



December 16, 2025

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

RE: **RDU 67-68 Tank Battery - Closure Request Report**
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°
Eddy County, New Mexico
ESRR Project No. VP-122

To Whom It May Concern:

Earth Systems Response & Restoration (ESRR), on behalf of WPX Energy Permian (WPX), presents the following Closure Request Report (CRR) detailing excavation activities and subsequent soil sampling events associated with an inadvertent release of produced water at the RDU 67-68 Tank Battery (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, WPX is requesting No Further Action (NFA) at the Site.

Site Location & Incident Description

The Site is located in Unit B, Section 27, Township 26 South, Range 30 East, in Eddy County, New Mexico (32.01950°, -103.86710°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1**).

On March 14, 2025, a pinhole leak developed on a dump line, causing the release of approximately 24 barrels (bbl) of produced water within a lined secondary containment (LSC) and adjacent production pad surfaces. A vacuum truck was immediately dispatched to the Site and recovered 3 bbls of fluids. ESRR conducted initial site assessment activities and mapped the observed release footprint on March 17, 2025, hereafter referred to as the Area of Concern (AOC) (**Figure 2**). WPX gave notice to the New Mexico Oil Conservation Division (NMOCD) by Notification of Release (NOR) and a Corrective Action Form C-141 (Form C-141) on March 17, 2025, and was subsequently assigned Incident Number nAPP2507627338.

Upon further review, WPX deemed it necessary for an Environmental Karst Study Report (EKS) to better understand the Site's Characterization. Southwest Geophysical Consulting, LLC. (SGC) were contracted to perform a surface and geophysical karst survey during May of 2025.

On June 11, 2025, WPX requested an extension of the June 12, 2025 deadline, to allow additional time to review SGC's EKS report and to determine/schedule remediation activities. WPX was granted a 90-day extension by the NMOCD for September 9, 2025.

On September 8, 2025, WPX requested an additional extension of the September 9, 2025 deadline, to allow additional time for remediation activities and for ESRR to complete this CRR. WPX was granted a 90-day extension by the NMOCD for December 8, 2025.

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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:

- o Between 1,000 feet and ½ mile of any continuously flowing watercourse or any other significant watercourse;
- o Between ½ and 1 mile of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- o Greater than 5 miles of any occupied permanent residence, school, hospital, institution or church;
- o Greater than 5 miles of any spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- o Greater than 5 miles of any other freshwater well or spring;
- o Greater than 5 miles of any incorporated municipal boundary or a defined municipal fresh water well field covered under a municipal ordinance;
- o Between 1,000 feet and ½ mile of any wetland;
- o Greater than 5 miles of any subsurface mine;
- o Between 1,000 feet and ½ mile of any unstable area (non-karst); and
- o Between 1 and 5 miles of a 100-year floodplain.

Based on the results from the EKS Report, SGC determined the following:

- o *No surface karst features exist within the 200-foot (61-meter) perimeter of the spill delineation boundary.*
- o *No anomalies consistent with subsurface air- or water- filled voids were found within the RD67 geophysical survey area, indicating the zone beneath the geophysical survey is not subject to collapse.*
- o *Flat-lying stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground.*

Receptor details used to determine the Site characterization are included in **Figure 1A** and **Figure 1B**. The **Environmental Karst Study Report** and **Referenced Well Records** for the closest depth to water well is attached.

Based on SGC’s EKS Report and DTW estimated to be greater than 100 feet below ground surface (bgs), the following Closure Criteria was applied:

Constituents of Concern (COCs)	Closure Criteria[‡]
Chloride	20,000 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	2,500 mg/kg
TPH (GRO)+ TPH (DRO)	1,000 mg/kg
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) ...	50 mg/kg

[‡]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

Delineation Activities

On March 21, 2025, ESRR conducted delineation activities to assess the presence or absence of soil impacts associated with the AOC. Ten delineation boreholes (HA-1 through HA-8, HA-7A, and HA-8A) were advanced via hand auger within and surrounding the AOC. 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/or the greatest depth. Delineation soil samples were placed directly into lab-provided pre-cleaned jars, packed with minimal void space, labeled, and placed on ice. The delineation soil samples were transported under strict chain-of-custody procedures, to Eurofins in Carlsbad, New Mexico, for analysis of the COCs.

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Laboratory analytical results for delineation soil samples (HA-7, HA-7A, HA-8, and HA-8A) surrounding the AOC were compliant with Site Closure Criteria but above the reclamation standard helping define the horizontal periphery of the AOC.

Laboratory analytical results for delineation soil samples collected within and around the AOC (HA-1 through HA-6) indicated either BTEX, TPH(GRO)+TPH(DRO), total TPH and/or chloride were above the Site Closure Criteria and/or the reclamation standard. Elevated BTEX is characterized by concentrations ranging from 65.0 mg/kg to 158 mg/kg. Elevated TPH(GRO)+TPH(DRO) is characterized by concentrations ranging from 3,910 to 13,800 mg/kg. Elevated total TPH is characterized by concentrations ranging from 3,270 to 60,100 mg/kg. Elevated chloride is characterized by a concentration of 23,000 mg/kg.

Laboratory analytical results are summarized in **Table 1**, included in the attachments. The locations of all delineation soil samples are shown in **Figure 2. Photographic Documentation** of all activities is attached.

Remediation Activities

During September of 2025, Devon oversaw initial excavation activities of identified soil impacts performed by a third-party contractor via mechanical equipment based on laboratory analytical results associated with delineation soil sampling activities and visual observation. The excavation was vertically advanced to depths approximately ranging from 0.5 to 2-feet bgs.

Following the removal of soil, ESRR collected 5-point composite soil samples at a sampling frequency of 200 square feet from the excavation floor (CS-1 through CS-17) and sidewalls (SW-1 through SW-4). 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 handled, transported, and analyzed as previously described.

Laboratory analytical results for confirmation soil samples (SW-1, SW-3 and SW-4) indicated that chloride concentrations were above the applicable Site Closure Criteria and/or the reclamation standard. Elevated chloride is characterized by concentrations ranging from 655 to 871 mg/kg.

Additional excavation in the proximity to confirmation soil samples (SW-1, SW-3 and SW-4) were advanced horizontally, maintaining the original depth of the excavation's floor. Following the removal of soil, ESRR collected, handled, transported, and analyzed the final confirmation soil samples as previously described with the addition of seven soil samples (CS-18 through CS-24).

Laboratory analytical results indicated that the concentration of COCs for all final confirmation soil samples were below the applicable Site Closure Criteria and/or 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 3. Photographic Documentation** of all activities is attached.

Approximately 243 cubic yards (CY) of impacted soil was removed from the Site and transported to R360 Red Bluff in Orla, Texas under Devon approved manifests. Upon receipt of the final confirmation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. The final soil cover was contoured to match the Site's pre-existing grade to prevent ponding of water and erosion.

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Closure Request

Based on laboratory analytical results, impacts associated with the inadvertent release have been delineated, excavated, and removed from the Site in accordance with Site Closure Criteria. Due to the active status of the well pad, the top 4 feet of the AOC is not ready to undergo complete reclamation in which the primary purpose is to reestablish vegetation. With depth to groundwater estimated to be greater than 100 feet bgs and no sensitive receptors within the established buffers in NMAC 19.15.29.12, WPX believes residual chloride concentrations within the AOC exceeding the reclamation standard but below the Site Closure Criteria meets the requirements set forth in NMAC 19.15.29.13 regulations and is equally protective of human health, the environment, and groundwater.

WPX will reassess the Site during plugging and abandonment activities or major facility reconstruction, whichever comes first, and address soil concentrations above the reclamation requirements of 100 mg/kg TPH and 600 mg/kg chloride (**Figure 4**) within the top 4 feet bgs. The final remediation will be confirmed via final confirmation soil sampling and is subject to change. As such, NFA appears warranted at this time, and WPX respectfully requests Closure of this CRR associated with Incident Number nAPP2507627338.

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

Sincerely,

EARTH SYSTEMS RESPONSE & RESTORATION

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

Gilbert Moreno
Carlsbad Operations Manager/ Project Geologist

A handwritten signature in black ink, appearing to read "Kris Williams".

Kris Williams, CHMM, REM
Principal

cc: Jim Raley, WPX Energy Permian
Bureau of Land Management

Attachments:

- Figure 1 - Site Map
- Figure 1A - Groundwater
- Figure 1B - Karst Potential
- Figure 2 - Delineation Soil Sample Locations
- Figure 3 - Excavation Soil Sample Locations
- Figure 4 - Future Restoration Areas
- Table 1 - Soil Sample Analytical Results
- Photographic Documentation
- Environmental Karst Study Report
- Referenced Well Record
- NMOCD Email Documentation & Correspondence
- Executed Chain-of-Custody Forms and Laboratory Analytical Reports



Figure 1 – Site Map

WPX Energy Permian – RDU 67-68 Tank Battery
 GPS: 32.01950°, -103.86710°
 Eddy County, New Mexico



