS 54	Solid	08/07/24 11:10	08/07/24 13:49	4'
890-6989-15	CS 55	Solid	08/07/24 11:20	08/07/24 13:49	4'



**Environment Testing**  
**Xenco**

## Chain of Custody

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

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

www.xenco.com Page 1 of 2

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@earthsy.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:	The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										PRESERVATIVE CODES	
	Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush													None: NO
Project Location:	Lea County, NM		Due Date:	5 day 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:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>										H <sub>3</sub> PO <sub>4</sub> : HP	
Samples Received Intact:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Thermometer ID:		TAT starts the day received by the lab, if received by 4:30pm											NaHSO <sub>4</sub> : NABIS	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	Correction Factor:		-0.8										Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
Sample Custody Seals:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	Temperature Reading:		1.8										Zn Acetate+NaOH: Zn	
Total Containers:				Corrected Temperature:		1.6										NaOH+Ascorbic Acid: SAPC	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPh	Chloride	BTEX								Sample Comments
CS41	S	8/7/2024	9:00	4'	C	1	X	X	X								Incident Number
CS42	S	8/7/2024	9:10	4'	C	1	X	X	X								hAPP2327037534
CS43	S	8/7/2024	9:20	4'	C	1	X	X	X								
CS44	S	8/7/2024	9:30	4'	C	1	X	X	X								
CS45	S	8/7/2024	9:40	1'	C	1	X	X	X								
CS46	S	8/7/2024	9:50	4'	C	1	X	X	X								
CS47	S	8/7/2024	10:00	4'	C	1	X	X	X								
CS48	S	8/7/2024	10:10	4'	C	1	X	X	X								
CS49	S	8/7/2024	10:20	1'	C	1	X	X	X								

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 At 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 \$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
0 Eurofins	1 Bueno	8/7 1349	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

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

www.xenco.com Page 2 of 2

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@earthsyst.net

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

Project Name:	The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes	
	Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush													None: NO
Project Location:	Lea County, NM		Due Date:	5 day 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> S <sub>0</sub> <sub>4</sub> : H <sub>2</sub>	NaOH: Na
<b>SAMPLE RECEIPT</b>	Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>												H <sub>3</sub> PO <sub>4</sub> : HP	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		20100												NaHSO <sub>4</sub> : NABIS	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		-0.2												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:		10.8												Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:		10.6												NaOH+Ascorbic Acid: SAPC	
<b>Sample Identification</b>		Matrix	Date Sampled	Time Sampled	Depth	Comp	Grab/									<b>Sample Comments</b>	
CS50	S	8/7/2024	10:30	2'	C	1	X	X	X							<b>Incident Number</b>	
CS51	S	8/7/2024	10:40	2'	C	1	X	X	X							nAPP2327037534	
CS52	S	8/7/2024	10:50	4'	C	1	X	X	X								
CS53	S	8/7/2024	11:00	4'	C	1	X	X	X								
CS54	S	8/7/2024	11:10	4'	C	1	X	X	X								
CS55	S	8/7/2024	11:20	4'	C	1	X	X	X								

Total 200.7 / 6010 200.6 / 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
0 <i>Gilbert</i>	1 <i>Bueno</i>	8/7 1349	2 <i> </i>	3 <i> </i>	4 <i> </i>
3 <i> </i>	4 <i> </i>	5 <i> </i>	6 <i> </i>	7 <i> </i>	8 <i> </i>
5 <i> </i>	6 <i> </i>	7 <i> </i>	8 <i> </i>	9 <i> </i>	10 <i> </i>

Revised Date: 08/25/2020 Rev. 2020.2

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6989-1

**Login Number:** 6989

SDG Number: Lea County, NM

**List Number:** 1**List Source:** Eurofins Carlsbad**Creator:** Bruns, Shannon

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6989-1

SDG Number: Lea County, NM

**Login Number:** 6989**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/07/24 10:01 PM**Creator:** Laing, Edmundo

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.			1
Sample custody seals, if present, are intact.			2
The cooler or samples do not appear to have been compromised or tampered with.			3
Samples were received on ice.			4
Cooler Temperature is acceptable.			5
Cooler Temperature is recorded.			6
COC is present			7
COC is filled out in ink and legible.			8
COC is filled out with all pertinent information			9
Is the Field Sampler's name present on COC?			10
There are no discrepancies between the containers received and the COC.			11
Samples are received within Holding Time (excluding tests with immediate HTs)			12
Sample containers have legible labels.			13
Containers are not broken or leaking.			14
Sample collection date/times are provided.			
Appropriate sample containers are used.			
Sample bottles are completely filled.			
Sample Preservation Verified.			
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs			
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").			



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 8/14/2024 9:09:45 AM

## JOB DESCRIPTION

THE CONTEST CTB  
2288

## JOB NUMBER

890-6992-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

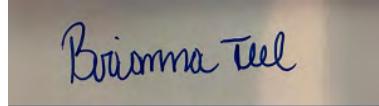
# Eurofins Carlsbad

## 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  
8/14/2024 9:09:45 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: THE CONTEST CTB

Laboratory Job ID: 890-6992-1  
SDG: 2288

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: THE CONTEST CTB

Job ID: 890-6992-1

**Job ID: 890-6992-1**

**Eurofins Carlsbad**

### Job Narrative 890-6992-1

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 8/8/2024 2:34 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 -0.8°C.

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: CS - 56 (890-6992-1), CS - 57 (890-6992-2), CS - 58 (890-6992-3), CS - 59 (890-6992-4) and CS - 60 (890-6992-5).

#### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-47036-A-1-C MS). Evidence of matrix interferences is not obvious.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-88066 and analytical batch 880-88136 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-88136 recovered above the upper control limit for m-Xylene & p-Xylene and o-Xylene. 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 880-88136/20).

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87976 and analytical batch 880-88013 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-87976/2-A). Evidence of matrix interferences is not obvious.

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

#### **HPLC/IC**

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

Eurofins Carlsbad

**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 56**  
 Date Collected: 08/08/24 10:40  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-1**  
 Matrix: Solid

**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		08/09/24 16:10	08/12/24 17:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 17:50	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:10	08/12/24 17:50	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		08/09/24 16:10	08/12/24 17:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 17:50	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		08/09/24 16:10	08/12/24 17:50	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		99		70 - 130			08/09/24 16:10	08/12/24 17:50	1
1,4-Difluorobenzene (Surr)		82		70 - 130			08/09/24 16:10	08/12/24 17:50	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			08/12/24 17:50	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			08/10/24 23:25	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	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/10/24 23:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/10/24 23:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/10/24 23:25	1
<b>Surrogate</b>									
1-Chlorooctane	86		70 - 130				08/09/24 09:21	08/10/24 23:25	1
<i>o</i> -Terphenyl	79		70 - 130				08/09/24 09:21	08/10/24 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.9		4.96		mg/Kg			08/13/24 19:37	1

**Client Sample ID: CS - 57**  
 Date Collected: 08/08/24 10:50  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-2**  
 Matrix: Solid

**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		08/09/24 16:10	08/12/24 18:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 18:11	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:10	08/12/24 18:11	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		08/09/24 16:10	08/12/24 18:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 18:11	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		08/09/24 16:10	08/12/24 18:11	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		102		70 - 130			08/09/24 16:10	08/12/24 18:11	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 57**  
 Date Collected: 08/08/24 10:50  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-2**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	08/09/24 16:10	08/12/24 18:11	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			08/12/24 18:11	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			08/11/24 00:39	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		08/09/24 09:21	08/11/24 00:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/11/24 00:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/11/24 00:39	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	08/09/24 09:21	08/11/24 00:39	1
o-Terphenyl	76		70 - 130	08/09/24 09:21	08/11/24 00:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.4		5.02		mg/Kg			08/13/24 19:55	1

**Client Sample ID: CS - 58****Lab Sample ID: 890-6992-3**

Matrix: Solid

Date Collected: 08/08/24 11:00

Date Received: 08/08/24 14:34

Sample Depth: 0.5'

**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		08/09/24 16:10	08/12/24 18:31	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:31	1
Ethylbenzene	<0.00202	U *+	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:31	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		08/09/24 16:10	08/12/24 18:31	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:31	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		08/09/24 16:10	08/12/24 18:31	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	08/09/24 16:10	08/12/24 18:31	1
1,4-Difluorobenzene (Surr)	84		70 - 130	08/09/24 16:10	08/12/24 18:31	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			08/12/24 18:31	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			08/11/24 00:53	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 58**  
 Date Collected: 08/08/24 11:00  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-3**  
 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		08/09/24 09:21	08/11/24 00:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/11/24 00:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/11/24 00:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				08/09/24 09:21	08/11/24 00:53	1
o-Terphenyl	72		70 - 130				08/09/24 09:21	08/11/24 00:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.6		5.01		mg/Kg			08/13/24 20:01	1

**Client Sample ID: CS - 59**  
 Date Collected: 08/08/24 11:10  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-4**  
 Matrix: Solid

**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		08/09/24 16:10	08/12/24 18:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:52	1
Ethylbenzene	<0.00202	U *+	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:52	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		08/09/24 16:10	08/12/24 18:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/09/24 16:10	08/12/24 18:52	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		08/09/24 16:10	08/12/24 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				08/09/24 16:10	08/12/24 18:52	1
1,4-Difluorobenzene (Surr)	79		70 - 130				08/09/24 16:10	08/12/24 18:52	1

**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			08/12/24 18:52	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			08/11/24 01:08	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	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				08/09/24 09:21	08/11/24 01:08	1
o-Terphenyl	73		70 - 130				08/09/24 09:21	08/11/24 01:08	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 59**  
 Date Collected: 08/08/24 11:10  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-4**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.1		5.04		mg/Kg			08/13/24 20:19	1

**Client Sample ID: CS - 60**  
 Date Collected: 08/08/24 11:20  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6992-5**  
 Matrix: Solid

**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		08/09/24 16:10	08/12/24 19:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:13	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:13	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		08/09/24 16:10	08/12/24 19:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:13	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		08/09/24 16:10	08/12/24 19:13	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				08/09/24 16:10	08/12/24 19:13	1
1,4-Difluorobenzene (Surr)	89		70 - 130				08/09/24 16:10	08/12/24 19:13	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			08/12/24 19:13	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			08/11/24 01:22	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		08/09/24 09:21	08/11/24 01:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:22	1
Surrogate	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				08/09/24 09:21	08/11/24 01:22	1
<i>o</i> -Terphenyl	73		70 - 130				08/09/24 09:21	08/11/24 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.9		5.00		mg/Kg			08/13/24 20:25	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-47036-A-1-C MS	Matrix Spike	135 S1+	98
880-47036-A-1-D MSD	Matrix Spike Duplicate	119	115
890-6992-1	CS - 56	99	82
890-6992-2	CS - 57	102	86
890-6992-3	CS - 58	109	84
890-6992-4	CS - 59	99	79
890-6992-5	CS - 60	107	89
LCS 880-88066/1-A	Lab Control Sample	113	94
LCSD 880-88066/2-A	Lab Control Sample Dup	120	97
MB 880-88066/5-A	Method Blank	82	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-6992-1	CS - 56	86	79
890-6992-1 MS	CS - 56	100	83
890-6992-1 MSD	CS - 56	109	90
890-6992-2	CS - 57	84	76
890-6992-3	CS - 58	78	72
890-6992-4	CS - 59	80	73
890-6992-5	CS - 60	81	73
LCS 880-87976/2-A	Lab Control Sample	137 S1+	115
LCSD 880-87976/3-A	Lab Control Sample Dup	119	98
MB 880-87976/1-A	Method Blank	170 S1+	161 S1+

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-88066/5-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	82		70 - 130		08/09/24 16:10	08/12/24 11:53	1				
1,4-Difluorobenzene (Surr)	95		70 - 130		08/09/24 16:10	08/12/24 11:53	1				

**Lab Sample ID: LCS 880-88066/1-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits		
	Added	Result	Qualifier								
Benzene	0.100	0.1018		mg/Kg	102	70 - 130					
Toluene	0.100	0.1077		mg/Kg	108	70 - 130					
Ethylbenzene	0.100	0.1330	*+	mg/Kg	133	70 - 130					
m-Xylene & p-Xylene	0.200	0.2620	*+	mg/Kg	131	70 - 130					
o-Xylene	0.100	0.1260		mg/Kg	126	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	113		70 - 130								
1,4-Difluorobenzene (Surr)	94		70 - 130								

**Lab Sample ID: LCSD 880-88066/2-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1016		mg/Kg	102	70 - 130		0			
Toluene	0.100	0.09871		mg/Kg	99	70 - 130		9			
Ethylbenzene	0.100	0.1328	*+	mg/Kg	133	70 - 130		0			
m-Xylene & p-Xylene	0.200	0.2685	*+	mg/Kg	134	70 - 130		2			
o-Xylene	0.100	0.1293		mg/Kg	129	70 - 130		3			
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	120		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								

**Lab Sample ID: 880-47036-A-1-C MS****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00202	U	0.100	0.08506		mg/Kg		85	70 - 130		
Toluene	<0.00202	U	0.100	0.08278		mg/Kg		83	70 - 130		

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

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

Lab Sample ID: 880-47036-A-1-C MS										Client Sample ID: Matrix Spike			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 880136										Prep Batch: 88066			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits				
Ethylbenzene	<0.00202	U *+	0.100	0.09831		mg/Kg		98	70 - 130				
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1808		mg/Kg		90	70 - 130				
o-Xylene	<0.00202	U	0.100	0.1125		mg/Kg		113	70 - 130				
Surrogate	MS %Recovery	MS Qualifier	MS Limits										
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130										
1,4-Difluorobenzene (Surr)	98		70 - 130										

**Lab Sample ID: 880-47036-A-1-D MSD**

Lab Sample ID: 880-47036-A-1-D MSD										Client Sample ID: Matrix Spike Duplicate			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 880136										Prep Batch: 88066			
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits				
Benzene	<0.00202	U	0.100	0.07497		mg/Kg		75	70 - 130				
Toluene	<0.00202	U	0.100	0.07829		mg/Kg		78	70 - 130				
Ethylbenzene	<0.00202	U *+	0.100	0.09372		mg/Kg		94	70 - 130				
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1732		mg/Kg		87	70 - 130				
o-Xylene	<0.00202	U	0.100	0.09427		mg/Kg		94	70 - 130				
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits										
4-Bromofluorobenzene (Surr)	119		70 - 130										
1,4-Difluorobenzene (Surr)	115		70 - 130										