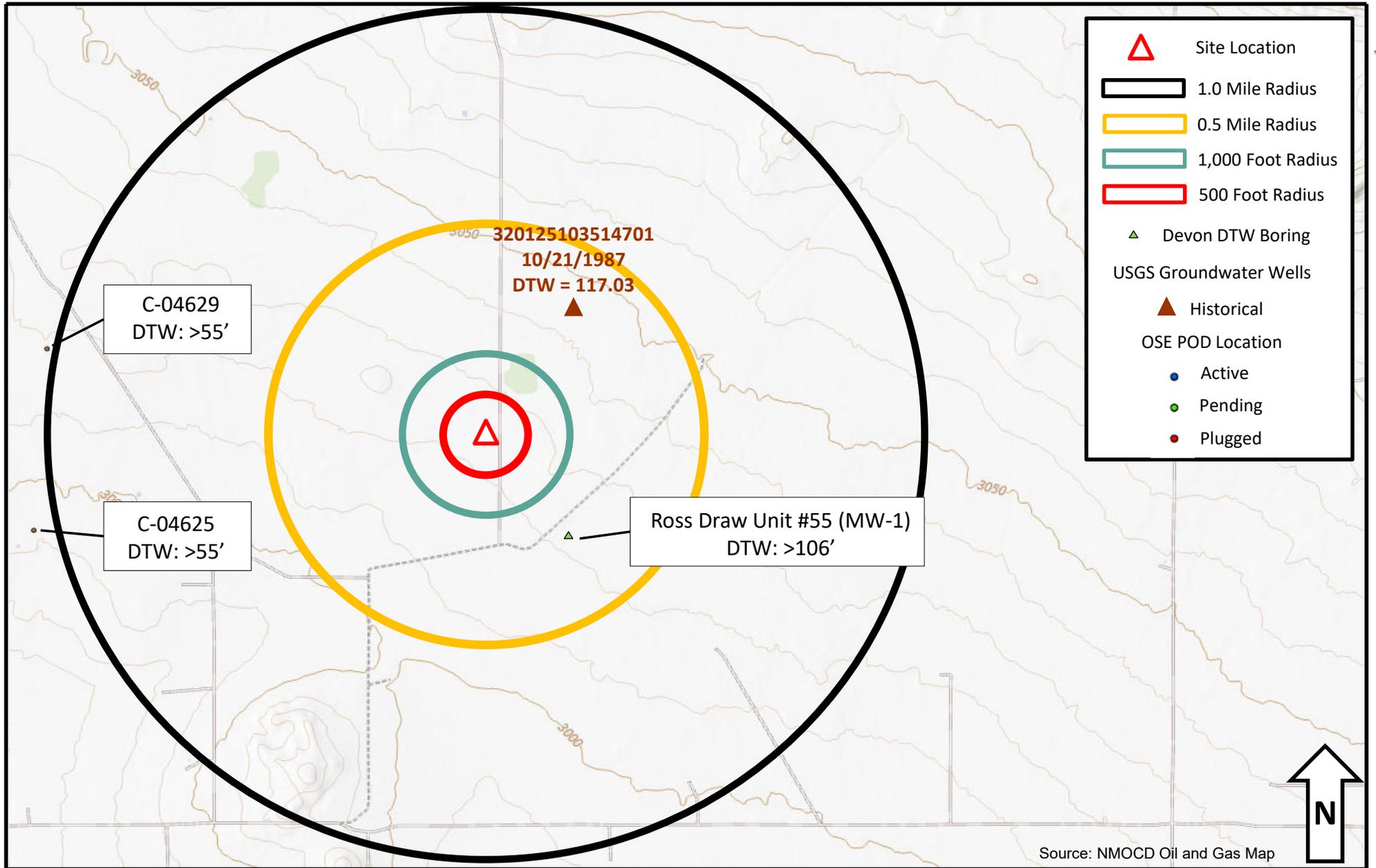


Figure 1A – Groundwater

WPX Energy Permian – RDU 67-68 Tank Battery
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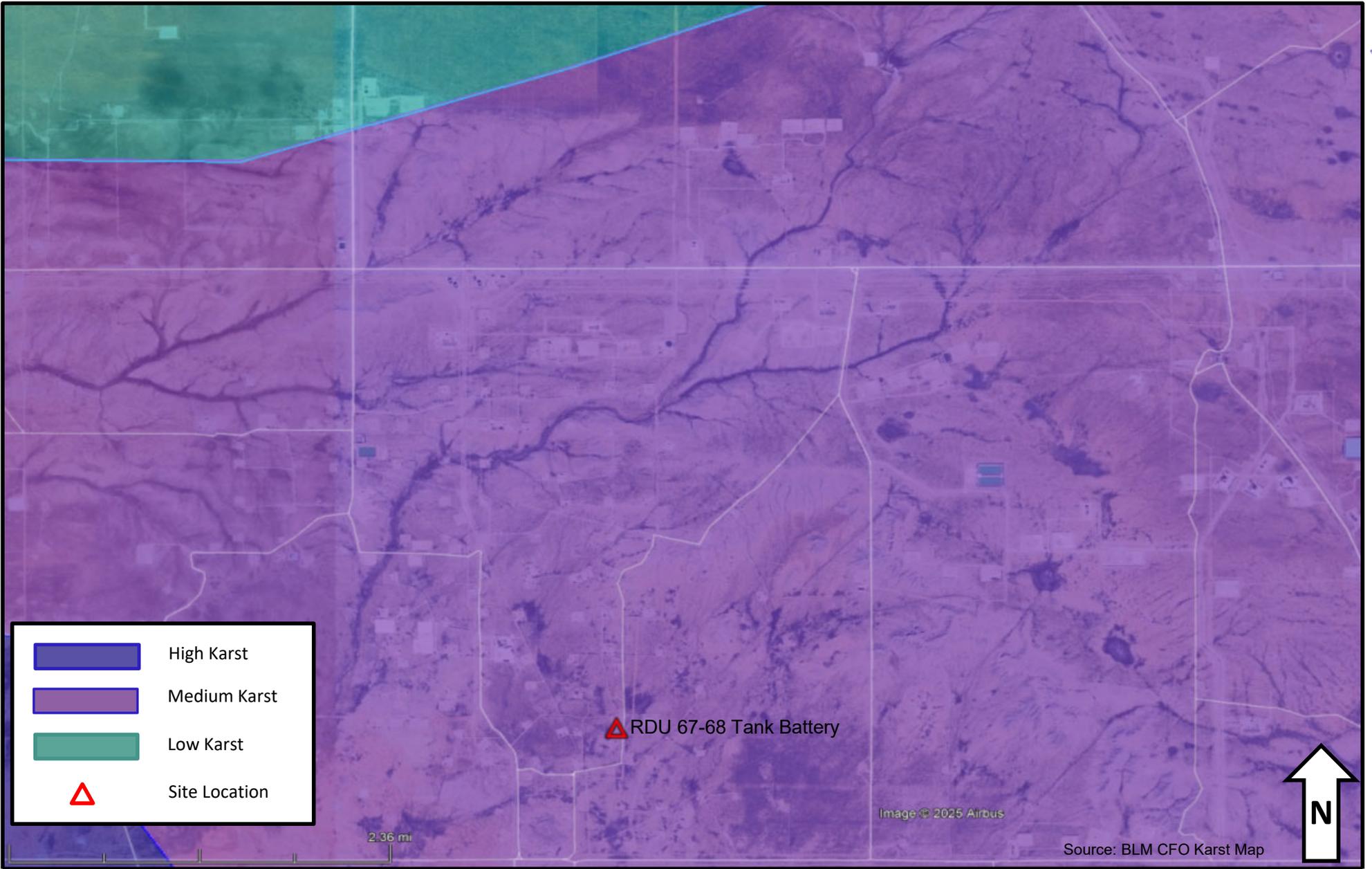


Figure 1B – Karst Potential
 WPX Energy Permian – RDU 67-68 Tank Battery
 GPS: 32.01950°, -103.86710°
 Eddy County, New Mexico

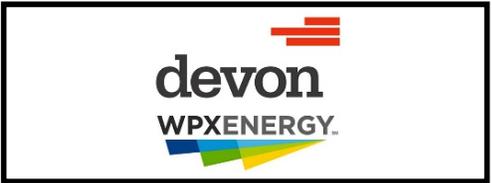




Figure 2 – Delineation Soil Sample Locations

WPX Energy Permian – RDU 67-68 Tank Battery
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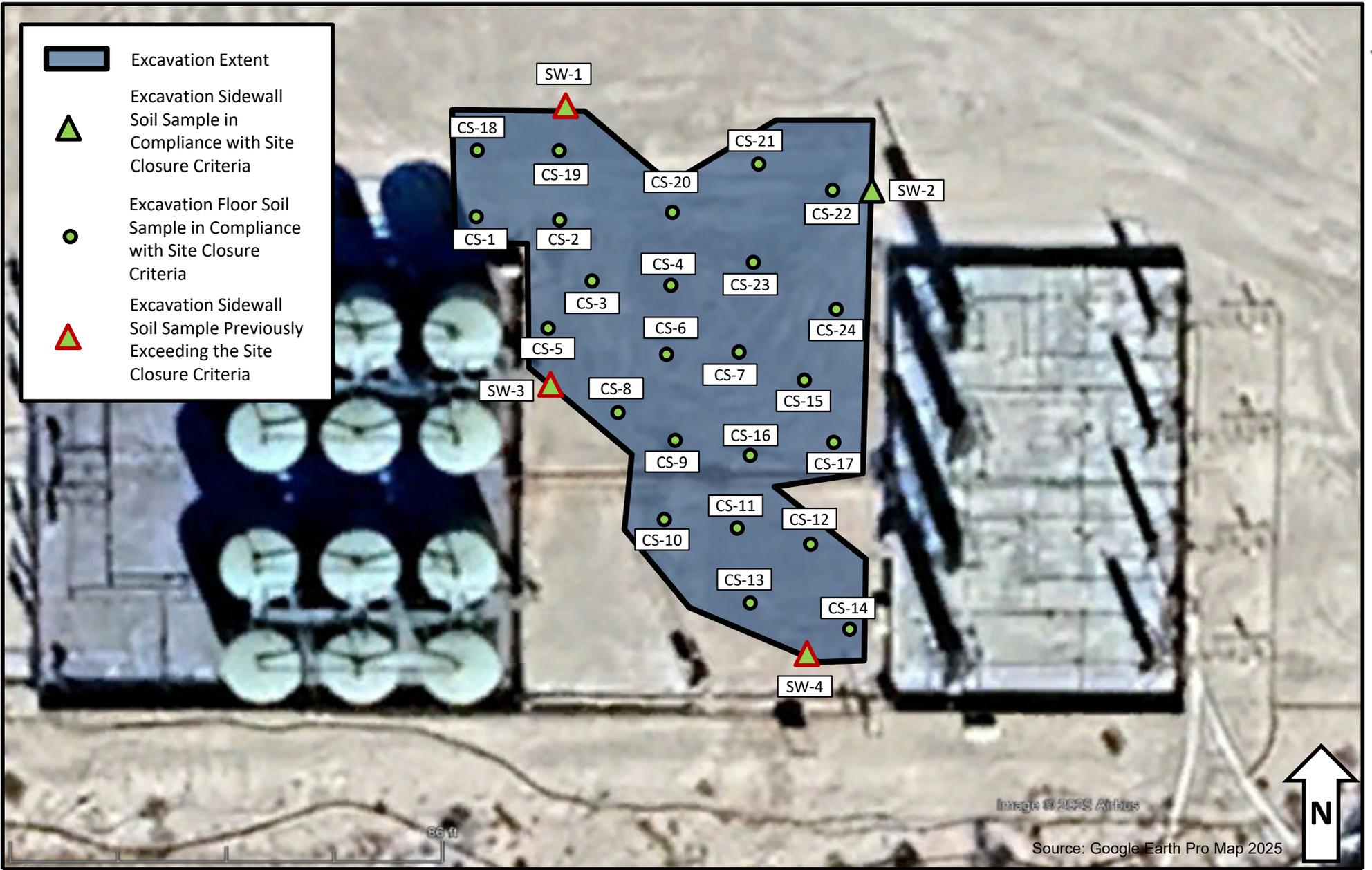


Figure 3 – Excavation Soil Sample Locations

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 Future Restoration Areas

Image © 2025 Airbus

Source: Google Earth Pro Map 2025

Figure 4 – Future Restoration Areas

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 Eddy County, New Mexico



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
RDU 67-68 Tank Battery
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH ORO (mg/kg)	TPH DRO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples - nAPP2507627338										
HA - 1	03/21/25	0.5	1.50	96.9	6,950	20,500	<997	6,950	27,500	5,220
HA - 1	03/21/25	1	<0.00199	0.00988	<49.6	<49.6	<49.6	<49.6	<49.6	1,910
HA - 1	03/21/25	2	<0.00200	0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	474
HA - 1	03/21/25	3	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	416
HA - 2	03/21/25	0.5	5.27	144	13,800	35,900	<997	13,800	49,700	7,960
HA - 2	03/21/25	1	<0.00198	0.0247	<49.8	<49.8	<49.8	<49.8	<49.8	3,920
HA - 2	03/21/25	2	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	3,750
HA - 2	03/21/25	3	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	2,480
HA - 2	03/21/25	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	619
HA - 3	03/21/25	0.5	0.392	99.7	3,910	10,600	<1,010	3,910	14,500	1,360
HA - 3	03/21/25	1	0.00227	1.43	208	1,370	<50.0	208	1,580	905
HA - 3	03/21/25	2	0.00657	0.0551	<49.7	<49.7	<49.7	<49.7	<49.7	1,070
HA - 3	03/21/25	3	<0.00199	0.00468	<49.7	<49.7	<49.7	<49.7	<49.7	2,000
HA - 3	03/21/25	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,210
HA - 3	03/21/25	6	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	267
HA - 4	03/21/25	0.5	0.162	65.0	4,340	15,200	<496	4,340	19,500	1,650
HA - 4	03/21/25	1	0.00660	4.52	311	2,960	<49.7	311	3,270	1,230
HA - 4	03/21/25	2	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	<49.7	196
HA - 4	03/21/25	3	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	569
HA - 4	03/21/25	4	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	402
HA - 4	03/21/25	6	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	988
HA - 5	03/21/25	0.5	0.163	83.8	5,670	26,200	<992	5,670	31,900	23,000
HA - 5	03/21/25	1	<0.00200	0.374	83.8	1,130	<49.7	83.8	1,130	8,860
HA - 5	03/21/25	2	<0.00200	0.0315	<49.8	<49.8	<49.8	<49.8	<49.8	10,300
HA - 5	03/21/25	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	2,780
HA - 5	03/21/25	4	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	1,200
HA - 5	03/21/25	6	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	254
HA - 6	03/21/25	0.5	2.27	158	12,900	47,200	<997	12,900	60,100	17,200
HA - 6	03/21/25	1	<0.00201	0.145	<49.7	148	<49.7	<49.7	148	4,770
HA - 6	03/21/25	2	<0.00200	0.0256	<49.8	<49.8	<49.8	<49.8	<49.8	2,270
HA - 6	03/21/25	3	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	1,770
HA - 6	03/21/25	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	1,870

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
RDU 67-68 Tank Battery
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH ORO (mg/kg)	TPH DRO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples - nAPP2507627338										
HA - 6	03/21/25	7	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	3,320
HA - 7	03/21/25	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	1,730
HA - 7	03/21/25	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	333
HA - 7A	03/21/25	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	1,020
HA - 7A	03/21/25	1	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	357
HA - 8	03/21/25	0.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	17,800
HA - 8	03/21/25	2	<0.00200	<0.00401	<49.6	<49.6	<49.6	<49.6	<49.6	4,130
HA - 8	03/21/25	4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	315
HA - 8	03/21/25	6	<0.00198	<0.00396	<49.6	<49.6	<49.6	<49.6	<49.6	112
HA - 8A	03/21/25	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,350
HA - 8A	03/21/25	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	4,550
Confirmation Soil Samples - nAPP2507627338										
CS - 1	09/15/25	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	852
CS - 2	09/15/25	1	<0.00199	<0.00398	<50.1	<50.1	<50.1	<50.1	<50.1	2,500
CS - 3	09/15/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,560
CS - 4	09/15/25	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	5,660
CS - 5	09/15/25	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	551
CS - 6	09/15/25	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,340
CS - 7	09/15/25	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	7,380
CS - 8	09/15/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	975
CS - 9	09/15/25	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	966
CS - 10	09/15/25	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	5,420
CS - 11	09/15/25	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	6,740
CS - 12	09/15/25	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	4,890
CS - 13	09/15/25	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	4,040
CS - 14	09/15/25	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	4,510
CS - 15	09/15/25	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	558
CS - 16	09/15/25	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	2,640
CS - 17	09/15/25	2	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	581
CS - 18	09/29/25	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,170
CS - 19	09/29/25	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	500
CS - 20	09/29/25	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	1,710

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
RDU 67-68 Tank Battery
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH ORO (mg/kg)	TPH DRO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Confirmation Soil Samples - nAPP2507627338										
CS - 21	09/29/25	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,670
CS - 22	09/29/25	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	4,810
CS - 23	09/29/25	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,740
CS - 24	09/29/25	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	6,330
SW - 1	09/15/25	0-1	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	871
SW - 1	09/29/25	0-1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	187
SW - 2	09/15/25	0-2	<0.00200	<0.00399	<50.1	<50.1	<50.1	<50.1	<50.1	588
SW - 3	09/15/25	0-1	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	677
SW - 3	09/29/25	0-1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	148
SW - 4	09/15/25	0-1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	655
SW - 4	09/29/25	0-1	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<49.8	119

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[†] for Soils Impacted by a Release
[†]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.