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

Lab Sample ID: MB 880-87976/1-A										Client Sample ID: Method Blank			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 88013										Prep Batch: 87976			
Analyte	MB Result	MB Qualifier		RL	MDL	Unit	D	Prepared	Analyzed				
Gasoline Range Organics (GRO)-C6-C10	<50.0	U		50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24				1
Diesel Range Organics (Over C10-C28)	<50.0	U		50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24				1
Oil Range Organics (Over C28-C36)	<50.0	U		50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24				1
Surrogate	MB %Recovery	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac			
1-Chlorooctane	170	S1+	70 - 130					08/09/24 09:21	08/10/24 17:24				1
o-Terphenyl	161	S1+	70 - 130					08/09/24 09:21	08/10/24 17:24				1

**Lab Sample ID: LCS 880-87976/2-A**

Lab Sample ID: LCS 880-87976/2-A										Client Sample ID: Lab Control Sample			
Matrix: Solid										Prep Type: Total/NA			
Analysis Batch: 88013										Prep Batch: 87976			
Analyte			Spike Added		LCS Result	LCS Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10			1000		1091		mg/Kg		109	70 - 130			
Diesel Range Organics (Over C10-C28)			1000		1161		mg/Kg		116	70 - 130			

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

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

Lab Sample ID: LCS 880-87976/2-A

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87976

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
<i>o</i> -Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-87976/3-A

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87976

Analyte	Spike	LCSD	LCSD		%Rec	RPD
	Added	Result	Qualifier	Unit	D	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1019		mg/Kg	102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	986.7		mg/Kg	99	70 - 130

Surrogate	LCSD	LCSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
<i>o</i> -Terphenyl	98		70 - 130

Lab Sample ID: 890-6992-1 MS

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: CS - 56

Prep Type: Total/NA

Prep Batch: 87976

Analyte	Sample	Sample	Spike	MS			%Rec		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	933.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	837.1		mg/Kg		84	70 - 130

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
<i>o</i> -Terphenyl	83		70 - 130

Lab Sample ID: 890-6992-1 MSD

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: CS - 56

Prep Type: Total/NA

Prep Batch: 87976

Analyte	Sample	Sample	Spike	MSD			%Rec		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1024		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	874.2		mg/Kg		88	70 - 130

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
<i>o</i> -Terphenyl	90		70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-88107/1-A

Matrix: Solid

Analysis Batch: 88304

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			08/13/24 17:54	1

Lab Sample ID: LCS 880-88107/2-A

Matrix: Solid

Analysis Batch: 88304

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Chloride	250	253.2		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-88107/3-A

Matrix: Solid

Analysis Batch: 88304

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-6992-1 MS

Matrix: Solid

Analysis Batch: 88304

Client Sample ID: CS - 56  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Chloride	90.9		248	340.3		mg/Kg		101	90 - 110	

Lab Sample ID: 890-6992-1 MSD

Matrix: Solid

Analysis Batch: 88304

Client Sample ID: CS - 56  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	90.9		248	340.6		mg/Kg		101	90 - 110	0	20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**GC VOA****Prep Batch: 88066**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	5035	
890-6992-2	CS - 57	Total/NA	Solid	5035	
890-6992-3	CS - 58	Total/NA	Solid	5035	
890-6992-4	CS - 59	Total/NA	Solid	5035	
890-6992-5	CS - 60	Total/NA	Solid	5035	
MB 880-88066/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88066/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88066/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-47036-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-47036-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 88136**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	8021B	88066
890-6992-2	CS - 57	Total/NA	Solid	8021B	88066
890-6992-3	CS - 58	Total/NA	Solid	8021B	88066
890-6992-4	CS - 59	Total/NA	Solid	8021B	88066
890-6992-5	CS - 60	Total/NA	Solid	8021B	88066
MB 880-88066/5-A	Method Blank	Total/NA	Solid	8021B	88066
LCS 880-88066/1-A	Lab Control Sample	Total/NA	Solid	8021B	88066
LCSD 880-88066/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88066
880-47036-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	88066
880-47036-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	88066

**Analysis Batch: 88316**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	Total BTEX	
890-6992-2	CS - 57	Total/NA	Solid	Total BTEX	
890-6992-3	CS - 58	Total/NA	Solid	Total BTEX	
890-6992-4	CS - 59	Total/NA	Solid	Total BTEX	
890-6992-5	CS - 60	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87976**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	8015NM Prep	
890-6992-2	CS - 57	Total/NA	Solid	8015NM Prep	
890-6992-3	CS - 58	Total/NA	Solid	8015NM Prep	
890-6992-4	CS - 59	Total/NA	Solid	8015NM Prep	
890-6992-5	CS - 60	Total/NA	Solid	8015NM Prep	
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6992-1 MS	CS - 56	Total/NA	Solid	8015NM Prep	
890-6992-1 MSD	CS - 56	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88013**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	8015B NM	87976
890-6992-2	CS - 57	Total/NA	Solid	8015B NM	87976

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**GC Semi VOA (Continued)****Analysis Batch: 88013 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-3	CS - 58	Total/NA	Solid	8015B NM	87976
890-6992-4	CS - 59	Total/NA	Solid	8015B NM	87976
890-6992-5	CS - 60	Total/NA	Solid	8015B NM	87976
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015B NM	87976
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87976
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87976
890-6992-1 MS	CS - 56	Total/NA	Solid	8015B NM	87976
890-6992-1 MSD	CS - 56	Total/NA	Solid	8015B NM	87976

**Analysis Batch: 88192**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Total/NA	Solid	8015 NM	8015 NM
890-6992-2	CS - 57	Total/NA	Solid	8015 NM	8015 NM
890-6992-3	CS - 58	Total/NA	Solid	8015 NM	8015 NM
890-6992-4	CS - 59	Total/NA	Solid	8015 NM	8015 NM
890-6992-5	CS - 60	Total/NA	Solid	8015 NM	8015 NM

**HPLC/IC****Leach Batch: 88107**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Soluble	Solid	DI Leach	DI Leach
890-6992-2	CS - 57	Soluble	Solid	DI Leach	DI Leach
890-6992-3	CS - 58	Soluble	Solid	DI Leach	DI Leach
890-6992-4	CS - 59	Soluble	Solid	DI Leach	DI Leach
890-6992-5	CS - 60	Soluble	Solid	DI Leach	DI Leach
MB 880-88107/1-A	Method Blank	Soluble	Solid	DI Leach	DI Leach
LCS 880-88107/2-A	Lab Control Sample	Soluble	Solid	DI Leach	DI Leach
LCSD 880-88107/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	DI Leach
890-6992-1 MS	CS - 56	Soluble	Solid	DI Leach	DI Leach
890-6992-1 MSD	CS - 56	Soluble	Solid	DI Leach	DI Leach

**Analysis Batch: 88304**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6992-1	CS - 56	Soluble	Solid	300.0	88107
890-6992-2	CS - 57	Soluble	Solid	300.0	88107
890-6992-3	CS - 58	Soluble	Solid	300.0	88107
890-6992-4	CS - 59	Soluble	Solid	300.0	88107
890-6992-5	CS - 60	Soluble	Solid	300.0	88107
MB 880-88107/1-A	Method Blank	Soluble	Solid	300.0	88107
LCS 880-88107/2-A	Lab Control Sample	Soluble	Solid	300.0	88107
LCSD 880-88107/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88107
890-6992-1 MS	CS - 56	Soluble	Solid	300.0	88107
890-6992-1 MSD	CS - 56	Soluble	Solid	300.0	88107

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 56****Lab Sample ID: 890-6992-1**

Matrix: Solid

Date Collected: 08/08/24 10:40  
 Date Received: 08/08/24 14:34

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	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 17:50	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88316	08/12/24 17:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			88192	08/10/24 23:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/10/24 23:25	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 19:37	CH	EET MID

**Client Sample ID: CS - 57****Lab Sample ID: 890-6992-2**

Matrix: Solid

Date Collected: 08/08/24 10:50  
 Date Received: 08/08/24 14:34

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	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 18:11	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88316	08/12/24 18:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			88192	08/11/24 00:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 00:39	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 19:55	CH	EET MID

**Client Sample ID: CS - 58****Lab Sample ID: 890-6992-3**

Matrix: Solid

Date Collected: 08/08/24 11:00  
 Date Received: 08/08/24 14:34

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	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 18:31	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88316	08/12/24 18:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			88192	08/11/24 00:53	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 00:53	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 20:01	CH	EET MID

**Client Sample ID: CS - 59****Lab Sample ID: 890-6992-4**

Matrix: Solid

Date Collected: 08/08/24 11:10  
 Date Received: 08/08/24 14:34

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	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 18:52	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88316	08/12/24 18:52	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

**Client Sample ID: CS - 59****Lab Sample ID: 890-6992-4**

Matrix: Solid

Date Collected: 08/08/24 11:10  
 Date Received: 08/08/24 14:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88192	08/11/24 01:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 01:08	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 20:19	CH	EET MID

**Client Sample ID: CS - 60****Lab Sample ID: 890-6992-5**

Matrix: Solid

Date Collected: 08/08/24 11:20  
 Date Received: 08/08/24 14:34

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	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 19:13	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88316	08/12/24 19:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			88192	08/11/24 01:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 01:22	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 20:25	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

### **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

Eurofins Carlsbad

**Method Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6992-1  
 SDG: 2288

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6992-1	CS - 56	Solid	08/08/24 10:40	08/08/24 14:34	0.5'
890-6992-2	CS - 57	Solid	08/08/24 10:50	08/08/24 14:34	0.5'
890-6992-3	CS - 58	Solid	08/08/24 11:00	08/08/24 14:34	0.5'
890-6992-4	CS - 59	Solid	08/08/24 11:10	08/08/24 14:34	0.5'
890-6992-5	CS - 60	Solid	08/08/24 11:20	08/08/24 14:34	0.5'

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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) 509-33  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-129  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-319



800-0992 Chain of Custody

Page 1 of 1

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@earthsyst.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:	The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes							
	Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush												None: NO	DI Water: H <sub>2</sub> O						
Project Location:	Lea County, NM		Due Date:	5 day TAT	Parameters											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:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>												H <sub>3</sub> PO <sub>4</sub> : HP							
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Thermometer ID: TNM00												NaHSO <sub>4</sub> : NABIS							
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			Correction Factor: -0.2												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>							
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			Temperature Reading: -10												Zn Acetate+NaOH: Zn							
Total Containers:			Corrected Temperature: -8												NaOH+Ascorbic Acid: SAPC								
Sample Identification			Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	Chloride	BTEX											Sample Comments	
CS56			S	8/8/2024	10:40	0.5'	C	1	X	X	X											Incident Number	
CS57			S	8/8/2024	10:50	0.5'	C	1	X	X	X											hAPP2327037534	
CS58			S	8/8/2024	11:00	0.5'	C	1	X	X	X												
CS59			S	8/8/2024	11:10	0.5'	C	1	X	X	X												
CS60			S	8/8/2024	11:20	0.5'	C	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
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 \$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
0	<i>Gilbert</i>	8/8/1434 <sup>2</sup>			
3	<i>Sumit</i>		4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6992-1

SDG Number: 2288

**Login Number: 6992****List Source: Eurofins Carlsbad****List Number: 1****Creator: Bruns, Shannon**

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6992-1

SDG Number: 2288

**Login Number:** 6992**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/09/24 09:09 AM**Creator:** Vasquez, Julisa

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 8/14/2024 5:19:40 PM

## JOB DESCRIPTION

The Contest CTB  
Lea County New Mexico

## JOB NUMBER

890-6991-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

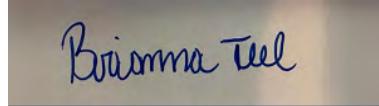
# Eurofins Carlsbad

## 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



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8/14/2024 5:19:40 PM

Authorized for release by  
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Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Laboratory Job ID: 890-6991-1  
SDG: Lea County New Mexico

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: The Contest CTB

Job ID: 890-6991-1

**Job ID: 890-6991-1**

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### Job Narrative 890-6991-1

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 8/8/2024 2:40 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 1.6°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (890-6991-1), H-1 (890-6991-2), H-1 (890-6991-3), H-2 (890-6991-4), H-2 (890-6991-5) and H-2 (890-6991-6).

### **GC VOA**

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

### **Diesel Range Organics**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87955 and analytical batch 880-88015 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: H-1 (890-6991-1), (LCS 880-87955/2-A) and (880-46967-A-1-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-87955 and analytical batch 880-88015 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD\_NM: The method blank for preparation batch 880-87955 and analytical batch 880-88015 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

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

### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-88094 and analytical batch 880-88145 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-1**

Date Collected: 08/08/24 08:30  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-1**

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		08/10/24 16:52	08/11/24 16:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 16:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 16:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 16:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 16:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				08/10/24 16:52	08/11/24 16:32	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/10/24 16:52	08/11/24 16:32	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			08/11/24 16:32	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			08/11/24 03:34	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		08/09/24 07:59	08/11/24 03:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 03:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 03:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				08/09/24 07:59	08/11/24 03:34	1
o-Terphenyl	131	S1+	70 - 130				08/09/24 07:59	08/11/24 03:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.0		4.98		mg/Kg			08/14/24 17:03	1

**Client Sample ID: H-1**

Date Collected: 08/08/24 08:40  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-2**

Matrix: Solid

**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		08/10/24 16:52	08/11/24 16:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 16:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 16:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/10/24 16:52	08/11/24 16:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 16:53	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/10/24 16:52	08/11/24 16:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				08/10/24 16:52	08/11/24 16:53	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/10/24 16:52	08/11/24 16:53	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6991-1  
SDG: Lea County New Mexico

**Client Sample ID: H-1****Lab Sample ID: 890-6991-2**

Matrix: Solid

Date Collected: 08/08/24 08:40  
Date Received: 08/08/24 14:40

**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			08/11/24 16:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/11/24 03:49	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		08/09/24 07:59	08/11/24 03:49	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/09/24 07:59	08/11/24 03:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/09/24 07:59	08/11/24 03:49	1

**Surrogate**

	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130			08/09/24 07:59	08/11/24 03:49	1
<i>o</i> -Terphenyl	95		70 - 130			08/09/24 07:59	08/11/24 03:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.1		5.00		mg/Kg			08/14/24 17:10	1

**Client Sample ID: H-1****Lab Sample ID: 890-6991-3**

Matrix: Solid

Date Collected: 08/08/24 08:50  
Date Received: 08/08/24 14:40

**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		08/10/24 16:52	08/11/24 17:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 17:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 17:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 17:13	1
<i>o</i> -Xylene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 17:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 17:13	1