RDU 67-68 Tank Battery - Closure Request Report
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°



PHOTO 1: Southwestern view during initial site assessment. 03/17/2025



PHOTO 2: Northwestern view during initial site assessment. 03/17/2025

RDU 67-68 Tank Battery - Closure Request Report
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°

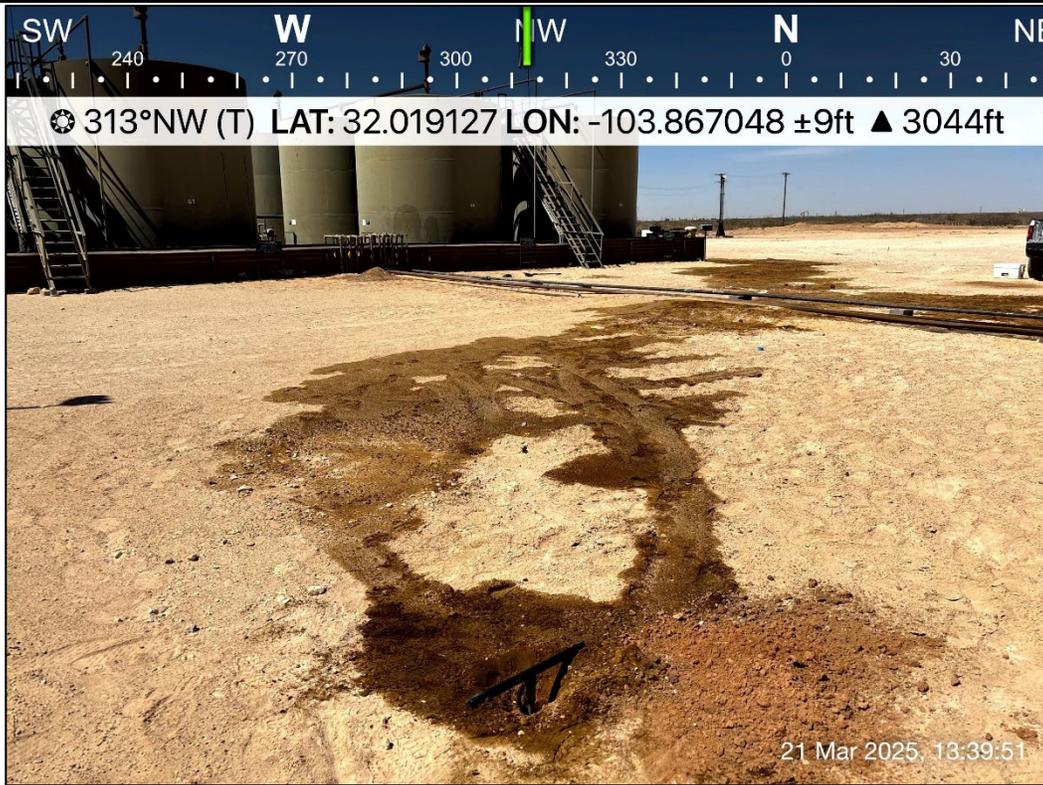


PHOTO 3: Northwestern view during delineation activities. 03/21/2025



PHOTO 4: Northwestern view during delineation activities. 03/21/2025

RDU 67-68 Tank Battery - Closure Request Report
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°

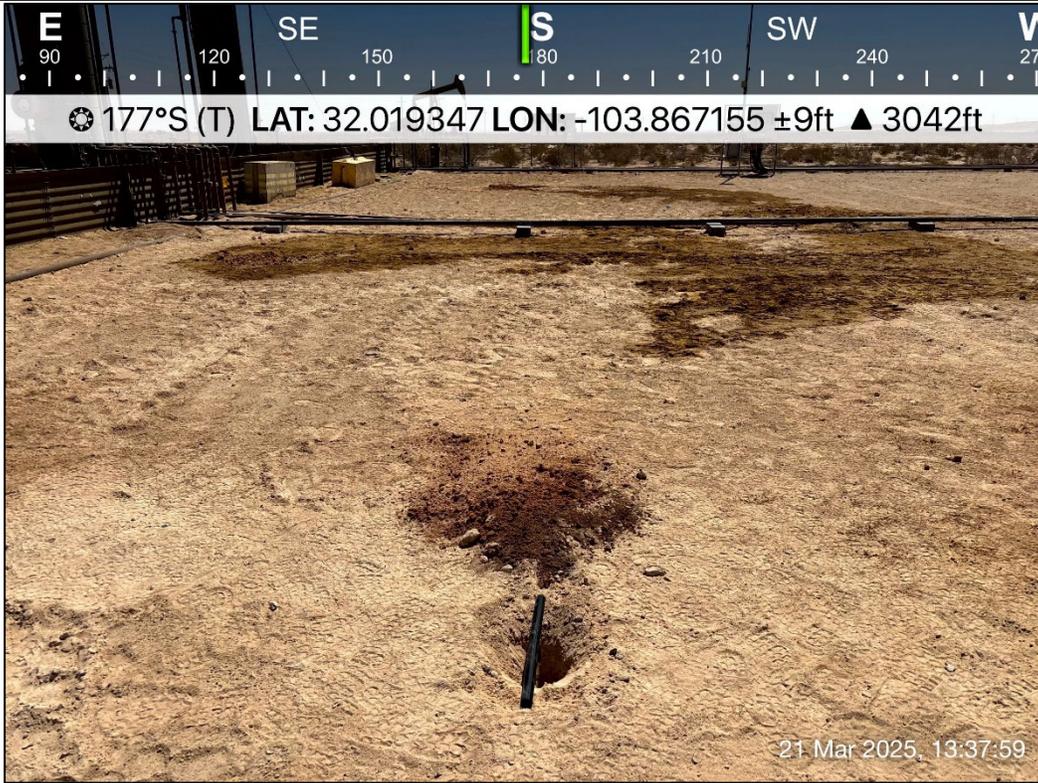


PHOTO 5: Southern view during delineation activities. 03/21/2025



PHOTO 6: Southern view during delineation activities. 03/21/2025

RDU 67-68 Tank Battery - Closure Request Report
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°

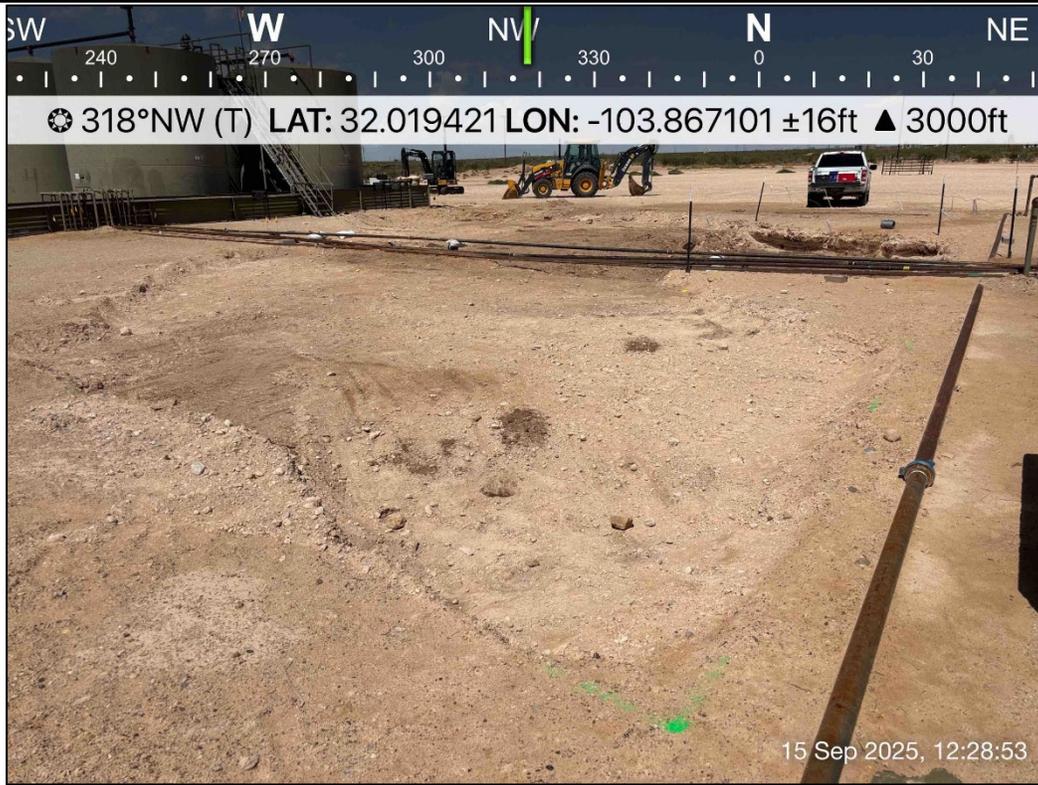


PHOTO 7: Northwestern view of the excavation extent. 09/15/2025



PHOTO 8: Southwestern view of the excavation extent. 09/15/2025

RDU 67-68 Tank Battery - Closure Request Report
Incident Number: nAPP2507627338
GPS: 32.01950°, -103.86710°



PHOTO 9: Southwestern view of the excavation extent. 09/29/2025



PHOTO 10: Southwestern view following restoration activities. 10/12/2025



Southwest Geophysical Consulting, LLC



Environmental Karst Study Report RDU 67-68 Tank Battery Eddy County, New Mexico

Prepared For:

**Earth Systems, LLC
1910 Resource Court
Carlsbad, NM 88220**

- Positive within 200 feet of spill delineation boundary
- Negative within 200 feet of spill delineation boundary
- Stable Unstable Ground
- Karst Monitor Recommended

May 23, 2025

ESYS-001-20250421

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1.0 INTRODUCTION

This report was commissioned by Earth Systems, LLC (hereinafter referred to as "the client"), on April 21, 2025, for the purpose of conducting an environmental karst study within an area encompassing the RDU 67-68 Tank Battery release site (hereinafter termed "RD67") centered at N 32.065895° W 103.948981°.

1.1 Goals of this Study

The goals of this study are to conduct a surface karst inventory and provide the client with the location and description of any surface karst features located within 200 feet (61 meters) of the spill delineation boundary (as defined by 19.15.29.12 NMAC^[1]), and to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions^[2]) within the spill delineation boundary of the RDU 67-68 Tank Battery release site as provided by the client via e-mail (**RDU 67-68_Release Extent.kmz**) on April 21, 2025, using electrical resistivity imaging^[3].

1.2 Summary of Findings

- **No surface karst features exist within the 200-foot (61-meter) perimeter of the spill delineation boundary.**
- **No anomalies consistent with subsurface air- or water-filled voids were found within the RD67 geophysical survey area, indicating the zone beneath the geophysical survey is not subject to collapse.**
- **Flat-lying stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground.**

1.3 Affected Environment

The RD67 project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region. Additionally, karst may develop by hypogene processes involving dissolution by upwelling fluids from depth independent of recharge from the overlying or immediately adjacent surface. Hypogene karst systems may not be connected to the surface and can remain undiscovered unless encountered during drilling or excavation.

Karst features are delicate resources that are often of geological, hydrological, biological, and archeological importance, and should be protected. The four primary concerns in these types of terrain are environmental issues, worker safety, equipment damage, and infrastructure integrity.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers^[4]. These designations are also recognized by the New Mexico State Land Office (NMSLO). This project occurs within a **MEDIUM** karst occurrence zone (MKOZ)^[5] (**Figure 1**).

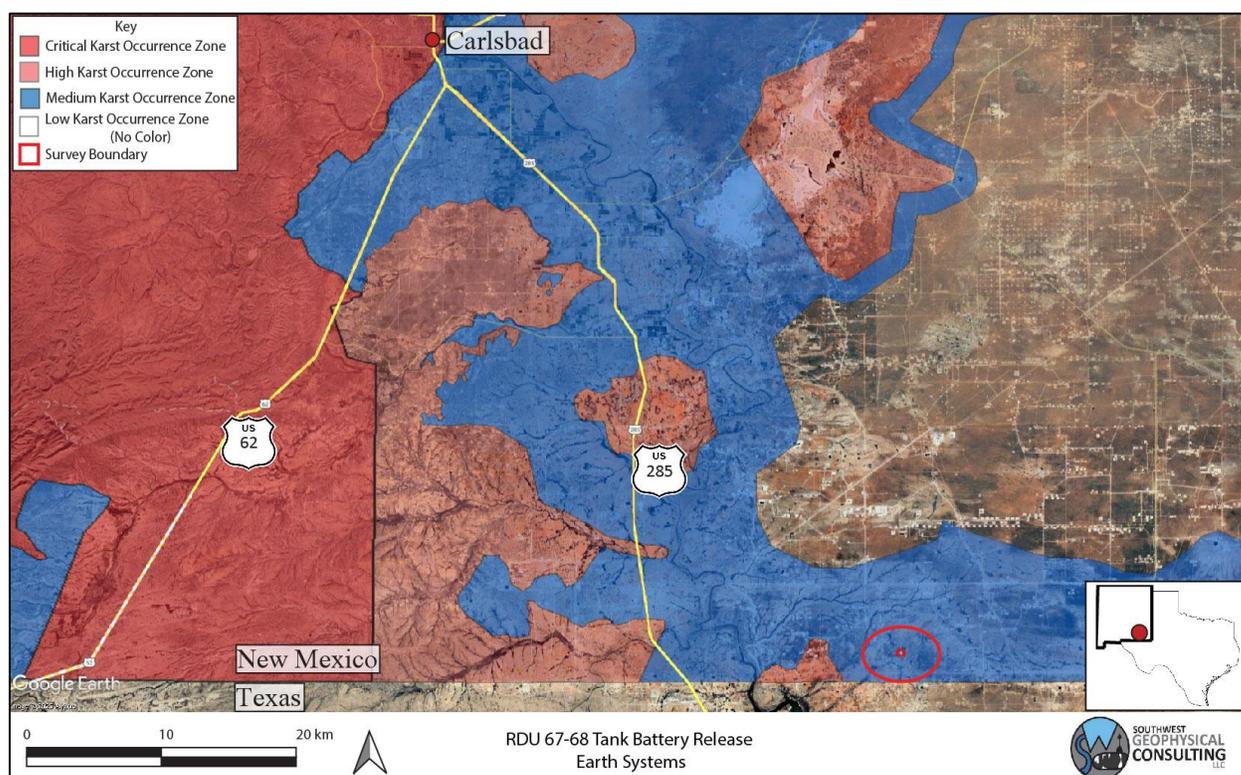


Figure 1: Karst occurrence zone overview. Background image credit: Google Earth. Image date: August 21, 2024. Image datum: WGS-84.

A medium karst occurrence zone is defined as an area in known soluble rock types that may have a shallow insoluble overburden. These areas may contain isolated karst features such as caves and sinkholes. Groundwater recharge may not be wholly dependent on karst features, but the karst features still provide the most rapid aquifer recharge in response to surface runoff^[4].

Due to the rapidity with which evaporite karst develops, each location within a karst occurrence zone must be assessed on an individual basis to determine the existence of surface karst features and the possibility of sub-surface karst development each time a release occurs.

1.4 Limitations of Report

This report should be read in full. No responsibility is accepted for the use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

This report has been prepared for the use of Earth Systems, LLC, in accordance with generally accepted consulting practices. Every effort has been made to ensure the information in this report is accurate as of the time of its writing. This report has not been prepared for use by parties other than the client, their contracting party, and their respective consulting advisors. It may not contain sufficient information for the purposes of other parties or for other uses.

This report was prepared upon completion of the associated fieldwork using a standard template prepared by Southwest Geophysical Consulting and is based on information collected prior to fieldwork, conditions encountered on site, and data collected during the fieldwork and reviewed at the time of preparation. Southwest Geophysical Consulting disclaims responsibility for any changes that might have occurred at the site after this time. The interpreted results, locations, and depths noted in this report (if applicable) should be taken as an interpretation only and no decision should be based solely on this information. Physical verification of aerial imagery analysis results in the field should be conducted prior to using this information for remediation planning. Physical verification of geophysical results using geotechnical methods should be conducted.

To the best of our knowledge, the information contained in this report is accurate at the date of issue. Due to the nature of karst terrain, the information in this report shall not be used beyond two years past the date of the field work provided in section **2.3 Description of Survey**. Large weather events can shorten this time period as areas subject to karst development can rapidly form new features subsequent to these events.

2.0 LOCATION AND DESCRIPTION OF STUDY AREA

2.1 Description of Site

The site is located 55.8 kilometers (34.7 miles) southeast of Carlsbad, New Mexico, north of State Line Road and south of Pipeline Road in an area known as Red Bluffs. The spill delineation boundary is located within section 27 of NM T26S R30E^[6] (**Figure 1** and **Figure 2**). The region has rolling terrain with karstification occurring in the gypsite soils and underlying gypsum and dolomite bedrock^[7] (see section **2.2 Local Geology Summary** for further information). The climate in this area of southeast New Mexico is semi-arid with an average annual precipitation of approximately 13 inches, of which about two-thirds falls as rain during summer thunderstorms from June to October. Summers are hot and sunny while winters are generally mild, with an average maximum temperature of 96°F in July and an average minimum temperature of 28°F in January^[8]. This area is within the Chihuahuan Desert Thornscrub as defined by the Southwestern Regional ReGAP Vegetation map^[9] and the vegetation consists mostly of areas of blue grama, nine-awned pappus grass, burro grass and low scrub including yucca. The spill delineation boundary is located within an MKOZ^[5] (**Figure 1**) and within BLM-CFO managed land^[10] (**Figure 2**).

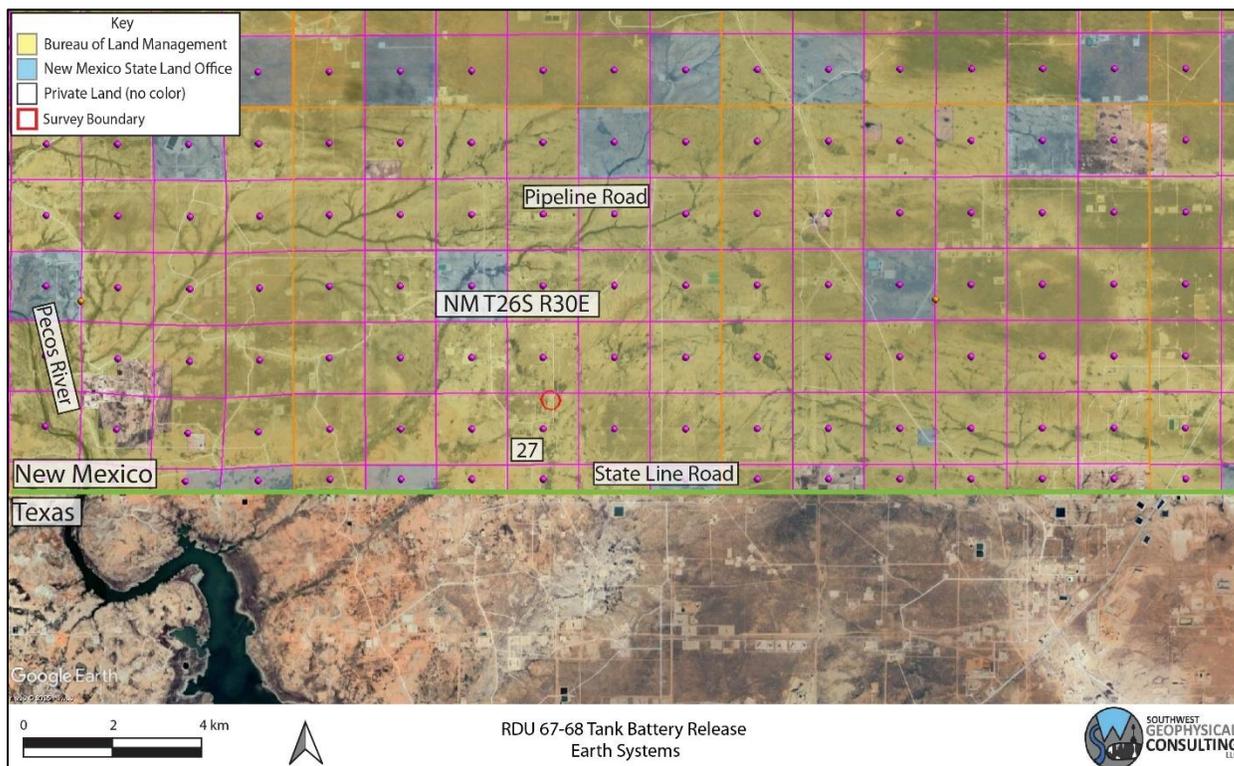


Figure 2: Land ownership and PLSS overview. Background image credit: Google Earth. Image date: December 31, 2023. Image datum: WGS-84.

2.2 Local Geology Summary

The site for the RD67 survey is located at an elevation of 924 meters (3,032 feet), \pm 2 meters (6.6 feet), and is located within a region entirely underlain by the Permian Dewey Lake (Pdl) and Rustler (Pru) Formations. The area is mantled by thin gypsiferous soils (gypsite), Quaternary alluvium (Qal) and eolian sands (Qe)^[11] up to 5 meters in depth (**Figure 3**).

The Dewey Lake Formation is composed of calcite-cemented, hematite-stained quartz sand grains^[12] and occasional gypsum lenses and can, in favorable conditions, form cavernous porosity within 30 meters of the top of the Rustler Formation^[13]. The Dewey Lake Formation is also known to be highly fractured near areas of heavy halite dissolution such as Nash Draw (approximately 25 kilometers north), and these fractures can act as hydrologic conduits.

The Rustler Formation is an evaporite facies and is composed mainly of thin siltstones and sandstones interbedded with claystones, dolomite and gypsum^[12], and contains both karst-forming strata (the Forty-niner and Tamarisk members) and two shallow aquifers (the Magenta and Culebra Dolomite members). The Forty-niner and Tamarisk members are known to have highly developed karst features including large voids and solution-enlarged fractures^[14].

The survey area is covered by the easily accessible Geologic Map of New Mexico (2003) at 1:500,000 scale^[15] and the Digital Geologic Map of New Mexico in ARC/INFO Format^[11].

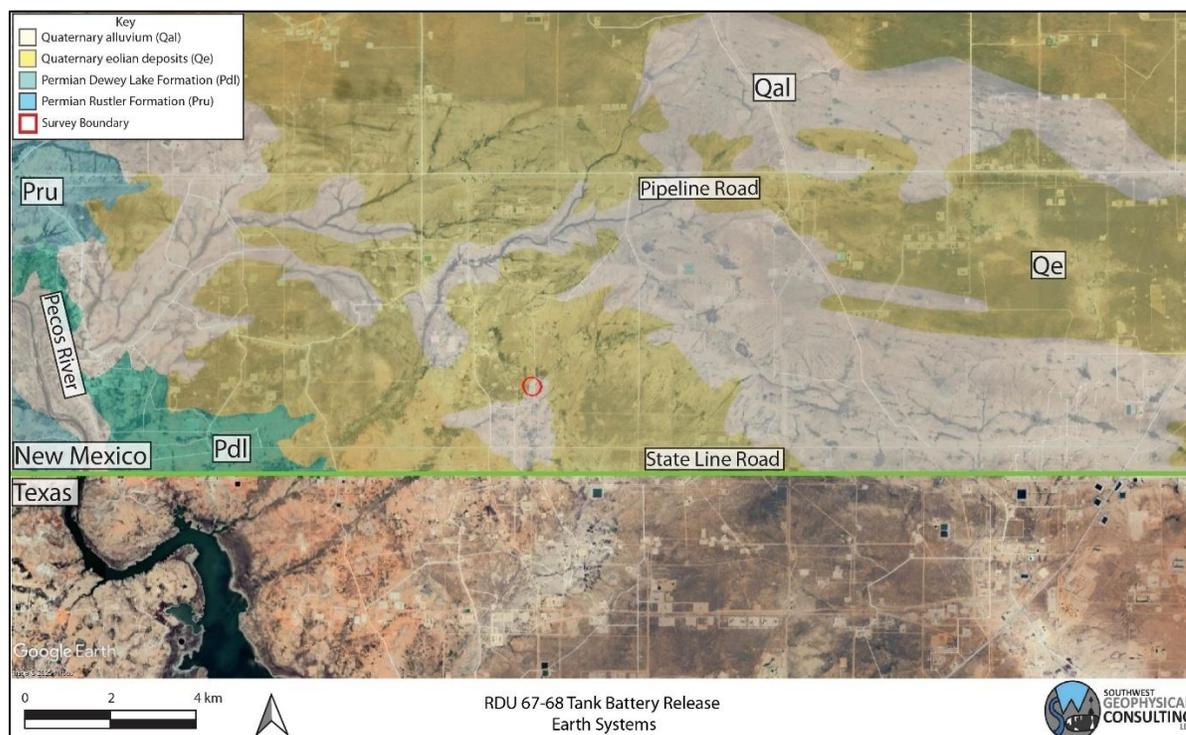


Figure 3: Geology overview. Geology map credit: The Digital Geologic Map of New Mexico in ARC/INFO Format. Background image credit: Google Earth. Image date: December 31, 2023. Image datum: WGS-84.

2.3 Description of Survey

2.3.1 Surface Karst Inventory

Southwest Geophysical Consulting, in partnership with SWCA Environmental Consultants, provides surface karst surveys using small, uncrewed aerial systems (sUAS) that are flown by qualified, FAA licensed drone pilots and that meet the stringent Bureau of Land Management – Carlsbad Field Office requirements for both pedestrian and aerial karst surveys.