**Surrogate**

	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			08/10/24 16:52	08/11/24 17:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130			08/10/24 16:52	08/11/24 17:13	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			08/11/24 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/11/24 04:03	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		08/09/24 07:59	08/11/24 04:03	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/09/24 07:59	08/11/24 04:03	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-1****Lab Sample ID: 890-6991-3**

Date Collected: 08/08/24 08:50  
 Date Received: 08/08/24 14:40

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)	<49.7	U	49.7		mg/Kg		08/09/24 07:59	08/11/24 04:03	1
<b>Surrogate</b>									
1-Chlorooctane	83		70 - 130				08/09/24 07:59	08/11/24 04:03	1
o-Terphenyl	96		70 - 130				08/09/24 07:59	08/11/24 04:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.6		4.99		mg/Kg			08/14/24 17:16	1

**Client Sample ID: H-2****Lab Sample ID: 890-6991-4**

Date Collected: 08/08/24 09:00  
 Date Received: 08/08/24 14:40

Matrix: Solid

**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		08/10/24 16:52	08/11/24 17:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/10/24 16:52	08/11/24 17:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/10/24 16:52	08/11/24 17:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/10/24 16:52	08/11/24 17:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/10/24 16:52	08/11/24 17:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/10/24 16:52	08/11/24 17:33	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	110		70 - 130				08/10/24 16:52	08/11/24 17:33	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/10/24 16:52	08/11/24 17:33	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			08/11/24 17:33	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			08/11/24 04:18	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		08/09/24 07:59	08/11/24 04:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 07:59	08/11/24 04:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/09/24 07:59	08/11/24 04:18	1
<b>Surrogate</b>									
1-Chlorooctane	82		70 - 130				08/09/24 07:59	08/11/24 04:18	1
o-Terphenyl	94		70 - 130				08/09/24 07:59	08/11/24 04:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		4.95		mg/Kg			08/14/24 17:22	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:10  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-5**

Matrix: Solid

**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		08/10/24 16:52	08/11/24 17:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 17:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 17:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/10/24 16:52	08/11/24 17:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/10/24 16:52	08/11/24 17:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/10/24 16:52	08/11/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				08/10/24 16:52	08/11/24 17:54	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/10/24 16:52	08/11/24 17:54	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			08/11/24 17:54	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			08/11/24 04:33	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		08/09/24 07:59	08/11/24 04:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 04:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 04:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				08/09/24 07:59	08/11/24 04:33	1
o-Terphenyl	102		70 - 130				08/09/24 07:59	08/11/24 04:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.1		4.95		mg/Kg			08/13/24 19:25	1

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:20  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-6**

Matrix: Solid

**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		08/10/24 16:52	08/11/24 18:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:14	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/10/24 16:52	08/11/24 18:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:14	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/10/24 16:52	08/11/24 18:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130				08/10/24 16:52	08/11/24 18:14	1
1,4-Difluorobenzene (Surr)	95		70 - 130				08/10/24 16:52	08/11/24 18:14	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-2****Lab Sample ID: 890-6991-6**

Matrix: Solid

Date Collected: 08/08/24 09:20  
 Date Received: 08/08/24 14:40

**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			08/11/24 18:14	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			08/11/24 04:47	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		08/09/24 07:59	08/11/24 04:47	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 04:47	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 07:59	08/11/24 04:47	1

**Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130	08/09/24 07:59	08/11/24 04:47	1
<i>o</i> -Terphenyl	93		70 - 130	08/09/24 07:59	08/11/24 04:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27.6		4.96		mg/Kg			08/13/24 19:31	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)													
890-6991-1	H-1	109	96													
890-6991-1 MS	H-1	96	101													
890-6991-1 MS	H-1	116	96													
890-6991-1 MSD	H-1	96	102													
890-6991-1 MSD	H-1	118	97													
890-6991-2	H-1	116	96													
890-6991-3	H-1	109	97													
890-6991-4	H-2	110	96													
890-6991-5	H-2	109	96													
890-6991-6	H-2	116	95													
LCS 880-88087/1-A	Lab Control Sample	101	102													
LCS 880-88311/1-A	Lab Control Sample	116	96													
LCSD 880-88087/2-A	Lab Control Sample Dup	93	104													
LCSD 880-88311/2-A	Lab Control Sample Dup	115	96													
MB 880-88086/5-A	Method Blank	102	90													
MB 880-88087/5-A	Method Blank	98	86													
MB 880-88200/5-A	Method Blank	113	96													
MB 880-88311/5-A	Method Blank	110	92													

**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)													
880-46967-A-1-E MS	Matrix Spike	123	123													
880-46967-A-1-F MSD	Matrix Spike Duplicate	279 S1+	265 S1+													
890-6991-1	H-1	115	131 S1+													
890-6991-2	H-1	82	95													
890-6991-3	H-1	83	96													
890-6991-4	H-2	82	94													
890-6991-5	H-2	89	102													
890-6991-6	H-2	81	93													
LCS 880-87955/2-A	Lab Control Sample	130	131 S1+													
LCSD 880-87955/3-A	Lab Control Sample Dup	108	107													
MB 880-87955/1-A	Method Blank	161 S1+	186 S1+													

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-88086/5-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88086**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	102		70 - 130		08/10/24 16:47	08/11/24 05:35	1				
1,4-Difluorobenzene (Surr)	90		70 - 130		08/10/24 16:47	08/11/24 05:35	1				

**Lab Sample ID: MB 880-88087/5-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	98		70 - 130		08/10/24 16:52	08/11/24 16:10	1				
1,4-Difluorobenzene (Surr)	86		70 - 130		08/10/24 16:52	08/11/24 16:10	1				

**Lab Sample ID: LCS 880-88087/1-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	Limits
Benzene	0.100	0.1046		mg/Kg	105	70 - 130				
Toluene	0.100	0.08811		mg/Kg	88	70 - 130				
Ethylbenzene	0.100	0.09244		mg/Kg	92	70 - 130				
m-Xylene & p-Xylene	0.200	0.1841		mg/Kg	92	70 - 130				
o-Xylene	0.100	0.09511		mg/Kg	95	70 - 130				
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	101		70 - 130							
1,4-Difluorobenzene (Surr)	102		70 - 130							

**Lab Sample ID: LCSD 880-88087/2-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	
	Added	Result	Qualifier						Limits	Limits
Benzene	0.100	0.1107		mg/Kg	111	70 - 130			6	35

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Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

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

**Lab Sample ID: LCSD 880-88087/2-A** **Client Sample ID: Lab Control Sample Dup**

**Matrix: Solid**

**Analysis Batch: 88081**

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
		Added	Result	Qualifier							
Toluene		0.100	0.09275		mg/Kg		93	70 - 130	5	35	
Ethylbenzene		0.100	0.09689		mg/Kg		97	70 - 130	5	35	
m-Xylene & p-Xylene		0.200	0.1929		mg/Kg		96	70 - 130	5	35	
o-Xylene		0.100	0.09953		mg/Kg		100	70 - 130	5	35	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

**Lab Sample ID: 890-6991-1 MS**

**Matrix: Solid**

**Analysis Batch: 88081**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00199	U	0.0998	0.09559		mg/Kg		96	70 - 130		
Toluene	<0.00199	U	0.0998	0.08098		mg/Kg		81	70 - 130		
Ethylbenzene	<0.00199	U	0.0998	0.08721		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1721		mg/Kg		86	70 - 130		
o-Xylene	<0.00199	U	0.0998	0.08983		mg/Kg		90	70 - 130		

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

**Lab Sample ID: 890-6991-1 MSD**

**Matrix: Solid**

**Analysis Batch: 88081**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00199	U	0.100	0.09315		mg/Kg		93	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.07734		mg/Kg		77	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.100	0.08398		mg/Kg		84	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1654		mg/Kg		83	70 - 130	4	35
o-Xylene	<0.00199	U	0.100	0.08665		mg/Kg		86	70 - 130	4	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

**Lab Sample ID: MB 880-88200/5-A**

**Matrix: Solid**

**Analysis Batch: 88256**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		08/12/24 14:42	08/13/24 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/12/24 14:42	08/13/24 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/12/24 14:42	08/13/24 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/12/24 14:42	08/13/24 11:28	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: MB 880-88200/5-A****Matrix: Solid****Analysis Batch: 88256****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88200**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
o-Xylene	<0.00200	U	0.00200		mg/Kg			08/12/24 14:42	08/13/24 11:28		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			08/12/24 14:42	08/13/24 11:28		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	113		70 - 130			08/12/24 14:42	08/13/24 11:28				1
1,4-Difluorobenzene (Surr)	96		70 - 130			08/12/24 14:42	08/13/24 11:28				1

**Lab Sample ID: MB 880-88311/5-A****Matrix: Solid****Analysis Batch: 88256****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88311**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
Toluene	<0.00200	U	0.00200		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
o-Xylene	<0.00200	U	0.00200		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			08/13/24 12:48	08/13/24 22:10		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	110		70 - 130			08/13/24 12:48	08/13/24 22:10				1
1,4-Difluorobenzene (Surr)	92		70 - 130			08/13/24 12:48	08/13/24 22:10				1

**Lab Sample ID: LCS 880-88311/1-A****Matrix: Solid****Analysis Batch: 88256****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88311**

Analyte	Spike	LCS	LCS	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifier								
Benzene	0.100	0.1134		0.100			mg/Kg		113	70 - 130	
Toluene	0.100	0.1159		0.100			mg/Kg		116	70 - 130	
Ethylbenzene	0.100	0.1152		0.100			mg/Kg		115	70 - 130	
m-Xylene & p-Xylene	0.200	0.2369		0.200			mg/Kg		118	70 - 130	
o-Xylene	0.100	0.1180		0.100			mg/Kg		118	70 - 130	
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	116		70 - 130			08/13/24 12:48	08/13/24 22:10				1
1,4-Difluorobenzene (Surr)	96		70 - 130			08/13/24 12:48	08/13/24 22:10				1

**Lab Sample ID: LCSD 880-88311/2-A****Matrix: Solid****Analysis Batch: 88256****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88311**

Analyte	Spike	LCSD	LCSD	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier									
Benzene	0.100	0.1077		0.100			mg/Kg		108	70 - 130	5	35
Toluene	0.100	0.1100		0.100			mg/Kg		110	70 - 130	5	35
Ethylbenzene	0.100	0.1096		0.100			mg/Kg		110	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2257		0.200			mg/Kg		113	70 - 130	5	35
o-Xylene	0.100	0.1127		0.100			mg/Kg		113	70 - 130	5	35

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

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

<b>Surrogate</b>	<b>LCSD</b>	<b>LCSD</b>	
	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

**Lab Sample ID: 890-6991-1 MS****Client Sample ID: H-1****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 88256****Prep Batch: 88311**

<b>Analyte</b>	<b>Sample</b>	<b>Sample</b>	<b>Spike</b>	<b>MS</b>	<b>MS</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>	<b>%Rec</b>
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>					
Benzene	<0.00199	U	0.0996	0.07683		mg/Kg	77	70 - 130		
Toluene	<0.00199	U	0.0996	0.08087		mg/Kg	81	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.08216		mg/Kg	82	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1700		mg/Kg	85	70 - 130		
o-Xylene	<0.00199	U	0.0996	0.08727		mg/Kg	88	70 - 130		

<b>Surrogate</b>	<b>MS</b>	<b>MS</b>	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

**Lab Sample ID: 890-6991-1 MSD****Client Sample ID: H-1****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 88256****Prep Batch: 88311**

<b>Analyte</b>	<b>Sample</b>	<b>Sample</b>	<b>Spike</b>	<b>MSD</b>	<b>MSD</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>Limits</b>	<b>RPD</b>	<b>Limit</b>
	<b>Result</b>	<b>Qualifier</b>	<b>Added</b>	<b>Result</b>	<b>Qualifier</b>						
Benzene	<0.00199	U	0.0994	0.1044		mg/Kg	105	70 - 130		30	35
Toluene	<0.00199	U	0.0994	0.1070		mg/Kg	108	70 - 130		28	35
Ethylbenzene	<0.00199	U	0.0994	0.1064		mg/Kg	107	70 - 130		26	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2175		mg/Kg	109	70 - 130		25	35
o-Xylene	<0.00199	U	0.0994	0.1082		mg/Kg	109	70 - 130		21	35

<b>Surrogate</b>	<b>MSD</b>	<b>MSD</b>	<b>Limits</b>
	<b>%Recovery</b>	<b>Qualifier</b>	
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-87955/1-A****Client Sample ID: Method Blank****Matrix: Solid****Prep Type: Total/NA****Analysis Batch: 88015****Prep Batch: 87955**

<b>Analyte</b>	<b>MB</b>	<b>MB</b>	<b>RL</b>	<b>MDL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>Result</b>	<b>Qualifier</b>							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/09/24 07:59	08/10/24 17:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 07:59	08/10/24 17:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/09/24 07:59	08/10/24 17:24	1

<b>Surrogate</b>	<b>MB</b>	<b>MB</b>	<b>Limits</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>%Recovery</b>	<b>Qualifier</b>				
1-Chlorooctane	161	S1+	70 - 130	08/09/24 07:59	08/10/24 17:24	1
o-Terphenyl	186	S1+	70 - 130	08/09/24 07:59	08/10/24 17:24	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: LCS 880-87955/2-A****Matrix: Solid****Analysis Batch: 88015****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 87955**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1067		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1223		mg/Kg		122	70 - 130
<b>Surrogate</b>							
<b>LCS %Recovery Qualifier Limits</b>							
1-Chlorooctane	130		70 - 130				
o-Terphenyl	131	S1+	70 - 130				

**Lab Sample ID: LCSD 880-87955/3-A****Matrix: Solid****Analysis Batch: 88015****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 87955**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	912.5		mg/Kg		91	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	1000	1022		mg/Kg		102	70 - 130	18	20
<b>Surrogate</b>									
<b>LCSD %Recovery Qualifier Limits</b>									
1-Chlorooctane	108		70 - 130						
o-Terphenyl	107		70 - 130						

**Lab Sample ID: 880-46967-A-1-E MS****Matrix: Solid****Analysis Batch: 88015****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 87955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2 F1	995	924.8		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F2 F1	995	999.6		mg/Kg		100	70 - 130
<b>Surrogate</b>									
<b>MS %Recovery Qualifier Limits</b>									
1-Chlorooctane	123		70 - 130						
o-Terphenyl	123		70 - 130						