The surface karst survey includes a desk study prior to the flight which allows us to provide client feedback in the event of any previously known karst features in the area. The desk study is performed out to 305 meters (1,000 feet) from the spill delineation boundary per New Mexico Oil Conservation Division guidance^[1] (**Figure 4**). The study was performed using satellite and aerial imagery from Google Earth Pro dated December 31, 2023 (please note features less than one meter in diameter are generally not visible using this method); the Southwest Geophysical Cave and Karst Database dated April 25, 2025^[16]; the Phantom Banks, NM, 1:24,000 quad, 1968, USGS topographic map; and the latest lidar imagery from CalTopo.com. Please note that we use older topographic maps because newer maps have had caves removed from them. These searches and queries returned no results within the survey boundary.

Surface karst surveys are conducted by sUAS at low elevation within 200 meters of the spill delineation boundary^[4] (**Figure 4**) following a preplanned raster pattern flightpath designed for the purpose of generating at least 75% imagery overlap. The collected high-resolution, georeferenced imagery is stitched together to develop orthomosaic imagery which is further developed into a digital elevation model (DEM); the DEM is then processed into a local relief model (LRM) (**Figure 6**). This LRM is color coded to enhance differences in elevation of as little as five centimeters. The orthoimagery, DEM, and LRM are uploaded to a server where they are analyzed by an experienced karst geologist. Finally, the data is reviewed by a senior karst geologist for quality assurance and downloaded into a table for inclusion in a written report^[17].

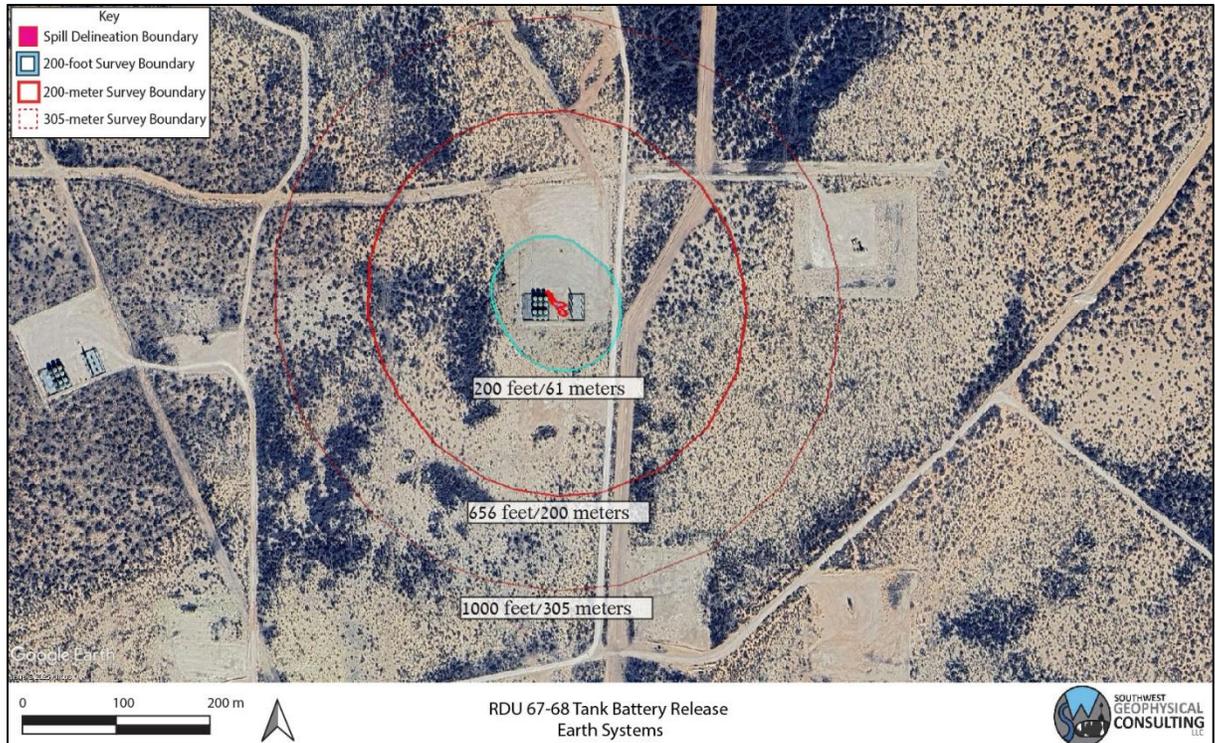


Figure 4: Surface survey overview. Background image credit: Google Earth. Image date: December 31, 2023. Datum: WGS-84.

The resolution of the orthoimagery is clear enough that features as small as 10 centimeters can be positively identified in most circumstances. Occasionally there are ambiguous features identified during an aerial survey that will need to be checked in the field if they are impacted by the proposed remediation efforts. Specifically, it is difficult to tell the difference between solution tubes, abandoned uncased well bores, and some burrows in drone imagery. If an ambiguous feature is located during imagery analysis, it is marked with a yellow dot in **Figure 6**. If a feature of any likelihood is subsequently verified in the field prior to publication of the report, the dot will be changed to a red triangle if confirmed as a karst feature or deleted if not.

The imagery for this study was collected via aerial survey by Pat Lagodney of SWCA on April 25, 2025. Surface karst features may have developed after this date and will not be noted in this report. Imagery analysis was completed by Britt Bommer of Southwest Geophysical Consulting on May 14, 2025.

2.3.2 Geophysical Survey

For this survey, an Advanced Geosciences Inc. (AGI) SuperSting™ Wifi R8 with a multi-electrode switchbox, a 28-electrode array of 40-centimeter-long electrodes, and a tablet controller were used to image the subsurface. This survey consisted of two orthogonal resistivity lines in a dipole-dipole configuration; line RD6701 is laid out west to east while line RD6702 is laid out south to north. Both lines consisted of 28 electrodes at 5-meter spacing, resulting in 135-meter-long arrays (**Figure 5, Table 1**). A preconfigured command file was used to run the data collection (DiDi28). This electrode configuration provided a depth of investigation of 27 meters (89 feet) and a resolution of 2.5 to 3.0 meters (8.2 to 9.8 feet) within the first 5 to 8 meters (16 to 26 feet) from the surface. A Leica GS18 GPS was used to record electrode locations and elevations.

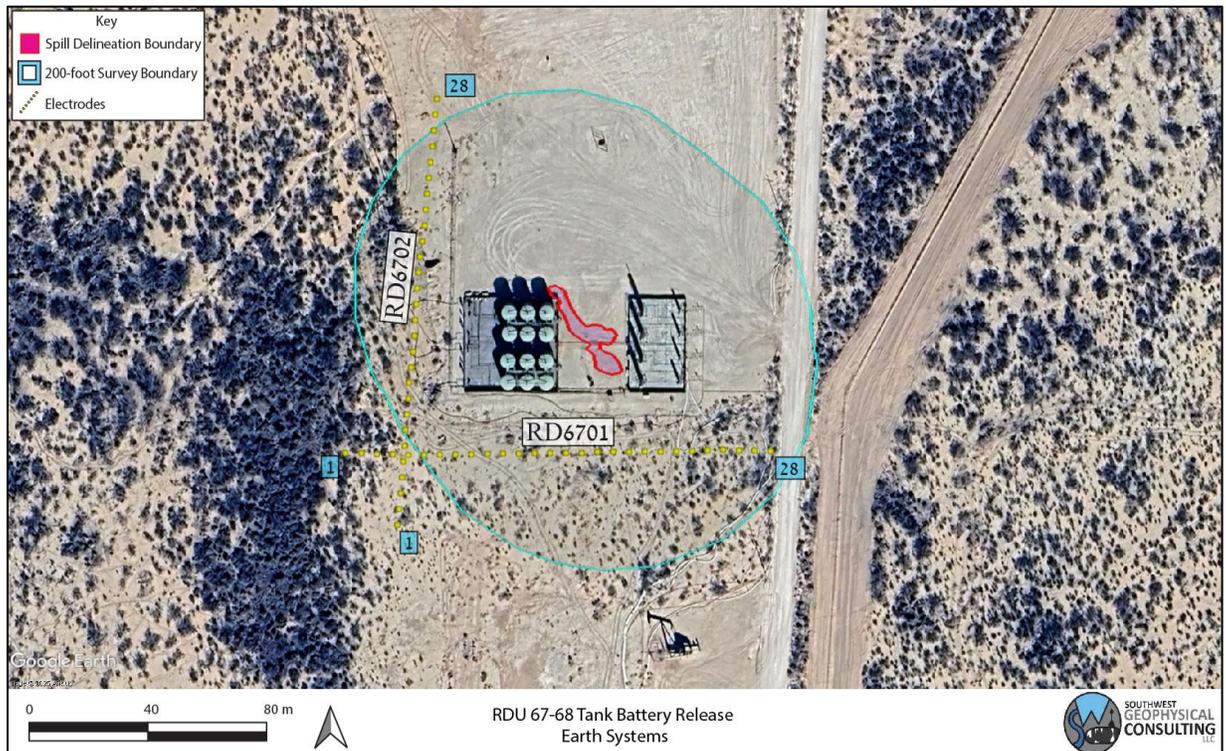


Figure 5: Geophysical survey overview. Two survey lines were conducted with 28 electrodes (yellow dots denoted with blue numbers). Background image credit: Google Earth. Image date: December 31, 2023. Image datum: WGS-84.

Table 1 provides basic line data. Detailed information for each line including electrode number, location in latitude/longitude (decimal degree format), and elevation in meters can be found in the accompanying data files.

Table 1: Survey Line Data Table. The .kmz file contains all the points for the survey line listed in the file name. These data are available in the accompanying files RD67_ERI_Points.xlsx and ESYS-001-20250421_RD67_Data_Files.kmz.

File Name:	Completed By:	Date:
RD6701.kmz	Garrett Jorgensen Olague – Senior Field Geologist Britt Bommer – Field Geologist Steven Kesler – Field Geologist	04/30/2025
RD6702.kmz		

EarthImager™ 2D software was used to download and process the data and to provide the model used to make our interpretations. The design of the survey and the orientation of each of the lines provides the information necessary to make the determination of “stable” or “unstable” ground at this site.

A typical starting model was used for the data processing due to the two-layer model of the geology in the area; specifically, generally high-resistivity gypsum and dolomite at the surface and low-resistivity saturated gypsum and dolomite bedrock at depth. The starting model used was “average apparent resistivity” and a default inversion setting of “surface,” with a minimum apparent resistivity set to 0.1 Ohm-meters (Ohm-m or Ω-m) and a max apparent resistivity set to 100,000 Ω-m (**Table 2**).

Table 2: Software Information and Settings

Software Name:	EarthImager™ 2D
Version:	2.4.4.649
Starting Model:	Average Apparent Resistivity
Default Inversion Settings:	Surface
Changes to Default Inversion Settings:	Max Apparent Resistivity = 100 kΩ-m Min Apparent Resistivity = 0.1 Ω-m

Note: Raw data files (.stg files for EarthImager™ 2D) and processed data (.trn files, terrain files for surface correction in EarthImager™ 2D and .out files, the processed .stg files) are available upon request.

All field work, including setup, stow, and travel, was completed by Garrett Jorgensen Olague, Britt Bommer, and Steven Kesler on April 30, 2025.

3.0 RESULTS

3.1 Surface Karst Survey

The desk study and surface karst survey showed no surface karst features within the 200-foot (61-meter)^[1] karst survey boundary (Figure 6).

No springs exist within the 1,000-foot (305-meter)^[1] survey boundary.

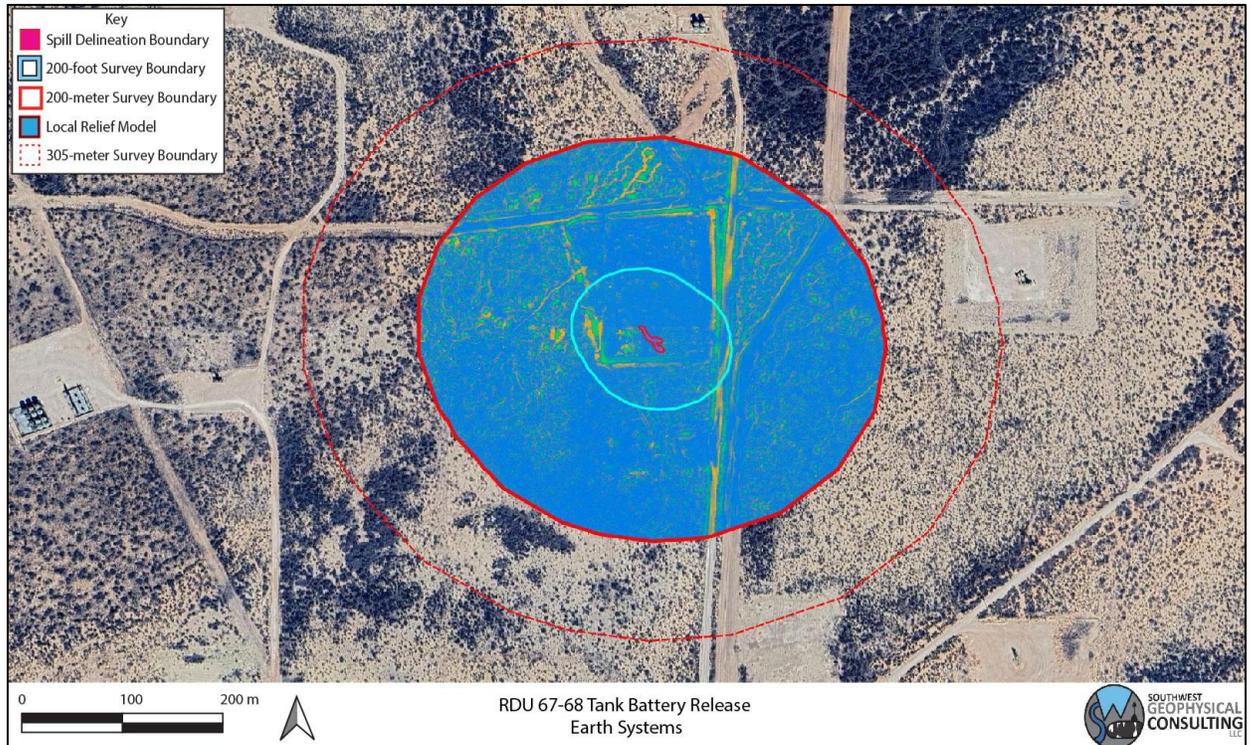


Figure 6: Surface karst survey results. Background image credit: Google Earth. Image date: December 31, 2023. Image datum: WGS-84.

3.2 Geophysical Survey

Electrical resistivity tomography forms images of the subsurface by causing a current to flow through the rock and soil and then measuring the resistance of these materials as the current flows through them. This measurement is taken many times and the resulting data, once processed, is used to produce a model of the subsurface (**Figure 7**). This model is produced using "non-unique" solutions, which means that there are many models and interpretations which will satisfy the data. Using experience and knowledge of the local geology, a high-confidence model can be established and used to develop an accurate understanding of what lies below the surface. This survey was conducted with the express purpose of locating subsurface voids and does not purport to find paleokarst (old, non-active karst features that have been filled in with sand and sediment) or nascent karst features below the resolution limit of the survey.

The results of this study indicate a well-layered geologic system with resistivities between 14.6 and 472 Ohm-m (**Figure 7**). Please keep in mind when viewing the 2D inverted resistivity sections that color maps can be widely different for each view. Always check the color map located on the right side of the image when viewing the 2D images to ensure you understand the range of resistivities presented. Distances along the top and depths along the left side are in meters. The color map along the right side is in Ohm-m. Due to the nature of the survey, shallower zones have higher resolution between electrodes than deeper zones; therefore, small features at depth will not be visible.

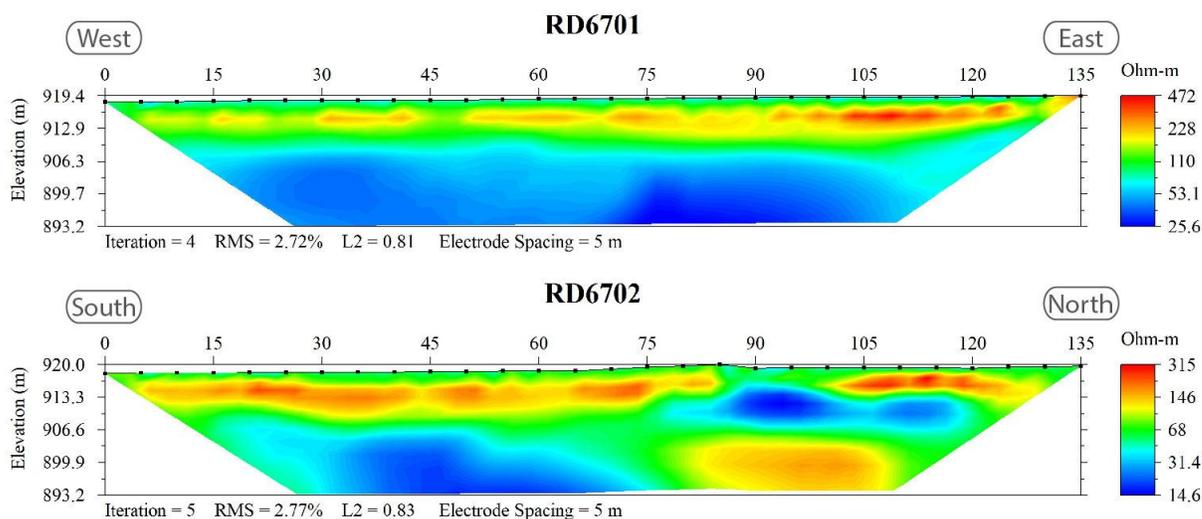


Figure 7: 2D inverted resistivity sections. Reds and oranges indicate higher resistivity values. Yellows and greens are medium-resistivity values. Blues are low-resistivity values. Please note that the color scale is relative.

4.0 DISCUSSION

No surface karst features and no anomalies consistent with air-filled subsurface voids are found within the RD67 survey area. However, small solutionally enlarged voids or fractures at or near the resolution limit of the survey (2.5 – 3.0 meters) may be present. Slightly higher-than-average resistivity areas less than 10 meters beneath the surface are interpreted as sand, caliche, or gypsite soils. Due to their much lower resistivity values when compared with significant subsurface voids, these features should not be a concern during remediation efforts. Areas of moderate resistivity (yellows, and greens) near the surface are interpreted as sand, caliche, or sandstone of the Dewey Lake Formation; or dry caliche soils and gypsum or dolomite bedrock Rustler Formation^[18] (**Figure 7** and **Figure 8**).

The low-resistivity area between 14.6 – 25 Ohm-m on line RD6702 may either represent fluid from the brine release or surface-to-subsurface hydrologic pathways. The low-resistivity area at a depth of 15 meters beneath the surface across both lines is likely a layer of either clay and halite lenses or moist or saturated layers within the Dewey Lake or Rustler Formations. (**Figure 7**).

Please remember that these are interpretations made from knowledge of the local subsurface materials and experience. **They remain interpretations until verified by geotechnical methods.** Employing a BLM-CFO approved karst monitor on site during any drilling and/or remediation activities that require excavation below four feet in depth should be considered.

Fracture sets within the subsurface can act as hydrologic pathways to the water table. Rapid dissolution of gypsum can occur along these pathways creating solution-enlarged fractures, and in some cases, voids within months to years. For this reason, this survey is valid only for this remediation event.

Within karst terrains like the project site, small air- or sediment-filled voids and/or brecciated zones and solutionally enlarged fractures that are below the resolution limit of the survey (2.5 – 3.0 meters) may exist; these may be encountered during excavation, and if so, should be evaluated by a karst specialist prior to continued work.

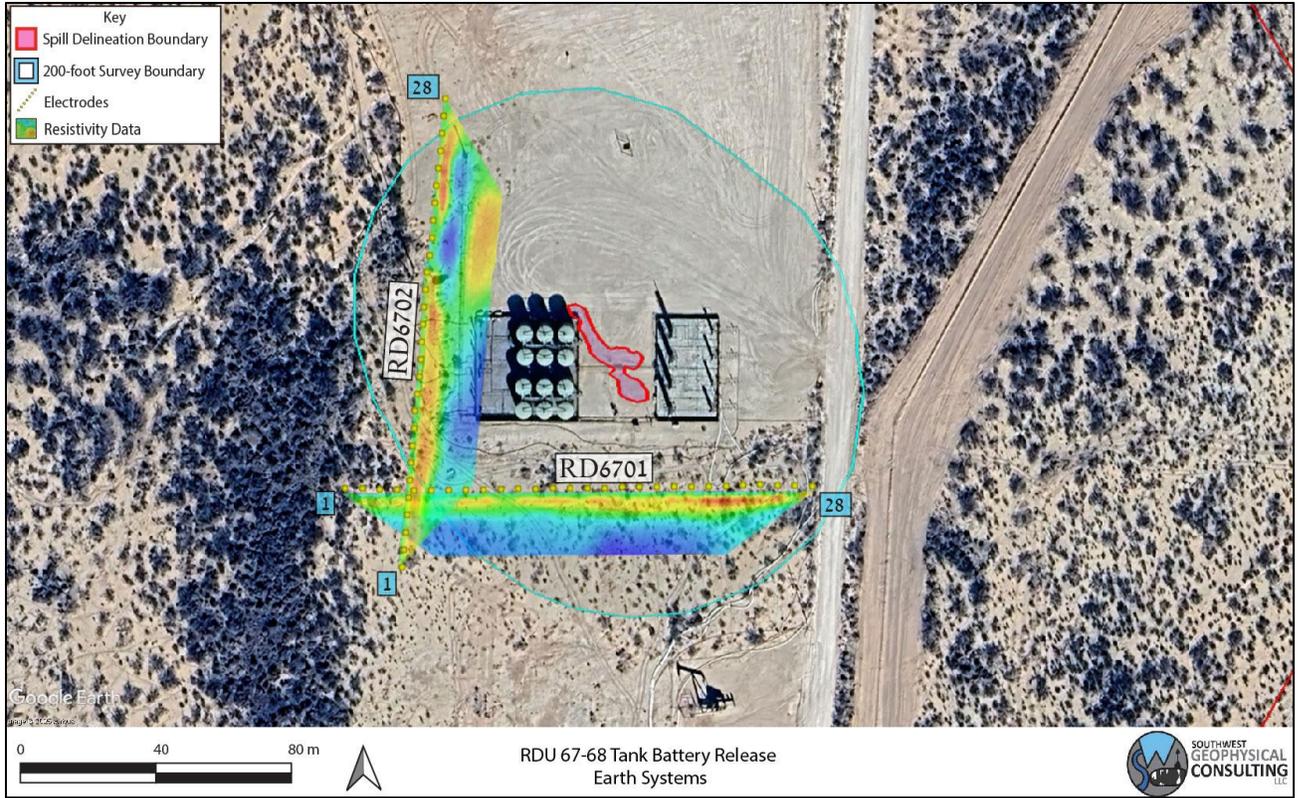


Figure 8: Interpretation. Colored trapezoids are 2D inverted resistivity lines. Background image credit: Google Earth. Image date: December 31, 2023.

5.0 SUMMARY

- **The RD67 survey contains no surface karst features within 200 feet (61 meters) of the spill delineation boundary.**
- **No shallow anomalies interpreted as large voids or related karst features that would present a danger to equipment operators are located within the geophysical survey area.**
- Intercepting a void during remediation is unlikely, but still possible. Small voids or solutionally enlarged fractures below the resolution limit of the survey may be encountered.
- **Well-layered stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground.**
- When conducting any remediation activities in this area, employing a BLM-CFO approved karst monitor on site should be considered.

6.0 DISCLOSURE STATEMENT

Karst occurrence zones are prone to rapid karst formation and warrant careful planning and engineering to mitigate karst-forming processes that could be accelerated by removal of surface cover or the vibrations associated with heavy equipment used in the remediation process.

Mitigation measures for any karst features revealed during excavation shall be approved by the Bureau of Land Management – Carlsbad Field Office and follow the Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527, or the Bureau of Land Management Cave and Karst Management Handbook, H-8380-1.

Vigilance during remediation activities is paramount. If voids are encountered during excavation, contact the Bureau of Land Management Karst Division at (575) 234-5972, the New Mexico State Land Office Surface Resources Division at (505) 827-5768, or a BLM-CFO approved karst contractor and request an on-site investigation from a karst expert if one is not already on site. A karst consultant can generally be available in Eddy County within five hours.

Approved karst monitors should have karst feature identification training, at least two years of supervised experience identifying karst features, wilderness first aid training, SRT training, confined space training, gas monitor training, and a minimum of SPAR cave rescue training through NCRC. They should have with them the proper gear and be prepared both physically and mentally to enter a collapse feature within minutes to perform a rescue if needed. Monitoring services with qualified karst monitors, as well as cave surveys and geophysical surveys, are available from Southwest Geophysical Consulting.

Under no circumstances should an untrained, inexperienced person enter a cave, pit, sinkhole, or collapse feature. All field employees of Southwest Geophysical Consulting have extensive caving experience and the ability to determine whether entry into a karst feature is safe or presents a hazard. In the event it is necessary to enter a karst feature, Southwest Geophysical Consulting can provide these services on request.

Cave and karst resource inventory reports, karst feature investigations, and geophysical reports (along with the associated data files) commissioned at the request of the federal land manager should be submitted to BLM-CFO: blm_nm_karst@blm.gov.

Cave and karst resource inventory reports for the NMSLO should be submitted to the respective project manager.

Environmental karst reports should be submitted to the appropriate project manager at the New Mexico Oil Conservation Division.

7.0 REFERENCES

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- 13 Powers, D. W., Lambert, S. J., Shaffer, S.-E., Hill, L. R. & Weart, W. D. Geological Characterization Report, Waste Isolation Pilot Plant (WIPP) Site, Southeastern New Mexico. 726 (Sandia Laboratories, Albuquerque, NM, 1978).
- 14 Goodbar, J. R. & Goodbar, A. in *US Geological Survey Karst Interest Group* (National Cave and Karst Research Institute, Carlsbad, NM, 2014).
- 15 Scholle, P. A. *Geologic Map of New Mexico*. (2003).