**Lab Sample ID: 880-46967-A-1-F MSD****Matrix: Solid****Analysis Batch: 88015****Client Sample ID: Matrix Spike Duplicate****Prep Type: Total/NA****Prep Batch: 87955**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F2 F1	995	2108	F1 F2	mg/Kg		212	70 - 130	78 20
Diesel Range Organics (Over C10-C28)	<49.6	U F2 F1	995	2202	F1 F2	mg/Kg		221	70 - 130	75 20
<b>Surrogate</b>										
<b>MSD %Recovery Qualifier Limits</b>										
1-Chlorooctane	279	S1+	70 - 130							

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: 880-46967-A-1-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88015

Prep Batch: 87955

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
o-Terphenyl	265	S1+			70 - 130

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-88094/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88145

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride			<5.00	U		5.00	mg/Kg			08/14/24 14:20	1

Lab Sample ID: LCS 880-88094/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88145

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	%Rec	Limits
	Added					mg/Kg				
Chloride	250			251.5		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-88094/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88145

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	%Rec	RPD	Limit
	Added					mg/Kg				RPD	Limit
Chloride	250			251.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-47070-A-4-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88145

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			mg/Kg			Limits
Chloride	6920	F1	5040	13830	F1			mg/Kg		137	90 - 110

Lab Sample ID: 880-47070-A-4-C MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88145

Analyte	Sample	Sample	Spike	MSD	MSD	Result	Qualifier	Unit	D	%Rec	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier			mg/Kg			RPD	Limit	
Chloride	6920	F1	5040	13830	F1			mg/Kg		137	90 - 110	0	20

Lab Sample ID: MB 880-88107/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 88304

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
							mg/Kg				
Chloride			<5.00	U		5.00	mg/Kg			08/13/24 17:54	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Method: 300.0 - Anions, Ion Chromatography (Continued)****Lab Sample ID: LCS 880-88107/2-A****Matrix: Solid****Analysis Batch: 88304****Client Sample ID: Lab Control Sample**  
**Prep Type: Soluble**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
Chloride	250	253.2		mg/Kg	101	90 - 110		

**Lab Sample ID: LCSD 880-88107/3-A****Matrix: Solid****Analysis Batch: 88304****Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Soluble**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250	253.6		mg/Kg	101	90 - 110		0	20

**Lab Sample ID: 890-6992-A-1-G MS****Matrix: Solid****Analysis Batch: 88304****Client Sample ID: Matrix Spike**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
Chloride	90.9		248	340.3		mg/Kg	101	90 - 110		

**Lab Sample ID: 890-6992-A-1-H MSD****Matrix: Solid****Analysis Batch: 88304****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
Chloride	90.9		248	340.6		mg/Kg	101	90 - 110		0

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**GC VOA****Analysis Batch: 88081**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	8021B	88087
890-6991-2	H-1	Total/NA	Solid	8021B	88087
890-6991-3	H-1	Total/NA	Solid	8021B	88087
890-6991-4	H-2	Total/NA	Solid	8021B	88087
890-6991-5	H-2	Total/NA	Solid	8021B	88087
890-6991-6	H-2	Total/NA	Solid	8021B	88087
MB 880-88086/5-A	Method Blank	Total/NA	Solid	8021B	88086
MB 880-88087/5-A	Method Blank	Total/NA	Solid	8021B	88087
LCS 880-88087/1-A	Lab Control Sample	Total/NA	Solid	8021B	88087
LCSD 880-88087/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88087
890-6991-1 MS	H-1	Total/NA	Solid	8021B	88087
890-6991-1 MSD	H-1	Total/NA	Solid	8021B	88087

**Prep Batch: 88086**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88086/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 88087**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	5035	
890-6991-2	H-1	Total/NA	Solid	5035	
890-6991-3	H-1	Total/NA	Solid	5035	
890-6991-4	H-2	Total/NA	Solid	5035	
890-6991-5	H-2	Total/NA	Solid	5035	
890-6991-6	H-2	Total/NA	Solid	5035	
MB 880-88087/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88087/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88087/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6991-1 MS	H-1	Total/NA	Solid	5035	
890-6991-1 MSD	H-1	Total/NA	Solid	5035	

**Prep Batch: 88200**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88200/5-A	Method Blank	Total/NA	Solid	5035	

**Analysis Batch: 88236**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	Total BTEX	
890-6991-2	H-1	Total/NA	Solid	Total BTEX	
890-6991-3	H-1	Total/NA	Solid	Total BTEX	
890-6991-4	H-2	Total/NA	Solid	Total BTEX	
890-6991-5	H-2	Total/NA	Solid	Total BTEX	
890-6991-6	H-2	Total/NA	Solid	Total BTEX	

**Analysis Batch: 88256**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88200/5-A	Method Blank	Total/NA	Solid	8021B	88200
MB 880-88311/5-A	Method Blank	Total/NA	Solid	8021B	88311
LCS 880-88311/1-A	Lab Control Sample	Total/NA	Solid	8021B	88311
LCSD 880-88311/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88311
890-6991-1 MS	H-1	Total/NA	Solid	8021B	88311

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**GC VOA (Continued)****Analysis Batch: 88256 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1 MSD	H-1	Total/NA	Solid	8021B	88311

**Prep Batch: 88311**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88311/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88311/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88311/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6991-1 MS	H-1	Total/NA	Solid	5035	
890-6991-1 MSD	H-1	Total/NA	Solid	5035	

**GC Semi VOA****Prep Batch: 87955**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	8015NM Prep	
890-6991-2	H-1	Total/NA	Solid	8015NM Prep	
890-6991-3	H-1	Total/NA	Solid	8015NM Prep	
890-6991-4	H-2	Total/NA	Solid	8015NM Prep	
890-6991-5	H-2	Total/NA	Solid	8015NM Prep	
890-6991-6	H-2	Total/NA	Solid	8015NM Prep	
MB 880-87955/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87955/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87955/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-46967-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-46967-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88015**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	8015B NM	87955
890-6991-2	H-1	Total/NA	Solid	8015B NM	87955
890-6991-3	H-1	Total/NA	Solid	8015B NM	87955
890-6991-4	H-2	Total/NA	Solid	8015B NM	87955
890-6991-5	H-2	Total/NA	Solid	8015B NM	87955
890-6991-6	H-2	Total/NA	Solid	8015B NM	87955
MB 880-87955/1-A	Method Blank	Total/NA	Solid	8015B NM	87955
LCS 880-87955/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87955
LCSD 880-87955/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87955
880-46967-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	87955
880-46967-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	87955

**Analysis Batch: 88170**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Total/NA	Solid	8015 NM	
890-6991-2	H-1	Total/NA	Solid	8015 NM	
890-6991-3	H-1	Total/NA	Solid	8015 NM	
890-6991-4	H-2	Total/NA	Solid	8015 NM	
890-6991-5	H-2	Total/NA	Solid	8015 NM	
890-6991-6	H-2	Total/NA	Solid	8015 NM	

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**HPLC/IC****Leach Batch: 88094**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Soluble	Solid	DI Leach	
890-6991-2	H-1	Soluble	Solid	DI Leach	
890-6991-3	H-1	Soluble	Solid	DI Leach	
890-6991-4	H-2	Soluble	Solid	DI Leach	
MB 880-88094/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-88094/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-88094/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-47070-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-47070-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Leach Batch: 88107**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-5	H-2	Soluble	Solid	DI Leach	
890-6991-6	H-2	Soluble	Solid	DI Leach	
MB 880-88107/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-88107/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-88107/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6992-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-6992-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 88145**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-1	H-1	Soluble	Solid	300.0	88094
890-6991-2	H-1	Soluble	Solid	300.0	88094
890-6991-3	H-1	Soluble	Solid	300.0	88094
890-6991-4	H-2	Soluble	Solid	300.0	88094
MB 880-88094/1-A	Method Blank	Soluble	Solid	300.0	88094
LCS 880-88094/2-A	Lab Control Sample	Soluble	Solid	300.0	88094
LCSD 880-88094/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88094
880-47070-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	88094
880-47070-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88094

**Analysis Batch: 88304**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6991-5	H-2	Soluble	Solid	300.0	88107
890-6991-6	H-2	Soluble	Solid	300.0	88107
MB 880-88107/1-A	Method Blank	Soluble	Solid	300.0	88107
LCS 880-88107/2-A	Lab Control Sample	Soluble	Solid	300.0	88107
LCSD 880-88107/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88107
890-6992-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	88107
890-6992-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88107

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-1**

Date Collected: 08/08/24 08:30  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-1**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 16:32	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 16:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			88170	08/11/24 03:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 03:34	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 17:03	CH	EET MID

**Client Sample ID: H-1**

Date Collected: 08/08/24 08:40  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-2**  
 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	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 16:53	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 16:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			88170	08/11/24 03:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 03:49	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 17:10	CH	EET MID

**Client Sample ID: H-1**

Date Collected: 08/08/24 08:50  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-3**  
 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			5.03 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 17:13	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 17:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			88170	08/11/24 04:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 04:03	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 17:16	CH	EET MID

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:00  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-4**  
 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			4.98 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 17:33	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 17:33	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:00  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-4**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88170	08/11/24 04:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 04:18	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 17:22	CH	EET MID

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:10  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-5**  
**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	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 17:54	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			88170	08/11/24 04:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 04:33	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 19:25	CH	EET MID

**Client Sample ID: H-2**

Date Collected: 08/08/24 09:20  
 Date Received: 08/08/24 14:40

**Lab Sample ID: 890-6991-6**  
**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			5.01 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 18:14	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88236	08/11/24 18:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			88170	08/11/24 04:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87955	08/09/24 07:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88015	08/11/24 04:47	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88107	08/11/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 19:31	CH	EET MID

**Laboratory References:**

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

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## Accreditation/Certification Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1

SDG: Lea County New Mexico

### **Laboratory: Eurofins Midland**

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

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

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

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

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## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6991-1  
 SDG: Lea County New Mexico

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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6991-1  
SDG: Lea County New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6991-1	H-1	Solid	08/08/24 08:30	08/08/24 14:40
890-6991-2	H-1	Solid	08/08/24 08:40	08/08/24 14:40
890-6991-3	H-1	Solid	08/08/24 08:50	08/08/24 14:40
890-6991-4	H-2	Solid	08/08/24 09:00	08/08/24 14:40
890-6991-5	H-2	Solid	08/08/24 09:10	08/08/24 14:40
890-6991-6	H-2	Solid	08/08/24 09:20	08/08/24 14:40

## **Chain of Custody**

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

**Work Order No:**

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

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	

Work Order Comments											
<b>Program:</b>	UST/PST	<input type="checkbox"/>	PRP	<input type="checkbox"/>	Brownfields	<input type="checkbox"/>	RRC	<input type="checkbox"/>	Superfund	<input type="checkbox"/>	
<b>State of Project:</b>											
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:	The Contest CTB	Turn Around		Pres. Code	ANALYSIS REQUEST							PRESERVATIVE CODES			
Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush										None: NO	D/I Water: H <sub>2</sub> O	
Project Location:	Lea County, NM	Due Date:		5 day 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 type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Parameters	890-6991 Chain of Custody							H <sub>3</sub> PO <sub>4</sub> : HP	
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:		T1M002									NaHSO <sub>4</sub> : NABIS	
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		-0.8									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 type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:		-1.0									Zn Acetate+NaOH: Zn	
Total Containers:			Corrected Temperature:		-8									NaOH+Ascorbic Acid: SAPC	



000-6991 Chain of Custod

Total 200.7 / 6010 200.8 / 6020:  
circle Method(s) and Metal(s) to be analyzed

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

Hq: 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 <i>John Gray</i>	<i>John Gray</i>	8/8 1434 <sup>2</sup>			
3		4			
5		6			

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6991-1  
SDG Number: Lea County New Mexico**Login Number:** 6991**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6991-1  
SDG Number: Lea County New Mexico**Login Number:** 6991**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/09/24 09:09 AM**Creator:** Vasquez, Julisa

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 8/12/2024 5:43:38 PM

## JOB DESCRIPTION

The Contest CTB  
Lea County New Mexico

## JOB NUMBER

890-6993-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

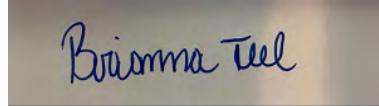
# Eurofins Carlsbad

## 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  
8/12/2024 5:43:38 PM

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: The Contest CTB

Laboratory Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
Project: The Contest CTB

Job ID: 890-6993-1

**Job ID: 890-6993-1****Eurofins Carlsbad**

### Job Narrative 890-6993-1

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 8/8/2024 2:49 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 1.6°C.

### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-3 (890-6993-1), HA-3 (890-6993-2), HA-4 (890-6993-3) and HA-4 (890-6993-4).