- 16 Decker, D. D., Jorgensen, G. L. & Palmer, R. in *Southwest Geophysical Cave and Karst Database* (ed LLC Southwest Geophysical Consulting) (Albuquerque, NM, 2025).
- 17 Whitehead, W., Bandy, M. & Decker, D. Protocol for Using UAV Photography for Rapid Assessment of Karst Features in Southeast New Mexico. *Proceedings of the 2022 Cave and Karst Management Symposium* (2022).
- 18 Hill, C. A. *Geology of the Delaware Basin, Guadalupe, Apache and Glass Mountains, New Mexico and West Texas*. Vol. 96-39 (Permian Basin Section - SEPM, 1996).

8.0 GLOSSARY OF TERMS

AGI	Advanced Geosciences Inc.
BLM-CFO	Bureau of Land Management - Carlsbad Field Office
brecciated	Fractured rock caused by faulting or collapse.
caprock-collapse sinkhole	Collapse of roof-spanning rock into a cave or void.
cave	Natural opening at the surface large enough for a person to enter.
cover-collapse sinkhole	Collapse of roof-spanning soil or clay ground cover into a subsurface void.
ERI	Electrical Resistivity Imaging
GPS	Global Positioning System
grike	A solutionally enlarged, vertical, or sub-vertical joint or fracture.
(H)	High confidence modifier for a PKF. This is typically reserved for a feature that is definitely karst but has not been confirmed in the field.
HKOZ	High Karst Occurrence Zone
karst	A landscape containing solutional features such as caves, sinkholes, swallets, and springs.
(L)	Low confidence modifier for a PKF. This is typically a feature that cannot be ruled out as karst but is most likely NOT karst related. This modifier may also be used for pseudokarst features.
(M)	Medium confidence modifier for PKF. This is an ambiguous feature that can't be positively identified as karst without a field visit (e.g., burrows, abandoned unlined wells, solution tubes, pseudokarst).
MKOZ	Medium Karst Occurrence Zone
NCRC	National Cave Rescue Commission
NKF	Non-karst feature. Used for features originally identified as PKF that have been subsequently identified in the field as non-karst related. This term may also be used for pseudokarst features.
NMSLO	New Mexico State Land Office
Ohm-m	Ohm-meter, a unit of measurement for resistivity. Sometimes abbreviated Ω -m.
paleokarst	Previously formed karst features that have been filled in by erosion and/or deposition of minerals.
Pat	Permian Artesia Group
Pc	Permian Capitan Formation
Pcs	Permian Castile Formation

Pdl	Permian Dewey Lake Formation
PKF	Possible karst feature. This term is reserved for features identified in satellite or aerial imagery that have NOT been visited in the field. Further modifiers include (H) for high confidence, (M) for medium confidence, and (L) for low confidence. These confidence levels are based on field experience.
PLSS	Public Land Survey System
Pqg	Permian Queen/Greyburg Formation
Pru	Permian Rustler Formation
pseudokarst	Karst-like features (sinkholes, conduits, voids etc.) that are not formed by dissolution. These types of features include soil piping, lava tubes, and some cover-collapse and suffosion sinkholes.
Psl	Permian Salado Formation
Psr	Permian Seven Rivers Formation
Pt	Permian Tansill Formation
Py	Permian Yates Formation
Qal	Quaternary alluvium
Qe	Quaternary eolian deposits
Qp	Quaternary piedmont deposits
Qpl	Quaternary playa lake deposits
RKF	Recognized karst feature. This term is reserved for karst features that have been physically verified in the field.
SPAR	Small Party Assisted Rescue
sUAS	Small, uncrewed aerial system
suffosion sinkhole	Raveling of soil into a pre-existing void or fracture.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed," meaning they are full of sediment.
SWG	Southwest Geophysical Consulting, LLC
UTM	Universal Transverse Mercator (projected coordinates)
(V)	Field verified modifier for a RKF. This indicates that the feature has been visited by a qualified karst professional in the field and fully identified
WGS	World Geodetic System (geographic coordinates)

9.0 ATTESTATION

David D. Decker, PhD, PG, CPG

Chief Executive Officer, Principal Geologist

Southwest Geophysical Consulting, LLC

5117 Fairfax Dr. NW

Albuquerque, NM 87114

dave@swgeophys.com

(505) 585-2550

CERTIFICATE OF AUTHOR

I, David D. Decker, a Licensed Professional Geologist and a Certified Professional Geologist, do certify that:

- I am currently employed as a consulting geologist in the specialty of caves and karst with an office address of 5117 Fairfax Dr. NW, Albuquerque, NM, USA, 87114.
- I graduated with a Master of Science in Applied Physics with a specialization in Sensor Systems from the Naval Post Graduate School in Monterey, California, in 2003, and a Doctor of Philosophy in Earth and Planetary Sciences from the University of New Mexico, Albuquerque, New Mexico, in 2018.
- I am a Licensed Professional Geologist in the State of Texas, USA (PG-15242) and have been since 2021. I am a Certified Professional Geologist through the American Institute of Professional Geologists (CPG-12123) and have been since 2021.
- I have been employed as a geologist continuously since 2016. I was previously employed as a Fire Controlman, Naval Flight Officer, and Aerospace Engineering Duty Officer in the U.S. Navy and operated, maintained, and installed various sensor systems including magnetic, electromagnetic, radar, communications, and acoustic systems in various capacities from 1986 through 2010.
- I have been involved in various aspects of cave and karst studies continuously since 1985, including exploration, mapping, and scientific studies.
- I have read the definition of “qualified karst professional” set out in the ASTM Standard Practice for Preliminary Karst Terrain Assessment for Site Development (ASTM E-1527). I meet the definition of “qualified professional” for the purposes of this standard.
- I am responsible for the content, compilation, and editing of all sections of report number ESYS-001-20250421 entitled, “Environmental Karst Study Report, RDU 67-68 Tank Battery, Eddy County, New Mexico.” I or a duly authorized and qualified representative of Southwest Geophysical Consulting, LLC, have personally visited this site and/or reviewed the aerial imagery on the date or dates mentioned in section **2.3 Description of Survey**.

- I have no prior involvement nor monetary interest in the described property or project, save for my fee for conducting this investigation and providing the report.

Dated in Albuquerque, New Mexico, May 26, 2025.



David D. Decker
PhD, CPG-12123



							BORING LOG/MONITORING WELL COMPLETION DIAGRAM						
Boring/Well Number: MW-1							Location: Ross Draw Unit #55						
Date: 12/9/2020							Client: WPX Energy						
Drilling Method: Air Rotary			Sampling Method: None				Logged By: J. Linn, PG			Drilled By: Talon LPE			
Gravel Pack Type: 10/20 Sand			Gravel Pack Depth Interval: 3 Bags				Seal Type: None		Seal Depth Interval: None		Latitude: 32.016165		
Casing Type: PVC		Diameter: 2-inch		Depth Interval: 0-101'7"			Boring Total Depth (ft. BGS): 106'7"			Longitude: -103.86346			
Screen Type: PVC		Slot: 0.010-inch		Diameter: 2-inch		Depth Interval: 101'7" - 106'7"		Well Total Depth (ft. BGS): 106'7"			Depth to Water (ft. BTOC): >106' 7"		DTW Date: 12/16/2020
Depth Interval (ft)	Recovery (ft)	Plasticity	Moisture	Odor	Staining	PID (ppm)	USCS	Sample ID	Lithology/Remarks			Well Completion	
0	NM	L	D	N	N	NM	SP	NS	Pale pink to buff colored poorly graded sand with minor silt				
5													
10													
15													
20	NM	L	D	N	N	NM	SW	NS	Pale tan orange well graded fine sand with minor medium and coarse sand				
25													
30													
35	NM	L	D	N	N	NM	SP	NS	Pale orange brown poorly graded fine sand with minor gravel				
40													
45													
50													
55													
60													
65	NM	L	D	N	N	NM	SP	NS	Grey poorly graded fine sand with minor gravel				
70													
75													
80													
85													
90	NM	L	D	N	N	NM	SP	NS	Darker grey poorly graded fine sand with minor silt and minor medium sand				
95													
100	NM	M	D	N	N	NM	SC	NS	Dark grey fine sand with moderate silt and clay - TD 106'7"				
106'7"													



RE: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

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

Date Wed 6/11/2025 2:08 PM

To Gilbert Moreno <gmoreno@earthsys.net>

Cc Raley, Jim <jim.ralej@dvn.com>

Your time extension request is approved. Remediation Due date has been updated to September 09, 2025 within the incident page. Ensure that the site characterization/assessment report has been completed and is provided within the final closure report.

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

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

If you have any questions, please contact me via email at your convenience.

Thank you,
Scott

Scott Rodgers • Environmental Specialist – Adv.

Environmental Bureau

EMNRD - Oil Conservation Division

5200 Oakland NE, Suite B | Albuquerque, NM 87113

505.469.1830 | scott.rodgers@emnrd.nm.gov

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



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Wednesday, June 11, 2025 10:34 AM

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

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: FW: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Wednesday, June 11, 2025 10:24 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Raley, Jim <jim.raley@div.com>
Subject: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

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

Hello,

Earth Systems Response & Restoration (ESRR) on behalf of WPX Energy Permian (WPX) is requesting an extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at the RDU 67-68 Tank Battery (Site).

A produced water release was discovered on March 14th, 2025, and was subsequently assigned Incident Number nAPP2507627338. ESRR performed initial delineation activities on March 21st, 2025. ESRR contracted Southwest Geophysical Consulting, LLC (SGC) to perform a Pedestrian Karst Survey and a Geophysical Survey to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions[2]) within the area of concern. SGC performed the Pedestrian Karst Survey during April 2025 followed by a Geophysical Survey on May 16th, 2025. SGC provided ESRR and WPX their findings in an Environmental Karst Study Report (EKSR) on June 6, 2025.

WPX requests an extension of the June 12th, 2025, deadline for the release associated with Incident Number nAPP2507627338, to allow additional time for review of SGC's EKSR and to allow additional time to determine/ schedule remediation activities and to allow ESRR to complete a subsequent corrective action closure report or remediation plan.

Regards,

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





Outlook

RE: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

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

Date Mon 9/8/2025 2:06 PM

To Gilbert Moreno <gmoreno@earthsys.net>

Cc Raley, Jim <jim.ralej@dvn.com>

Your time extension request is approved. Remediation Due date has been updated to December 8, 2025 within the incident page. Please note that this is the second extension request.

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

If you have any questions, please contact me via email at your convenience.

Thank you,
Scott

Scott Rodgers • Environmental Specialist – Adv.

Environmental Bureau

EMNRD - Oil Conservation Division

5200 Oakland NE, Suite B | Albuquerque, NM 87113

505.469.1830 | scott.rodgers@emnrd.nm.gov

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



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Monday, September 8, 2025 10:58 AM

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

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: FW: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

From: Gilbert Moreno <gmoreno@earthsys.net>

Sent: Monday, September 8, 2025 8:48 AM

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

Cc: Raley, Jim <jim.ralej@dvn.com>; CFO_Spill, BLM_NM <blm_nm_cfo_spill@blm.gov>

Subject: [EXTERNAL] RDU 67-68 Tank Battery - Extension Request - nAPP2507627338

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

Hello,

Earth Systems Response & Restoration (ESRR) on behalf of WPX Energy Permian (WPX) is requesting an additional extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at the RDU 67-68 Tank Battery (Site).

WPX reviewed the Geophysical Karst Survey Report, performed by Southwest Geophysical Consulting, LLC, previously mentioned in the initial extension request and has a better understanding of the Site Closure Criteria. Unfortunately, due to safety encroachment guidelines by WPX, this Site has been deemed a "Critical Location" requiring a complete facility shut down prior to any ground disturbance via hand tools or mechanical equipment causing remediation activities to be delayed. Remediation activities are anticipated to begin September 9th, 2025.

WPX requests an extension of the September 9th, 2025, deadline for the release associated with Incident Number nAPP2507627338, to allow additional time for remediation activities. Upon completion and favorable soil sample laboratory analyticals, ESRR will complete a subsequent corrective action closure report.

Regards,

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



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 500089

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 500089
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2507627338
Incident Name	NAPP2507627338 RDU 67-68 TANK BATTERY @ 30-015-41976
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-015-41976] ROSS DRAW UNIT #055

Location of Release Source	
Site Name	RDU 67-68 TANK BATTERY
Date Release Discovered	03/14/2025
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	3,205
What is the estimated number of samples that will be gathered	20
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/15/2025
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Gilbert Moreno (832) 541-7719
Please provide any information necessary for navigation to sampling site	32.019500001,-103.867100001

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

CONDITIONS

Action 500089

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 500089
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jraley	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/9/2025
jraley	If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.	9/9/2025

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 508803

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 508803
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2507627338
Incident Name	NAPP2507627338 RDU 67-68 TANK BATTERY @ 30-015-41976
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-015-41976] ROSS DRAW UNIT #055

Location of Release Source	
Site Name	RDU 67-68 TANK BATTERY
Date Release Discovered	03/14/2025
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	1,000
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/29/2025
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Gilbert Moreno (832) 541-7719
Please provide any information necessary for navigation to sampling site	32.019500001,-103.867100001

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

CONDITIONS

Action 508803

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 508803
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jraley	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/24/2025
jraley	If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.	9/24/2025



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 3/31/2025 4:39:00 PM

JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy, NM

JOB NUMBER

890-7836-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



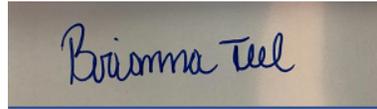
Eurofins Carlsbad

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
3/31/2025 4:39:00 PM

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

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Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-7836-1
SDG: Eddy, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
SDG: Eddy, NM

Qualifiers

GC 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.