### GC VOA

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

### Diesel Range Organics

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87976 and analytical batch 880-88013 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-87976/2-A). Evidence of matrix interferences is not obvious.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-88093 and analytical batch 880-88146 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Carlsbad

**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA-3****Lab Sample ID: 890-6993-1**

Matrix: Solid

Date Collected: 08/08/24 09:30  
 Date Received: 08/08/24 14:49

**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		08/10/24 16:52	08/11/24 18:35	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/10/24 16:52	08/11/24 18:35	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/10/24 16:52	08/11/24 18:35	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/10/24 16:52	08/11/24 18:35	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/10/24 16:52	08/11/24 18:35	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/10/24 16:52	08/11/24 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				08/10/24 16:52	08/11/24 18:35	1
1,4-Difluorobenzene (Surr)	98		70 - 130				08/10/24 16:52	08/11/24 18:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			08/11/24 18:35	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			08/11/24 01:37	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		08/09/24 09:21	08/11/24 01:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/11/24 01:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/09/24 09:21	08/11/24 01:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				08/09/24 09:21	08/11/24 01:37	1
o-Terphenyl	85		70 - 130				08/09/24 09:21	08/11/24 01:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.4		25.3		mg/Kg			08/12/24 13:31	5

**Client Sample ID: HA-3****Lab Sample ID: 890-6993-2**

Matrix: Solid

Date Collected: 08/08/24 09:40  
 Date Received: 08/08/24 14:49

**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		08/10/24 16:52	08/11/24 18:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/10/24 16:52	08/11/24 18:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 18:55	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/10/24 16:52	08/11/24 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				08/10/24 16:52	08/11/24 18:55	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/10/24 16:52	08/11/24 18:55	1

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## Client Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA-3****Lab Sample ID: 890-6993-2**

Matrix: Solid

Date Collected: 08/08/24 09:40  
 Date Received: 08/08/24 14:49

**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			08/11/24 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	<49.8	U	49.8		mg/Kg			08/11/24 01:51	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		08/09/24 09:21	08/11/24 01:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 01:51	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	08/09/24 09:21	08/11/24 01:51	1
<i>o</i> -Terphenyl	71		70 - 130	08/09/24 09:21	08/11/24 01:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.1		5.04		mg/Kg			08/12/24 13:37	1

**Client Sample ID: HA-4****Lab Sample ID: 890-6993-3**

Matrix: Solid

Date Collected: 08/08/24 09:50  
 Date Received: 08/08/24 14:49

**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		08/10/24 16:52	08/11/24 19:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 19:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 19:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 19:16	1
<i>o</i> -Xylene	<0.00199	U	0.00199		mg/Kg		08/10/24 16:52	08/11/24 19:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/10/24 16:52	08/11/24 19:16	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	08/10/24 16:52	08/11/24 19:16	1
1,4-Difluorobenzene (Surr)	96		70 - 130	08/10/24 16:52	08/11/24 19:16	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			08/11/24 19:16	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			08/11/24 02:06	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		08/09/24 09:21	08/11/24 02:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/11/24 02:06	1

Eurofins Carlsbad

**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA-4****Lab Sample ID: 890-6993-3**

Matrix: Solid

Date Collected: 08/08/24 09:50  
 Date Received: 08/08/24 14:49

**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)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/11/24 02:06	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				08/09/24 09:21	08/11/24 02:06	1
o-Terphenyl	73		70 - 130				08/09/24 09:21	08/11/24 02:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.4		4.98		mg/Kg			08/12/24 13:43	1

**Client Sample ID: HA-4****Lab Sample ID: 890-6993-4**

Matrix: Solid

Date Collected: 08/08/24 10:00  
 Date Received: 08/08/24 14:49

**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		08/10/24 16:52	08/11/24 19:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 19:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 19:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/10/24 16:52	08/11/24 19:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/10/24 16:52	08/11/24 19:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/10/24 16:52	08/11/24 19:36	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				08/10/24 16:52	08/11/24 19:36	1
1,4-Difluorobenzene (Surr)	95		70 - 130				08/10/24 16:52	08/11/24 19:36	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			08/11/24 19:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/11/24 02:35	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		08/09/24 09:21	08/11/24 02:35	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/09/24 09:21	08/11/24 02:35	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/09/24 09:21	08/11/24 02:35	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/09/24 09:21	08/11/24 02:35	1
o-Terphenyl	78		70 - 130				08/09/24 09:21	08/11/24 02:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.1		4.97		mg/Kg			08/12/24 13:49	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)								
890-6991-A-1-B MS	Matrix Spike	96	101								
890-6991-A-1-C MSD	Matrix Spike Duplicate	96	102								
890-6993-1	HA-3	111	98								
890-6993-2	HA-3	110	96								
890-6993-3	HA-4	114	96								
890-6993-4	HA-4	112	95								
LCS 880-88087/1-A	Lab Control Sample	101	102								
LCSD 880-88087/2-A	Lab Control Sample Dup	93	104								
MB 880-88086/5-A	Method Blank	102	90								
MB 880-88087/5-A	Method Blank	98	86								

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-6992-A-1-B MS	Matrix Spike	100	83								
890-6992-A-1-C MSD	Matrix Spike Duplicate	109	90								
890-6993-1	HA-3	93	85								
890-6993-2	HA-3	79	71								
890-6993-3	HA-4	81	73								
890-6993-4	HA-4	88	78								
LCS 880-87976/2-A	Lab Control Sample	137 S1+	115								
LCSD 880-87976/3-A	Lab Control Sample Dup	119	98								
MB 880-87976/1-A	Method Blank	170 S1+	161 S1+								

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-88086/5-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88086**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/10/24 16:47	08/11/24 05:35	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	102		70 - 130		08/10/24 16:47	08/11/24 05:35	1				
1,4-Difluorobenzene (Surr)	90		70 - 130		08/10/24 16:47	08/11/24 05:35	1				

**Lab Sample ID: MB 880-88087/5-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/10/24 16:52	08/11/24 16:10	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	98		70 - 130		08/10/24 16:52	08/11/24 16:10	1				
1,4-Difluorobenzene (Surr)	86		70 - 130		08/10/24 16:52	08/11/24 16:10	1				

**Lab Sample ID: LCS 880-88087/1-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	Spike	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits		
	Added	Result	Qualifier								
Benzene	0.100	0.1046		mg/Kg	105	70 - 130					
Toluene	0.100	0.08811		mg/Kg	88	70 - 130					
Ethylbenzene	0.100	0.09244		mg/Kg	92	70 - 130					
m-Xylene & p-Xylene	0.200	0.1841		mg/Kg	92	70 - 130					
o-Xylene	0.100	0.09511		mg/Kg	95	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	101		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

**Lab Sample ID: LCSD 880-88087/2-A****Matrix: Solid****Analysis Batch: 88081****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88087**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1107		mg/Kg	111	70 - 130	6	35			

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Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: LCSD 880-88087/2-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 88081				Prep Batch: 88087							
Analyte		Spike		LCSD	LCSD			%Rec		RPD	
		Added		Result	Qualifier	Unit	D	Limits	RPD	Limit	
Toluene		0.100		0.09275		mg/Kg		93	70 - 130	5	35
Ethylbenzene		0.100		0.09689		mg/Kg		97	70 - 130	5	35
m-Xylene & p-Xylene		0.200		0.1929		mg/Kg		96	70 - 130	5	35
o-Xylene		0.100		0.09953		mg/Kg		100	70 - 130	5	35
Surrogate		LCSD	LCSD								
		%Recovery	Qualifier			Limits					
4-Bromofluorobenzene (Surr)		93				70 - 130					
1,4-Difluorobenzene (Surr)		104				70 - 130					

### Lab Sample ID: 890-6991-A-1-B MS

Lab Sample ID: 890-6991-A-1-B MS				Client Sample ID: Matrix Spike						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 88081				Prep Batch: 88087						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD
Benzene	<0.00199	U	0.0998	0.09559		mg/Kg		96	70 - 130	
Toluene	<0.00199	U	0.0998	0.08098		mg/Kg		81	70 - 130	
Ethylbenzene	<0.00199	U	0.0998	0.08721		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1721		mg/Kg		86	70 - 130	
o-Xylene	<0.00199	U	0.0998	0.08983		mg/Kg		90	70 - 130	
Surrogate	MS %Recovery	MS Qualifier	MS Limits							
4-Bromofluorobenzene (Surr)	96		70 - 130							
1,4-Difluorobenzene (Surr)	101		70 - 130							

### Lab Sample ID: 890-6991-A-1-C MSD

Lab Sample ID: 890-6991-A-1-C MSD				Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 88081				Prep Batch: 88087							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	
Benzene	<0.00199	U	0.100	0.09315		mg/Kg		93	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.07734		mg/Kg		77	70 - 130	5	35
Ethylbenzene	<0.00199	U	0.100	0.08398		mg/Kg		84	70 - 130	4	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1654		mg/Kg		83	70 - 130	4	35
o-Xylene	<0.00199	U	0.100	0.08665		mg/Kg		86	70 - 130	4	35
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	96		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

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

Lab Sample ID: MB 880-87976/1-A				Client Sample ID: Method Blank						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 88013				Prep Batch: 87976						
Analyte	MB Result	MB Qualifier	MB RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24		1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: MB 880-87976/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88013

Prep Batch: 87976

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier								
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24	1	
<b>Surrogate</b>										
	MB		MB		Limits		Prepared		Dil Fac	
1-Chlorooctane	%Recovery	Qualifier	170	S1+	70 - 130		08/09/24 09:21	08/10/24 17:24	1	
<i>o-Terphenyl</i>	161	S1+			70 - 130		08/09/24 09:21	08/10/24 17:24	1	

Lab Sample ID: LCS 880-87976/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88013

Prep Batch: 87976

Analyte	Spike		LCS	LCS	Unit	D	%Rec	
	Added	Result	Qualifier	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	1000	1091		mg/Kg		109	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1161		mg/Kg		116	70 - 130	
<b>Surrogate</b>								
	LCS		LCS		Limits			
1-Chlorooctane	%Recovery	Qualifier	137	S1+	70 - 130			
<i>o-Terphenyl</i>	115				70 - 130			

Lab Sample ID: LCSD 880-87976/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88013

Prep Batch: 87976

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec		RPD
	Added	Result	Qualifier	%Rec	Limits				Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1019		mg/Kg		102	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	986.7		mg/Kg		99	70 - 130	16	20
<b>Surrogate</b>									
	LCSD		LCSD		Limits				
1-Chlorooctane	%Recovery	Qualifier	119	70 - 130					
<i>o-Terphenyl</i>	98			70 - 130					

Lab Sample ID: 890-6992-A-1-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88013

Prep Batch: 87976

Analyte	Sample		Spike	MS	MS	Unit	D	%Rec	
	Result	Qualifier	Added	Result	Qualifier	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	933.4		94	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	997	837.1		84	70 - 130		
<b>Surrogate</b>									
	MS		MS		Limits				
1-Chlorooctane	%Recovery	Qualifier	100	70 - 130					
<i>o-Terphenyl</i>	83			70 - 130					

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: 890-6992-A-1-C MSD							Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid							Prep Type: Total/NA					
Analysis Batch: 88013							Prep Batch: 87976					
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1024		mg/Kg		103	70 - 130	9		20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	874.2		mg/Kg		88	70 - 130	4		20
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits									
1-Chlorooctane	109		70 - 130									
o-Terphenyl	90		70 - 130									

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-88093/1-A							Client Sample ID: Method Blank					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 88146												
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	<5.00	U		5.00	mg/Kg			08/12/24 11:00				1

Lab Sample ID: LCS 880-88093/2-A							Client Sample ID: Lab Control Sample					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 88146												
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits					
Chloride	250	252.7		mg/Kg		101	90 - 110					

Lab Sample ID: LCSD 880-88093/3-A							Client Sample ID: Lab Control Sample Dup					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 88146												
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit		
Chloride	250	253.2		mg/Kg		101	90 - 110	0				20

Lab Sample ID: 880-47096-A-1-C MS							Client Sample ID: Matrix Spike					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 88146												
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Chloride	23.4		253	278.5		mg/Kg		101	90 - 110	0		20

Lab Sample ID: 880-47096-A-1-D MSD							Client Sample ID: Matrix Spike Duplicate					
Matrix: Solid							Prep Type: Soluble					
Analysis Batch: 88146												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD	Limit
Chloride	23.4		253	278.6		mg/Kg		101	90 - 110	0		20

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: 880-47104-A-1-B MS**

**Matrix: Solid**

**Analysis Batch: 88146**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier						
Chloride	21800	F1	12500	38780	F1	mg/Kg	136	90 - 110			

**Lab Sample ID: 880-47104-A-1-C MSD**

**Matrix: Solid**

**Analysis Batch: 88146**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier						
Chloride	21800	F1	12500	38870	F1	mg/Kg	136	90 - 110		0	20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**GC VOA****Analysis Batch: 88081**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	8021B	88087
890-6993-2	HA-3	Total/NA	Solid	8021B	88087
890-6993-3	HA-4	Total/NA	Solid	8021B	88087
890-6993-4	HA-4	Total/NA	Solid	8021B	88087
MB 880-88086/5-A	Method Blank	Total/NA	Solid	8021B	88086
MB 880-88087/5-A	Method Blank	Total/NA	Solid	8021B	88087
LCS 880-88087/1-A	Lab Control Sample	Total/NA	Solid	8021B	88087
LCSD 880-88087/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88087
890-6991-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	88087
890-6991-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	88087

**Prep Batch: 88086**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88086/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 88087**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	5035	
890-6993-2	HA-3	Total/NA	Solid	5035	
890-6993-3	HA-4	Total/NA	Solid	5035	
890-6993-4	HA-4	Total/NA	Solid	5035	
MB 880-88087/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88087/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88087/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6991-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-6991-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 88237**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	Total BTEX	
890-6993-2	HA-3	Total/NA	Solid	Total BTEX	
890-6993-3	HA-4	Total/NA	Solid	Total BTEX	
890-6993-4	HA-4	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87976**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	8015NM Prep	
890-6993-2	HA-3	Total/NA	Solid	8015NM Prep	
890-6993-3	HA-4	Total/NA	Solid	8015NM Prep	
890-6993-4	HA-4	Total/NA	Solid	8015NM Prep	
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6992-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6992-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88013**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	8015B NM	87976

Eurofins Carlsbad

**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**GC Semi VOA (Continued)****Analysis Batch: 88013 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-2	HA-3	Total/NA	Solid	8015B NM	87976
890-6993-3	HA-4	Total/NA	Solid	8015B NM	87976
890-6993-4	HA-4	Total/NA	Solid	8015B NM	87976
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015B NM	87976
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87976
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87976
890-6992-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	87976
890-6992-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	87976

**Analysis Batch: 88193**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Total/NA	Solid	8015 NM	8015 NM
890-6993-2	HA-3	Total/NA	Solid	8015 NM	8015 NM
890-6993-3	HA-4	Total/NA	Solid	8015 NM	8015 NM
890-6993-4	HA-4	Total/NA	Solid	8015 NM	8015 NM

**HPLC/IC****Leach Batch: 88093**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Soluble	Solid	DI Leach	DI Leach
890-6993-2	HA-3	Soluble	Solid	DI Leach	DI Leach
890-6993-3	HA-4	Soluble	Solid	DI Leach	DI Leach
890-6993-4	HA-4	Soluble	Solid	DI Leach	DI Leach
MB 880-88093/1-A	Method Blank	Soluble	Solid	DI Leach	DI Leach
LCS 880-88093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	DI Leach
LCSD 880-88093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	DI Leach
880-47096-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	DI Leach
880-47096-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	DI Leach
880-47104-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	DI Leach
880-47104-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	DI Leach

**Analysis Batch: 88146**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6993-1	HA-3	Soluble	Solid	300.0	88093
890-6993-2	HA-3	Soluble	Solid	300.0	88093
890-6993-3	HA-4	Soluble	Solid	300.0	88093
890-6993-4	HA-4	Soluble	Solid	300.0	88093
MB 880-88093/1-A	Method Blank	Soluble	Solid	300.0	88093
LCS 880-88093/2-A	Lab Control Sample	Soluble	Solid	300.0	88093
LCSD 880-88093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88093
880-47096-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	88093
880-47096-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88093
880-47104-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	88093
880-47104-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88093

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA-3**

Date Collected: 08/08/24 09:30

Date Received: 08/08/24 14:49

**Lab Sample ID: 890-6993-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 18:35	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88237	08/11/24 18:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			88193	08/11/24 01:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 01:37	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	88146	08/12/24 13:31	CH	EET MID

**Client Sample ID: HA-3**

Date Collected: 08/08/24 09:40

Date Received: 08/08/24 14:49

**Lab Sample ID: 890-6993-2**

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			4.99 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 18:55	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88237	08/11/24 18:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			88193	08/11/24 01:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 01:51	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88146	08/12/24 13:37	CH	EET MID

**Client Sample ID: HA-4**

Date Collected: 08/08/24 09:50

Date Received: 08/08/24 14:49

**Lab Sample ID: 890-6993-3**

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			5.03 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 19:16	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88237	08/11/24 19:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			88193	08/11/24 02:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 02:06	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88146	08/12/24 13:43	CH	EET MID

**Client Sample ID: HA-4**

Date Collected: 08/08/24 10:00

Date Received: 08/08/24 14:49

**Lab Sample ID: 890-6993-4**

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			5.00 g	5 mL	88087	08/10/24 16:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88081	08/11/24 19:36	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88237	08/11/24 19:36	SM	EET MID

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**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA-4****Lab Sample ID: 890-6993-4**

Date Collected: 08/08/24 10:00

Matrix: Solid

Date Received: 08/08/24 14:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			88193	08/11/24 02:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 02:35	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88146	08/12/24 13:49	CH	EET MID

**Laboratory References:**

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

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**Accreditation/Certification Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6993-1  
SDG: Lea County New Mexico

**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

1  
2  
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Eurofins Carlsbad

## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: The Contest CTB

Job ID: 890-6993-1  
 SDG: Lea County New Mexico

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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
Project/Site: The Contest CTB

Job ID: 890-6993-1  
SDG: Lea County New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6993-1	HA-3	Solid	08/08/24 09:30	08/08/24 14:49
890-6993-2	HA-3	Solid	08/08/24 09:40	08/08/24 14:49
890-6993-3	HA-4	Solid	08/08/24 09:50	08/08/24 14:49
890-6993-4	HA-4	Solid	08/08/24 10:00	08/08/24 14:49



Environment Testing  
Xenco

## Chain of Custody

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

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

[www.xenco.com](http://www.xenco.com) Page 1 of 1

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@earthsyst.net

Work Order Comments	
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:		The Contest CTB		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes	
Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Due Date:	5 day TAT												None: NO	DI Water: H <sub>2</sub> O
Project Location:		Lea County, NM				Parameters										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:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											H <sub>3</sub> PO <sub>4</sub> : HP		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:		TMM002												NaHSO <sub>4</sub> : NABIS		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:		-0.2												Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:		-1.0C												Zn Acetate+NaOH: Zn		
Total Containers:		Corrected Temperature:		-0.8C												NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX							Sample Comments	
HA-3	S	8/8/2024	9:30	0.5'	C	1	X	X	X								Incident Number	
HA-3	S	8/8/2024	9:40	1'	C	1	X	X	X								nAPP2327037534	
HA-4	S	8/8/2024	9:50	0.5'	C	1	X	X	X									
HA-4	S	8/8/2024	10:00	1'	C	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  
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 \$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
0		8/8/14:34	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: 890-6993-1  
SDG Number: Lea County New Mexico**Login Number:** 6993**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Lopez, Abraham

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6993-1  
SDG Number: Lea County New Mexico**Login Number:** 6993**List Source:** Eurofins Midland  
**List Creation:** 08/09/24 09:09 AM**List Number:** 2**Creator:** Vasquez, Julisa

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 8/14/2024 5:19:36 PM

## JOB DESCRIPTION

THE CONTEST CTB  
Lea County New Mexico

## JOB NUMBER

890-6990-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

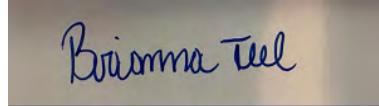
# Eurofins Carlsbad

## 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  
8/14/2024 5:19:36 PM

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: THE CONTEST CTB

Laboratory Job ID: 890-6990-1  
SDG: Lea County New Mexico

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high 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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: THE CONTEST CTB

Job ID: 890-6990-1

**Job ID: 890-6990-1**

**Eurofins Carlsbad**

### Job Narrative 890-6990-1

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 8/8/2024 2:34 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 -0.8°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 5 (890-6990-1), HA - 5 (890-6990-2) and HA - 5 (890-6990-3).

### **GC VOA**

Method 8021B: The continuing calibration blank (CCB) for analytical batch 880-88085 contained Ethylbenzene above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-88064 and 880-88065 and analytical batch 880-88085 was outside the upper control limits.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-88065 and analytical batch 880-88085 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

### **Diesel Range Organics**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87921 and analytical batch 880-88019 was outside the upper control limits.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-87921 and analytical batch 880-88019 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCSD 880-87921/3-A), (880-47007-A-46-D MS) and (880-47007-A-46-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The continuing calibration verification (CCV) associated with batch 880-88019 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-88094 and analytical batch 880-88145 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was

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**Case Narrative**

Client: Earth Systems Response and Restoration  
Project: THE CONTEST CTB

Job ID: 890-6990-1

**Job ID: 890-6990-1 (Continued)****Eurofins Carlsbad**

within acceptance limits.

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA - 5**  
 Date Collected: 08/08/24 10:10  
 Date Received: 08/08/24 14:34  
 Sample Depth: 0.5'

**Lab Sample ID: 890-6990-1**  
 Matrix: Solid

**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		08/09/24 16:06	08/11/24 12:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/09/24 16:06	08/11/24 12:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/09/24 16:06	08/11/24 12:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/09/24 16:06	08/11/24 12:01	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		08/09/24 16:06	08/11/24 12:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/09/24 16:06	08/11/24 12:01	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		116		70 - 130			08/09/24 16:06	08/11/24 12:01	1
1,4-Difluorobenzene (Surr)		119		70 - 130			08/09/24 16:06	08/11/24 12:01	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			08/11/24 12:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/09/24 21:57	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 *+ *1	49.7		mg/Kg		08/08/24 14:18	08/09/24 21:57	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+ *1	49.7		mg/Kg		08/08/24 14:18	08/09/24 21:57	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/08/24 14:18	08/09/24 21:57	1
<b>Surrogate</b>									<b>Dil Fac</b>
1-Chlorooctane		117	70 - 130				08/08/24 14:18	08/09/24 21:57	1
<i>o</i> -Terphenyl		121	70 - 130				08/08/24 14:18	08/09/24 21:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		5.00		mg/Kg			08/14/24 16:45	1

**Client Sample ID: HA - 5**  
 Date Collected: 08/08/24 10:20  
 Date Received: 08/08/24 14:34  
 Sample Depth: 1'

**Lab Sample ID: 890-6990-2**  
 Matrix: Solid

**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		08/09/24 16:06	08/11/24 12:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/09/24 16:06	08/11/24 12:22	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/09/24 16:06	08/11/24 12:22	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		108		70 - 130			08/09/24 16:06	08/11/24 12:22	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA - 5**  
 Date Collected: 08/08/24 10:20  
 Date Received: 08/08/24 14:34  
 Sample Depth: 1'

**Lab Sample ID: 890-6990-2**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130	08/09/24 16:06	08/11/24 12:22	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			08/11/24 12:22	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			08/09/24 22:14	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 *+ *1	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+ *1	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	08/08/24 14:18	08/09/24 22:14	1
o-Terphenyl	114		70 - 130	08/08/24 14:18	08/09/24 22:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		4.97		mg/Kg			08/14/24 16:51	1

**Client Sample ID: HA - 5****Lab Sample ID: 890-6990-3**

Matrix: Solid

Date Collected: 08/08/24 10:30

Date Received: 08/08/24 14:34

Sample Depth: 4'

**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		08/09/24 16:06	08/11/24 12:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/09/24 16:06	08/11/24 12:42	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:06	08/11/24 12:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/09/24 16:06	08/11/24 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	08/09/24 16:06	08/11/24 12:42	1
1,4-Difluorobenzene (Surr)	114		70 - 130	08/09/24 16:06	08/11/24 12:42	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			08/11/24 12:42	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			08/09/24 22:31	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA - 5**  
 Date Collected: 08/08/24 10:30  
 Date Received: 08/08/24 14:34  
 Sample Depth: 4'

**Lab Sample ID: 890-6990-3**  
 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	<49.8	U *+ *1	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+ *1	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/08/24 14:18	08/09/24 22:31	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	08/08/24 14:18	08/09/24 22:31	1
<i>o</i> -Terphenyl	121		70 - 130	08/08/24 14:18	08/09/24 22:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.8		4.95		mg/Kg		08/14/24 16:57		1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-47095-A-81-C MS	Matrix Spike	108	104
880-47095-A-81-D MSD	Matrix Spike Duplicate	108	106
890-6990-1	HA - 5	116	119
890-6990-2	HA - 5	108	112
890-6990-3	HA - 5	111	114
LCS 880-88065/1-A	Lab Control Sample	105	105
LCSD 880-88065/2-A	Lab Control Sample Dup	102	103
MB 880-88064/5-A	Method Blank	187 S1+	144 S1+
MB 880-88065/5-A	Method Blank	202 S1+	157 S1+

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)  
 DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-47007-A-46-D MS	Matrix Spike	125	141 S1+
880-47007-A-46-E MSD	Matrix Spike Duplicate	126	142 S1+
890-6990-1	HA - 5	117	121
890-6990-2	HA - 5	112	114
890-6990-3	HA - 5	119	121
LCS 880-87921/2-A	Lab Control Sample	170 S1+	196 S1+
LCSD 880-87921/3-A	Lab Control Sample Dup	119	133 S1+
MB 880-87921/1-A	Method Blank	267 S1+	277 S1+

**Surrogate Legend**

1CO = 1-Chlorooctane  
 OTPH = o-Terphenyl

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-88064/5-A****Matrix: Solid****Analysis Batch: 88085****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88064**

Analyte	MB		MB		MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL							
Benzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/09/24 16:04	08/10/24 18:20		1
Surrogate	MB		MB		%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery		Qualifier	Limits						
4-Bromofluorobenzene (Surr)	187	S1+		70 - 130				08/09/24 16:04	08/10/24 18:20	
1,4-Difluorobenzene (Surr)	144	S1+		70 - 130				08/09/24 16:04	08/10/24 18:20	

**Lab Sample ID: MB 880-88065/5-A****Matrix: Solid****Analysis Batch: 88085****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88065**

Analyte	MB		MB		MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL							
Benzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/09/24 16:06	08/11/24 05:58		1
Surrogate	MB		MB		%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery		Qualifier	Limits						
4-Bromofluorobenzene (Surr)	202	S1+		70 - 130				08/09/24 16:06	08/11/24 05:58	
1,4-Difluorobenzene (Surr)	157	S1+		70 - 130				08/09/24 16:06	08/11/24 05:58	

**Lab Sample ID: LCS 880-88065/1-A****Matrix: Solid****Analysis Batch: 88085****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88065**

Analyte	Spike		LCS		Unit	D	%Rec		RPD
	Added	Result	Result	Qualifier			%Rec	Limits	
Benzene	0.100	0.1215	mg/Kg	122	70 - 130				
Toluene	0.100	0.1167	mg/Kg	117	70 - 130				
Ethylbenzene	0.100	0.1027	mg/Kg	103	70 - 130				
m-Xylene & p-Xylene	0.200	0.2390	mg/Kg	119	70 - 130				
o-Xylene	0.100	0.1384 *+	mg/Kg	138	70 - 130				
Surrogate	LCS		LCS		Unit	D	%Rec		RPD
	%Recovery		Qualifier	Limits			%Rec	Limits	
4-Bromofluorobenzene (Surr)	105			70 - 130					
1,4-Difluorobenzene (Surr)	105			70 - 130					

**Lab Sample ID: LCSD 880-88065/2-A****Matrix: Solid****Analysis Batch: 88085****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88065**

Analyte	Spike		LCSD		Unit	D	%Rec		RPD
	Added	Result	Result	Qualifier			%Rec	Limits	
Benzene	0.100	0.09685	mg/Kg	97	70 - 130				

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

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

**Lab Sample ID: LCSD 880-88065/2-A**      **Client Sample ID: Lab Control Sample Dup**

**Matrix: Solid**

**Analysis Batch: 88085**

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
		Added	Result	Qualifier						
Toluene		0.100	0.09406		mg/Kg		94	70 - 130	21	35
Ethylbenzene		0.100	0.08732		mg/Kg		87	70 - 130	16	35
m-Xylene & p-Xylene		0.200	0.1926		mg/Kg		96	70 - 130	22	35
o-Xylene		0.100	0.1136		mg/Kg		114	70 - 130	20	35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

**Lab Sample ID: 880-47095-A-81-C MS**

**Matrix: Solid**

**Analysis Batch: 88085**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00202	U	0.100	0.08665		mg/Kg		87	70 - 130	
Toluene	<0.00202	U	0.100	0.08440		mg/Kg		84	70 - 130	
Ethylbenzene	<0.00202	U	0.100	0.07864		mg/Kg		79	70 - 130	
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1960		mg/Kg		98	70 - 130	
o-Xylene	<0.00202	U *+	0.100	0.1162		mg/Kg		116	70 - 130	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

**Lab Sample ID: 880-47095-A-81-D MSD**

**Matrix: Solid**

**Analysis Batch: 88085**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00202	U	0.100	0.09010		mg/Kg		90	70 - 130	4
Toluene	<0.00202	U	0.100	0.08388		mg/Kg		84	70 - 130	1
Ethylbenzene	<0.00202	U	0.100	0.07392		mg/Kg		74	70 - 130	6
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1866		mg/Kg		93	70 - 130	5
o-Xylene	<0.00202	U *+	0.100	0.1121		mg/Kg		112	70 - 130	4

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/08/24 14:18	08/09/24 09:21	1

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: MB 880-87921/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88019

Prep Batch: 87921

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/08/24 14:18	08/09/24 09:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/08/24 14:18	08/09/24 09:21	1
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	267	S1+	70 - 130				08/08/24 14:18	08/09/24 09:21	1
<i>o</i> -Terphenyl	277	S1+	70 - 130				08/08/24 14:18	08/09/24 09:21	1

Lab Sample ID: LCS 880-87921/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88019

Prep Batch: 87921

Analyte	Spike		LCS	LCS	Unit	D	%Rec	
	Added	Result	Qualifier	Limits	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1500	*+	mg/Kg	150	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1791	*+	mg/Kg	179	70 - 130		
<b>Surrogate</b>								
	%Recovery	Qualifier	Limits					
1-Chlorooctane	170	S1+	70 - 130					
<i>o</i> -Terphenyl	196	S1+	70 - 130					

Lab Sample ID: LCSD 880-87921/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88019

Prep Batch: 87921

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec		RPD
	Added	Result	Qualifier	Limits	%Rec	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	1000	1115	*1	mg/Kg	111	70 - 130	29	20	
Diesel Range Organics (Over C10-C28)	1000	1243	*1	mg/Kg	124	70 - 130	36	20	
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
<i>o</i> -Terphenyl	133	S1+	70 - 130						

Lab Sample ID: 880-47007-A-46-D MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 88019

Prep Batch: 87921

Analyte	Sample		Spike	MS	MS	Unit	D	%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *+ *1	992	1056		mg/Kg	106	70 - 130	
Diesel Range Organics (Over C10-C28)	92.6	*+ *1	992	1202		mg/Kg	112	70 - 130	
<b>Surrogate</b>									
	%Recovery	Qualifier	Limits						
1-Chlorooctane	125		70 - 130						
<i>o</i> -Terphenyl	141	S1+	70 - 130						

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

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

Lab Sample ID: 880-47007-A-46-E MSD

Matrix: Solid

Analysis Batch: 88019

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 87921

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *+ *1	992	1067		mg/Kg		108	70 - 130	1 20
Diesel Range Organics (Over C10-C28)	92.6	*+ *1	992	1206		mg/Kg		112	70 - 130	0 20
<b>Surrogate</b>										
<b>MSD MSD</b>										
<b>%Recovery Qualifier Limits</b>										
1-Chlorooctane	126			70 - 130						
<i>o</i> -Terphenyl	142	S1+		70 - 130						

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-88094/1-A

Matrix: Solid

Analysis Batch: 88145

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			08/14/24 14:20	1

Lab Sample ID: LCS 880-88094/2-A

Matrix: Solid

Analysis Batch: 88145

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	251.5		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-88094/3-A

Matrix: Solid

Analysis Batch: 88145

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Chloride	250	251.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-47070-A-4-B MS

Matrix: Solid

Analysis Batch: 88145

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	6920	F1	5040	13830	F1	mg/Kg		137	90 - 110

Lab Sample ID: 880-47070-A-4-C MSD

Matrix: Solid

Analysis Batch: 88145

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Chloride	6920	F1	5040	13830	F1	mg/Kg		137	90 - 110	0 20

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**GC VOA****Prep Batch: 88064**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-88064/5-A	Method Blank	Total/NA	Solid	5035	

**Prep Batch: 88065**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	5035	
890-6990-2	HA - 5	Total/NA	Solid	5035	
890-6990-3	HA - 5	Total/NA	Solid	5035	
MB 880-88065/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88065/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88065/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-47095-A-81-C MS	Matrix Spike	Total/NA	Solid	5035	
880-47095-A-81-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 88085**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	8021B	88065
890-6990-2	HA - 5	Total/NA	Solid	8021B	88065
890-6990-3	HA - 5	Total/NA	Solid	8021B	88065
MB 880-88064/5-A	Method Blank	Total/NA	Solid	8021B	88064
MB 880-88065/5-A	Method Blank	Total/NA	Solid	8021B	88065
LCS 880-88065/1-A	Lab Control Sample	Total/NA	Solid	8021B	88065
LCSD 880-88065/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88065
880-47095-A-81-C MS	Matrix Spike	Total/NA	Solid	8021B	88065
880-47095-A-81-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	88065

**Analysis Batch: 88210**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	Total BTEX	
890-6990-2	HA - 5	Total/NA	Solid	Total BTEX	
890-6990-3	HA - 5	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87921**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	8015NM Prep	
890-6990-2	HA - 5	Total/NA	Solid	8015NM Prep	
890-6990-3	HA - 5	Total/NA	Solid	8015NM Prep	
MB 880-87921/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87921/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-47007-A-46-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-47007-A-46-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88019**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	8015B NM	87921
890-6990-2	HA - 5	Total/NA	Solid	8015B NM	87921
890-6990-3	HA - 5	Total/NA	Solid	8015B NM	87921
MB 880-87921/1-A	Method Blank	Total/NA	Solid	8015B NM	87921
LCS 880-87921/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87921

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**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**GC Semi VOA (Continued)****Analysis Batch: 88019 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-87921/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87921
880-47007-A-46-D MS	Matrix Spike	Total/NA	Solid	8015B NM	87921
880-47007-A-46-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	87921

**Analysis Batch: 88120**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Total/NA	Solid	8015 NM	
890-6990-2	HA - 5	Total/NA	Solid	8015 NM	
890-6990-3	HA - 5	Total/NA	Solid	8015 NM	

**HPLC/IC****Leach Batch: 88094**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Soluble	Solid	DI Leach	
890-6990-2	HA - 5	Soluble	Solid	DI Leach	
890-6990-3	HA - 5	Soluble	Solid	DI Leach	
MB 880-88094/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-88094/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-88094/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-47070-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-47070-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 88145**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6990-1	HA - 5	Soluble	Solid	300.0	88094
890-6990-2	HA - 5	Soluble	Solid	300.0	88094
890-6990-3	HA - 5	Soluble	Solid	300.0	88094
MB 880-88094/1-A	Method Blank	Soluble	Solid	300.0	88094
LCS 880-88094/2-A	Lab Control Sample	Soluble	Solid	300.0	88094
LCSD 880-88094/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88094
880-47070-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	88094
880-47070-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88094

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

**Client Sample ID: HA - 5**

Date Collected: 08/08/24 10:10

Date Received: 08/08/24 14:34

**Lab Sample ID: 890-6990-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	88065	08/09/24 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88085	08/11/24 12:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88210	08/11/24 12:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			88120	08/09/24 21:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87921	08/08/24 14:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88019	08/09/24 21:57	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 16:45	CH	EET MID

**Client Sample ID: HA - 5**

Date Collected: 08/08/24 10:20

Date Received: 08/08/24 14:34

**Lab Sample ID: 890-6990-2**

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			5.01 g	5 mL	88065	08/09/24 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88085	08/11/24 12:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88210	08/11/24 12:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			88120	08/09/24 22:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87921	08/08/24 14:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88019	08/09/24 22:14	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 16:51	CH	EET MID

**Client Sample ID: HA - 5**

Date Collected: 08/08/24 10:30

Date Received: 08/08/24 14:34

**Lab Sample ID: 890-6990-3**

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			5.00 g	5 mL	88065	08/09/24 16:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88085	08/11/24 12:42	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88210	08/11/24 12:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			88120	08/09/24 22:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87921	08/08/24 14:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88019	08/09/24 22:31	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	88094	08/11/24 10:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88145	08/14/24 16:57	CH	EET MID

**Laboratory References:**

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

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**Accreditation/Certification Summary**

Client: Earth Systems Response and Restoration  
Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
SDG: Lea County New Mexico

**Laboratory: Eurofins Midland**

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

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

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

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

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## Method Summary

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
 SDG: Lea County New Mexico

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

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**Sample Summary**

Client: Earth Systems Response and Restoration  
Project/Site: THE CONTEST CTB

Job ID: 890-6990-1  
SDG: Lea County New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6990-1	HA - 5	Solid	08/08/24 10:10	08/08/24 14:34	0.5'
890-6990-2	HA - 5	Solid	08/08/24 10:20	08/08/24 14:34	1'
890-6990-3	HA - 5	Solid	08/08/24 10:30	08/08/24 14:34	4'

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**Environment Testing  
Xenco**

## **Chain of Custody**

Houston, TX (281) 240-4200, Dallas, TX (214) 902-030  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-12  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-31



890-6990 Chain of Custody

<http://www.ncbi.nlm.nih.gov> <http://www.ncbi.nlm.nih.gov/entrez>

Page 1 of 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R	Comments
Company Name:	Earth Systems R&R	Company Name:		<b>Program:</b> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
Address:	1910 Resource Ct.	Address:		<b>State of Project:</b>
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:		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"/>
Phone:	832-541-7719	Email:	gmoreno@earthsys.net	Deliverables: EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____

Project Name:	The Contest CTB	Turn Around		Pres. Code Parameters	ANALYSIS REQUEST										Preservative Codes	
Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush												None: NO	DI Water: H <sub>2</sub> O
Project Location:	Lea County, NM	Due Date:	5 day 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>
<b>SAMPLE RECEIPT</b>		Temp Blank:	Yes		No	Wet Ice:	Yes	No								H <sub>3</sub> PO <sub>4</sub> : HP
Samples Received Intact:		Yes	No		Thermometer ID:	(WMC00)									NaHSO <sub>4</sub> : NABIS	
Cooler Custody Seals:		Yes	No	N/A	Correction Factor:	-0-2									Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
Sample Custody Seals:		Yes	No	N/A	Temperature Reading:	-1-0									Zn Acetate+NaOH: Zn	
Total Containers:					Corrected Temperature:	- -8									NaOH+Ascorbic Acid: SAPC	

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

Hq: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0 <i>Gibson</i>	<i>S. Bunn</i>	8/8 1434	2		
3			4		
5			6		

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6990-1  
SDG Number: Lea County New Mexico**Login Number:** 6990**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Bruns, Shannon

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6990-1  
SDG Number: Lea County New Mexico**Login Number:** 6990**List Source:** Eurofins Midland  
**List Creation:** 08/09/24 09:09 AM**List Number:** 2**Creator:** Vasquez, Julisa

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 8/13/2024 1:03:47 PM

## JOB DESCRIPTION

THE CONTEST CTB  
2288

## JOB NUMBER

890-6994-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

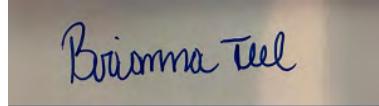
# Eurofins Carlsbad

## 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



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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: THE CONTEST CTB

Laboratory Job ID: 890-6994-1  
SDG: 2288

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## Definitions/Glossary

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Earth Systems Response and Restoration  
 Project: THE CONTEST CTB

Job ID: 890-6994-1

**Job ID: 890-6994-1**

**Eurofins Carlsbad**

### Job Narrative 890-6994-1

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 8/8/2024 2:34 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 -0.8°C.

### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SW - 16 (890-6994-1) and SW - 17 (890-6994-2).

### **GC VOA**

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-47036-A-1-C MS). Evidence of matrix interferences is not obvious.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-88066 and analytical batch 880-88136 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-88136 recovered above the upper control limit for m-Xylene & p-Xylene and o-Xylene. 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 880-88136/20).

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

### **Diesel Range Organics**

Method 8015MOD\_NM: The surrogate recovery for the blank associated with preparation batch 880-87976 and analytical batch 880-88013 was outside the upper control limits.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-87976/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: SW - 17 (890-6994-2). Evidence of matrix interferences is not obvious.

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

### **HPLC/IC**

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

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Client Sample ID: SW - 16****Lab Sample ID: 890-6994-1**

Matrix: Solid

Date Collected: 08/08/24 11:30  
 Date Received: 08/08/24 14:34

**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		08/09/24 16:10	08/12/24 19:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:33	1
Ethylbenzene	<0.00200	U *+	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:33	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		08/09/24 16:10	08/12/24 19:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/24 16:10	08/12/24 19:33	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		08/09/24 16:10	08/12/24 19:33	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		105		70 - 130			08/09/24 16:10	08/12/24 19:33	1
1,4-Difluorobenzene (Surr)		83		70 - 130			08/09/24 16:10	08/12/24 19:33	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			08/12/24 19:33	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			08/11/24 02:50	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		08/09/24 09:21	08/11/24 02:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 02:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 02:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				08/09/24 09:21	08/11/24 02:50	1
o-Terphenyl	86		70 - 130				08/09/24 09:21	08/11/24 02:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.4		5.01		mg/Kg			08/12/24 13:55	1

**Client Sample ID: SW - 17****Lab Sample ID: 890-6994-2**

Matrix: Solid

Date Collected: 08/08/24 11:40  
 Date Received: 08/08/24 14:34

**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		08/09/24 16:10	08/12/24 19:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/09/24 16:10	08/12/24 19:54	1
Ethylbenzene	<0.00201	U *+	0.00201		mg/Kg		08/09/24 16:10	08/12/24 19:54	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		08/09/24 16:10	08/12/24 19:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/09/24 16:10	08/12/24 19:54	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		08/09/24 16:10	08/12/24 19:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				08/09/24 16:10	08/12/24 19:54	1
1,4-Difluorobenzene (Surr)	88		70 - 130				08/09/24 16:10	08/12/24 19:54	1

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**Client Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Client Sample ID: SW - 17****Lab Sample ID: 890-6994-2**

Matrix: Solid

Date Collected: 08/08/24 11:40  
 Date Received: 08/08/24 14:34

**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			08/12/24 19:54	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			08/11/24 03:04	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			08/11/24 03:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 03:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/09/24 09:21	08/11/24 03:04	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	08/09/24 09:21	08/11/24 03:04	1
<i>o</i> -Terphenyl	69	S1-	70 - 130	08/09/24 09:21	08/11/24 03:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.3		4.96		mg/Kg			08/12/24 14:01	1

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**Surrogate Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Method: 8021B - Volatile Organic Compounds (GC)****Matrix: Solid****Prep Type: Total/NA**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Percent Surrogate Recovery (Acceptance Limits)</b>		
		<b>BFB1</b> <b>(70-130)</b>	<b>DFBZ1</b> <b>(70-130)</b>	
880-47036-A-1-C MS	Matrix Spike	135 S1+	98	
880-47036-A-1-D MSD	Matrix Spike Duplicate	119	115	
890-6994-1	SW - 16	105	83	
890-6994-2	SW - 17	103	88	
LCS 880-88066/1-A	Lab Control Sample	113	94	
LCSD 880-88066/2-A	Lab Control Sample Dup	120	97	
MB 880-88066/5-A	Method Blank	82	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**

<b>Lab Sample ID</b>	<b>Client Sample ID</b>	<b>Percent Surrogate Recovery (Acceptance Limits)</b>		
		<b>1CO1</b> <b>(70-130)</b>	<b>OTPH1</b> <b>(70-130)</b>	
890-6992-A-1-B MS	Matrix Spike	100	83	
890-6992-A-1-C MSD	Matrix Spike Duplicate	109	90	
890-6994-1	SW - 16	96	86	
890-6994-2	SW - 17	77	69 S1-	
LCS 880-87976/2-A	Lab Control Sample	137 S1+	115	
LCSD 880-87976/3-A	Lab Control Sample Dup	119	98	
MB 880-87976/1-A	Method Blank	170 S1+	161 S1+	

**Surrogate Legend**

1CO = 1-Chlorooctane  
 OTPH = o-Terphenyl

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## QC Sample Results

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Method: 8021B - Volatile Organic Compounds (GC)****Lab Sample ID: MB 880-88066/5-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Benzene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Toluene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
o-Xylene	<0.00200	U	0.00200		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	08/09/24 16:10	08/12/24 11:53	1			
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	82		70 - 130		08/09/24 16:10	08/12/24 11:53	1				
1,4-Difluorobenzene (Surr)	95		70 - 130		08/09/24 16:10	08/12/24 11:53	1				

**Lab Sample ID: LCS 880-88066/1-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits		
	Added	Result	Qualifier								
Benzene	0.100	0.1018		mg/Kg	102	70 - 130					
Toluene	0.100	0.1077		mg/Kg	108	70 - 130					
Ethylbenzene	0.100	0.1330	*+	mg/Kg	133	70 - 130					
m-Xylene & p-Xylene	0.200	0.2620	*+	mg/Kg	131	70 - 130					
o-Xylene	0.100	0.1260		mg/Kg	126	70 - 130					
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits						
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	113		70 - 130								
1,4-Difluorobenzene (Surr)	94		70 - 130								

**Lab Sample ID: LCSD 880-88066/2-A****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Spike	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.1016		mg/Kg	102	70 - 130				0	35
Toluene	0.100	0.09871		mg/Kg	99	70 - 130				9	35
Ethylbenzene	0.100	0.1328	*+	mg/Kg	133	70 - 130				0	35
m-Xylene & p-Xylene	0.200	0.2685	*+	mg/Kg	134	70 - 130				2	35
o-Xylene	0.100	0.1293		mg/Kg	129	70 - 130				3	35
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits						
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	120		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								

**Lab Sample ID: 880-47036-A-1-C MS****Matrix: Solid****Analysis Batch: 88136****Client Sample ID: Matrix Spike****Prep Type: Total/NA****Prep Batch: 88066**

Analyte	Sample	Sample	Spike	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00202	U	0.100	0.08506		mg/Kg		85	70 - 130		
Toluene	<0.00202	U	0.100	0.08278		mg/Kg		83	70 - 130		

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

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

**Lab Sample ID: 880-47036-A-1-C MS** **Client Sample ID: Matrix Spike**

**Matrix: Solid**

**Analysis Batch: 880136**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				Limits
Ethylbenzene	<0.00202	U *+	0.100	0.09831		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1808		mg/Kg		90	70 - 130
o-Xylene	<0.00202	U	0.100	0.1125		mg/Kg		113	70 - 130

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	135	S1+			70 - 130
1,4-Difluorobenzene (Surr)	98				70 - 130

**Lab Sample ID: 880-47036-A-1-D MSD**

**Client Sample ID: Matrix Spike Duplicate**

**Matrix: Solid**

**Analysis Batch: 880136**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				RPD
Benzene	<0.00202	U	0.100	0.07497		mg/Kg		75	70 - 130
Toluene	<0.00202	U	0.100	0.07829		mg/Kg		78	70 - 130
Ethylbenzene	<0.00202	U *+	0.100	0.09372		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00404	U *+	0.200	0.1732		mg/Kg		87	70 - 130
o-Xylene	<0.00202	U	0.100	0.09427		mg/Kg		94	70 - 130

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	119				70 - 130
1,4-Difluorobenzene (Surr)	115				70 - 130

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

**Lab Sample ID: MB 880-87976/1-A**

**Client Sample ID: Method Blank**

**Matrix: Solid**

**Analysis Batch: 88013**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/09/24 09:21	08/10/24 17:24	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Recovery	Qualifier						
1-Chlorooctane	170	S1+			70 - 130	08/09/24 09:21	08/10/24 17:24	1
o-Terphenyl	161	S1+			70 - 130	08/09/24 09:21	08/10/24 17:24	1

**Lab Sample ID: LCS 880-87976/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Solid**

**Analysis Batch: 88013**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1091		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1161		mg/Kg		116	70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

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

Lab Sample ID: LCS 880-87976/2-A

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87976

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	137	S1+	70 - 130
<i>o</i> -Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-87976/3-A

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87976

Analyte		Spike	LCSD	LCSD			%Rec	RPD
		Added	Result	Qualifier	Unit	D	Limits	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	1019		mg/Kg	102	70 - 130	7
Diesel Range Organics (Over C10-C28)		1000	986.7		mg/Kg	99	70 - 130	16

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
<i>o</i> -Terphenyl	98		70 - 130

Lab Sample ID: 890-6992-A-1-B MS

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 87976

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	933.4		mg/Kg	94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	837.1		mg/Kg	84	70 - 130

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
<i>o</i> -Terphenyl	83		70 - 130

Lab Sample ID: 890-6992-A-1-C MSD

Matrix: Solid

Analysis Batch: 88013

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 87976

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	1024		mg/Kg	103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	874.2		mg/Kg	88	70 - 130

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
<i>o</i> -Terphenyl	90		70 - 130

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**QC Sample Results**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-88093/1-A

Matrix: Solid

Analysis Batch: 88146

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			08/12/24 11:00	1

Lab Sample ID: LCS 880-88093/2-A

Matrix: Solid

Analysis Batch: 88146

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Chloride	250	252.7		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-88093/3-A

Matrix: Solid

Analysis Batch: 88146

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	253.2		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 880-47096-A-1-C MS

Matrix: Solid

Analysis Batch: 88146

Client Sample ID: Matrix Spike  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
Chloride	23.4		253	278.5		mg/Kg		101	90 - 110	

Lab Sample ID: 880-47096-A-1-D MSD

Matrix: Solid

Analysis Batch: 88146

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	23.4		253	278.6		mg/Kg		101	90 - 110	0	20

Eurofins Carlsbad

**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**GC VOA****Prep Batch: 88066**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	5035	
890-6994-2	SW - 17	Total/NA	Solid	5035	
MB 880-88066/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-88066/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-88066/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-47036-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-47036-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

**Analysis Batch: 88136**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	8021B	88066
890-6994-2	SW - 17	Total/NA	Solid	8021B	88066
MB 880-88066/5-A	Method Blank	Total/NA	Solid	8021B	88066
LCS 880-88066/1-A	Lab Control Sample	Total/NA	Solid	8021B	88066
LCSD 880-88066/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88066
880-47036-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	88066
880-47036-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	88066

**Analysis Batch: 88317**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	Total BTEX	
890-6994-2	SW - 17	Total/NA	Solid	Total BTEX	

**GC Semi VOA****Prep Batch: 87976**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	8015NM Prep	
890-6994-2	SW - 17	Total/NA	Solid	8015NM Prep	
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6992-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6992-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88013**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	8015B NM	87976
890-6994-2	SW - 17	Total/NA	Solid	8015B NM	87976
MB 880-87976/1-A	Method Blank	Total/NA	Solid	8015B NM	87976
LCS 880-87976/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87976
LCSD 880-87976/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87976
890-6992-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	87976
890-6992-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	87976

**Analysis Batch: 88194**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Total/NA	Solid	8015 NM	
890-6994-2	SW - 17	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

**QC Association Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**HPLC/IC****Leach Batch: 88093**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Soluble	Solid	DI Leach	
890-6994-2	SW - 17	Soluble	Solid	DI Leach	
MB 880-88093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-88093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-88093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-47096-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-47096-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

**Analysis Batch: 88146**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6994-1	SW - 16	Soluble	Solid	300.0	88093
890-6994-2	SW - 17	Soluble	Solid	300.0	88093
MB 880-88093/1-A	Method Blank	Soluble	Solid	300.0	88093
LCS 880-88093/2-A	Lab Control Sample	Soluble	Solid	300.0	88093
LCSD 880-88093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88093
880-47096-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	88093
880-47096-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	88093

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Eurofins Carlsbad

**Lab Chronicle**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

**Client Sample ID: SW - 16****Lab Sample ID: 890-6994-1**

Date Collected: 08/08/24 11:30  
 Date Received: 08/08/24 14:34

**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			5.00 g	5 mL	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 19:33	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88317	08/12/24 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			88194	08/11/24 02:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 02:50	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88146	08/12/24 13:55	CH	EET MID

**Client Sample ID: SW - 17****Lab Sample ID: 890-6994-2**

Date Collected: 08/08/24 11:40  
 Date Received: 08/08/24 14:34

**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			4.98 g	5 mL	88066	08/09/24 16:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88136	08/12/24 19:54	EL	EET MID
Total/NA	Analysis	Total BTEX		1			88317	08/12/24 19:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			88194	08/11/24 03:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87976	08/09/24 09:21	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88013	08/11/24 03:04	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88093	08/11/24 10:22	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88146	08/12/24 14:01	CH	EET MID

**Laboratory References:**

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

Eurofins Carlsbad

**Accreditation/Certification Summary**

Client: Earth Systems Response and Restoration  
Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
SDG: 2288

**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

Eurofins Carlsbad

**Method Summary**

Client: Earth Systems Response and Restoration  
 Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
 SDG: 2288

<b>Method</b>	<b>Method Description</b>	<b>Protocol</b>	<b>Laboratory</b>
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

Eurofins Carlsbad

**Sample Summary**

Client: Earth Systems Response and Restoration  
Project/Site: THE CONTEST CTB

Job ID: 890-6994-1  
SDG: 2288

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6994-1	SW - 16	Solid	08/08/24 11:30	08/08/24 14:34
890-6994-2	SW - 17	Solid	08/08/24 11:40	08/08/24 14:34

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Environment Testing  
Xenco

## Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-030  
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3  
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-12  
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-31



890-6994 Chain of Custody

Page 1 of 1

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@earthsyst.net

Comments
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:		Turn Around		Pres. Code	ANALYSIS REQUEST										Preservative Codes	
Project Number:	2288	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush												None: NO	DI Water: H <sub>2</sub> O
Project Location:	Lea County, NM	Due Date:	5 day 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: Yes	No	Wet Ice: Yes		No										H <sub>3</sub> PO <sub>4</sub> : HP	
Samples Received Intact:	Yes	No	Thermometer ID:		TWN002										NaHSO <sub>4</sub> : NABIS	
Cooler Custody Seals:	Yes	No	N/A		Correction Factor:	-0.2									Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>	
Sample Custody Seals:	Yes	No	N/A		Temperature Reading:	-1.0									Zn Acetate+NaOH: Zn	
Total Containers:				Corrected Temperature:	-8									NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	Chloride	BTEX					Sample Comments	
SW16		S	8/8/2024	11:30	0-0.5'	C	1	X	X	X					Incident Number	
SW17		S	8/8/2024	11:40	0-0.5'	C	1	X	X	X					nAPP2327037534	
<i>Gilbert</i>																

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 \$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
0 <i>Gilbert</i>	<i>Steve</i>	8/8 14:34	2		
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Revised Date: 08/25/2020 Rev. 2020.2

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6994-1

SDG Number: 2288

**Login Number:** 6994**List Source:** Eurofins Carlsbad**List Number:** 1**Creator:** Bruns, Shannon**Question****Answer****Comment**

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

## Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-6994-1

SDG Number: 2288

**Login Number:** 6994**List Source:** Eurofins Midland**List Number:** 2**List Creation:** 08/09/24 09:09 AM**Creator:** Vasquez, Julisa

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	

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 381846

**QUESTIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 381846
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2327037534
Incident Name	NAPP2327037534 THE CONTEST FEDERAL CTB @ 30-025-46673
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-46673] THE CONTEST FEDERAL COM #131H
Incident Facility	[fAPP2126033053] THE CONTEST CTB

**Location of Release Source***Please answer all the questions in this group.*

Site Name	THE CONTEST FEDERAL CTB
Date Release Discovered	09/19/2023
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

Incident Type	Produced Water 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	<i>Not answered.</i>
Produced Water Released (bbls) Details	<i>Cause: Equipment Failure   Flow Line - Production   Produced Water   Released: 207 BBL   Recovered: 200 BBL   Lost: 7 BBL.</i>
Is the concentration of chloride in the produced water >10,000 mg/l	<i>Yes</i>
Condensate Released (bbls) Details	<i>Not answered.</i>
Natural Gas Vented (Mcf) Details	<i>Not answered.</i>
Natural Gas Flared (Mcf) Details	<i>Not answered.</i>
Other Released Details	<i>Not answered.</i>
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	<i>Not answered.</i>

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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**

QUESTIONS, Page 2

Action 381846

**QUESTIONS (continued)**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID:  332195
	Action Number:  381846
	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)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

*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.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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

I hereby agree and sign off to the above statement	Name: Luke Kelly Title: Manager, Environmental Regulatory Compliance Email: lkelly@civiresources.com Date: 09/09/2024
--	--

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 3

Action 381846

**QUESTIONS (continued)**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID:  332195
	Action Number:  381846
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Site Characterization**

*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
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)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	186
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	67.7
GRO+DRO (EPA SW-846 Method 8015M)	67.7
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0.5

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

On what estimated date will the remediation commence	01/01/2024
On what date will (or did) the final sampling or liner inspection occur	08/08/2024
On what date will (or was) the remediation complete(d)	08/08/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	12500
What is the estimated volume (in cubic yards) that will be remediated	2100

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 381846

**QUESTIONS (continued)**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 381846
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Remediation Plan (continued)**

*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.*

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(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	TARGA NORTHERN DELAWARE, LLC. [fAPP2123031392]
OR which OCD approved well (API) will be used for <b>off-site</b> disposal	<i>Not answered.</i>
OR is the <b>off-site</b> disposal site, to be used, out-of-state	<i>Not answered.</i>
OR is the <b>off-site</b> disposal site, to be used, an NMED facility	<i>Not answered.</i>
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<i>Not answered.</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 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: Luke Kelly Title: Manager, Environmental Regulatory Compliance Email: lkelly@civiresources.com Date: 09/09/2024
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*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 5

Action 381846

**QUESTIONS (continued)**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID:  332195
	Action Number:  381846
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Deferral Requests Only**

*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	No
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QUESTIONS, Page 6

Action 381846

**QUESTIONS (continued)**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID: 332195
	Action Number: 381846
	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	369420
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/08/2024
What was the (estimated) number of samples that were to be gathered	70
What was the sampling surface area in square feet	10553

<b>Remediation Closure Request</b>	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	12500
What was the total volume (cubic yards) remediated	2100
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	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.

*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	Name: Luke Kelly Title: Manager, Environmental Regulatory Compliance Email: lkelly@civiresources.com Date: 09/09/2024
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Action 381846

**QUESTIONS (continued)**

Operator:	OGRID: 332195
Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	Action Number: 381846
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

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

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CONDITIONS

Action 381846

**CONDITIONS**

Operator:  Civitas Permian Operating, LLC 555 17th Street Denver, CO 80202	OGRID:  332195
	Action Number:  381846
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
nvelez	None	11/14/2024