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: RDU 67-68 Tank Battery

Job ID: 890-7836-1

Job ID: 890-7836-1

Eurofins Carlsbad

Job Narrative 890-7836-1

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 3/24/2025 8:13 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 1 (890-7836-1), HA - 1 (890-7836-2), HA - 1 (890-7836-3), HA - 1 (890-7836-4), HA - 2 (890-7836-5), HA - 2 (890-7836-6), HA - 2 (890-7836-7), HA - 2 (890-7836-8), HA - 2 (890-7836-9), HA - 3 (890-7836-10), HA - 3 (890-7836-11), HA - 3 (890-7836-12), HA - 3 (890-7836-13), HA - 3 (890-7836-14), HA - 3 (890-7836-15), HA - 4 (890-7836-16), HA - 4 (890-7836-17), HA - 4 (890-7836-18), HA - 4 (890-7836-19), HA - 4 (890-7836-20), HA - 4 (890-7836-21), HA - 5 (890-7836-22), HA - 5 (890-7836-23), HA - 5 (890-7836-24), HA - 5 (890-7836-25), HA - 5 (890-7836-26), HA - 5 (890-7836-27), HA - 6 (890-7836-28), HA - 6 (890-7836-29), HA - 6 (890-7836-30), HA - 6 (890-7836-31), HA - 6 (890-7836-32) and HA - 6 (890-7836-33).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-7836-1), HA - 2 (890-7836-5), HA - 3 (890-7836-10), HA - 3 (890-7836-11), HA - 4 (890-7836-16) and HA - 4 (890-7836-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-105910 and analytical batch 880-106008 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: HA - 5 (890-7836-22). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-106008 recovered under the lower control limit for Ethylbenzene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-7836-1), HA - 2 (890-7836-5), HA - 3 (890-7836-10), HA - 4 (890-7836-16) and HA - 5 (890-7836-22). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: HA - 5 (890-7836-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: HA - 6 (890-7836-28). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 3 (890-7836-11) and HA - 4 (890-7836-17). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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Case Narrative

Client: Earth Systems Response and Restoration
Project: RDU 67-68 Tank Battery

Job ID: 890-7836-1

Job ID: 890-7836-1 (Continued)

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Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-7836-1), HA - 2 (890-7836-5) and HA - 4 (890-7836-16). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-7836-A-2-D MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-106065 and analytical batch 880-106122 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-106065/2-A), (LCSD 880-106065/3-A) and (890-7844-A-56-B MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: HA - 3 (890-7836-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 5 (890-7836-22) and HA - 6 (890-7836-28). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 5 (890-7836-23), HA - 5 (890-7836-24), HA - 5 (890-7836-26), HA - 5 (890-7836-27), HA - 6 (890-7836-29), HA - 6 (890-7836-30), HA - 6 (890-7836-31), HA - 6 (890-7836-32), HA - 6 (890-7836-33), (LCS 880-105923/2-A) and (LCSD 880-105923/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-7836-A-21-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-105923 and analytical batch 880-106259 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-105997 and analytical batch 880-106026 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-1

Date Collected: 03/21/25 08:40

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.50		0.101		mg/Kg		03/24/25 14:49	03/25/25 14:59	50
Toluene	18.5		0.496		mg/Kg		03/26/25 08:49	03/26/25 14:04	250
Ethylbenzene	11.9		0.496		mg/Kg		03/26/25 08:49	03/26/25 14:04	250
m-Xylene & p-Xylene	48.1		0.992		mg/Kg		03/26/25 08:49	03/26/25 14:04	250
o-Xylene	16.9		0.496		mg/Kg		03/26/25 08:49	03/26/25 14:04	250
Xylenes, Total	65.0		0.992		mg/Kg		03/26/25 08:49	03/26/25 14:04	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1022	S1+	70 - 130	03/24/25 14:49	03/25/25 14:59	50
1,4-Difluorobenzene (Surr)	80		70 - 130	03/24/25 14:49	03/25/25 14:59	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	96.9		0.992		mg/Kg			03/26/25 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	27500		997		mg/Kg			03/25/25 11:08	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	6950		997		mg/Kg		03/24/25 16:12	03/25/25 11:08	20
Diesel Range Organics (Over C10-C28)	20500		997		mg/Kg		03/24/25 16:12	03/25/25 11:08	20
Oil Range Organics (Over C28-C36)	<997	U	997		mg/Kg		03/24/25 16:12	03/25/25 11:08	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	375	S1+	70 - 130	03/24/25 16:12	03/25/25 11:08	20
o-Terphenyl	621	S1+	70 - 130	03/24/25 16:12	03/25/25 11:08	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5220		99.8		mg/Kg			03/26/25 06:20	10

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-2

Date Collected: 03/21/25 08:45

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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		03/24/25 14:49	03/25/25 12:15	1
Toluene	0.00239		0.00199		mg/Kg		03/24/25 14:49	03/25/25 12:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:49	03/25/25 12:15	1
m-Xylene & p-Xylene	0.00507		0.00398		mg/Kg		03/24/25 14:49	03/25/25 12:15	1
o-Xylene	0.00242		0.00199		mg/Kg		03/24/25 14:49	03/25/25 12:15	1
Xylenes, Total	0.00749		0.00398		mg/Kg		03/24/25 14:49	03/25/25 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	03/24/25 14:49	03/25/25 12:15	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-2

Date Collected: 03/21/25 08:45

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	03/24/25 14:49	03/25/25 12:15	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00988		0.00398		mg/Kg			03/25/25 12:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/25/25 10:18	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	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 10:18	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 10:18	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	03/24/25 16:12	03/25/25 10:18	1
o-Terphenyl	103		70 - 130	03/24/25 16:12	03/25/25 10:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1910		49.8		mg/Kg			03/26/25 06:26	5

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-3

Date Collected: 03/21/25 08:50

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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		03/24/25 14:49	03/25/25 12:36	1
Toluene	0.00399		0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	03/24/25 14:49	03/25/25 12:36	1
1,4-Difluorobenzene (Surr)	100		70 - 130	03/24/25 14:49	03/25/25 12:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00399		0.00399		mg/Kg			03/25/25 12:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/25/25 11:25	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-3

Date Collected: 03/21/25 08:50

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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		03/24/25 16:12	03/25/25 11:25	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 11:25	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 11:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				03/24/25 16:12	03/25/25 11:25	1
o-Terphenyl	116		70 - 130				03/24/25 16:12	03/25/25 11:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	474		10.0		mg/Kg			03/26/25 06:32	1

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-4

Date Collected: 03/21/25 08:55

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 14:49	03/25/25 12:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:56	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/24/25 14:49	03/25/25 12:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 12:56	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/24/25 14:49	03/25/25 12:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130				03/24/25 14:49	03/25/25 12:56	1
1,4-Difluorobenzene (Surr)	90		70 - 130				03/24/25 14:49	03/25/25 12:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/25/25 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/25/25 11:42	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		03/24/25 16:12	03/25/25 11:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 11:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 11:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130				03/24/25 16:12	03/25/25 11:42	1
o-Terphenyl	117		70 - 130				03/24/25 16:12	03/25/25 11:42	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1
 Date Collected: 03/21/25 08:55
 Date Received: 03/24/25 08:13
 Sample Depth: 3

Lab Sample ID: 890-7836-4
 Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	416		9.94		mg/Kg			03/26/25 06:38	1

Client Sample ID: HA - 2
 Date Collected: 03/21/25 09:00
 Date Received: 03/24/25 08:13
 Sample Depth: 0.5

Lab Sample ID: 890-7836-5
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	5.27		0.0998		mg/Kg		03/24/25 14:49	03/25/25 15:20	50
Toluene	31.7		0.498		mg/Kg		03/26/25 08:49	03/26/25 14:24	250
Ethylbenzene	13.0		0.0998		mg/Kg		03/24/25 14:49	03/25/25 15:20	50
m-Xylene & p-Xylene	70.5		0.996		mg/Kg		03/26/25 08:49	03/26/25 14:24	250
o-Xylene	23.1		0.498		mg/Kg		03/26/25 08:49	03/26/25 14:24	250
Xylenes, Total	93.6		0.996		mg/Kg		03/26/25 08:49	03/26/25 14:24	250
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	620	S1+	70 - 130				03/24/25 14:49	03/25/25 15:20	50
1,4-Difluorobenzene (Surr)	80		70 - 130				03/24/25 14:49	03/25/25 15:20	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	144		0.996		mg/Kg			03/26/25 14:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	49700		997		mg/Kg			03/25/25 11:58	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	13800		997		mg/Kg		03/24/25 16:12	03/25/25 11:58	20
Diesel Range Organics (Over C10-C28)	35900		997		mg/Kg		03/24/25 16:12	03/25/25 11:58	20
Oil Range Organics (Over C28-C36)	<997	U	997		mg/Kg		03/24/25 16:12	03/25/25 11:58	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	694	S1+	70 - 130				03/24/25 16:12	03/25/25 11:58	20
o-Terphenyl	983	S1+	70 - 130				03/24/25 16:12	03/25/25 11:58	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7960		99.2		mg/Kg			03/26/25 06:43	10

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-6

Date Collected: 03/21/25 09:05

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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		03/24/25 14:49	03/25/25 13:17	1
Toluene	0.00504		0.00198		mg/Kg		03/24/25 14:49	03/25/25 13:17	1
Ethylbenzene	0.00207		0.00198		mg/Kg		03/24/25 14:49	03/25/25 13:17	1
m-Xylene & p-Xylene	0.0116		0.00396		mg/Kg		03/24/25 14:49	03/25/25 13:17	1
o-Xylene	0.00597		0.00198		mg/Kg		03/24/25 14:49	03/25/25 13:17	1
Xylenes, Total	0.0176		0.00396		mg/Kg		03/24/25 14:49	03/25/25 13:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				03/24/25 14:49	03/25/25 13:17	1
1,4-Difluorobenzene (Surr)	97		70 - 130				03/24/25 14:49	03/25/25 13:17	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0247		0.00396		mg/Kg			03/25/25 13:17	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			03/25/25 12:15	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		03/24/25 16:12	03/25/25 12:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:12	03/25/25 12:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:12	03/25/25 12:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				03/24/25 16:12	03/25/25 12:15	1
o-Terphenyl	111		70 - 130				03/24/25 16:12	03/25/25 12:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3920		50.2		mg/Kg			03/26/25 07:01	5

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-7

Date Collected: 03/21/25 09:10

Matrix: Solid

Date Received: 03/24/25 08:13

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		03/24/25 14:49	03/25/25 13:37	1
Toluene	0.00366		0.00199		mg/Kg		03/24/25 14:49	03/25/25 13:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:49	03/25/25 13:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:49	03/25/25 13:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:49	03/25/25 13:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:49	03/25/25 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				03/24/25 14:49	03/25/25 13:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-7

Date Collected: 03/21/25 09:10

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	03/24/25 14:49	03/25/25 13:37	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			03/25/25 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/25/25 12:31	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	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 12:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 12:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 12:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	03/24/25 16:12	03/25/25 12:31	1
o-Terphenyl	117		70 - 130	03/24/25 16:12	03/25/25 12:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3750		49.8		mg/Kg			03/26/25 07:06	5

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-8

Date Collected: 03/21/25 09:15

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 14:49	03/25/25 13:58	1
Toluene	0.00241		0.00200		mg/Kg		03/24/25 14:49	03/25/25 13:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 13:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/24/25 14:49	03/25/25 13:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 13:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/24/25 14:49	03/25/25 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/24/25 14:49	03/25/25 13:58	1
1,4-Difluorobenzene (Surr)	98		70 - 130	03/24/25 14:49	03/25/25 13:58	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			03/25/25 13:58	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			03/25/25 12:48	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-8

Date Collected: 03/21/25 09:15

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 16:12	03/25/25 12:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 12:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				03/24/25 16:12	03/25/25 12:48	1
o-Terphenyl	108		70 - 130				03/24/25 16:12	03/25/25 12:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2480		49.9		mg/Kg			03/26/25 07:24	5

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-9

Date Collected: 03/21/25 09:20

Matrix: Solid

Date Received: 03/24/25 08:13

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		03/24/25 14:49	03/25/25 14:18	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/24/25 14:49	03/25/25 14:18	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/24/25 14:49	03/25/25 14:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/24/25 14:49	03/25/25 14:18	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/24/25 14:49	03/25/25 14:18	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/24/25 14:49	03/25/25 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				03/24/25 14:49	03/25/25 14:18	1
1,4-Difluorobenzene (Surr)	94		70 - 130				03/24/25 14:49	03/25/25 14:18	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			03/25/25 14:18	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			03/25/25 13:05	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	<49.8	U	49.8		mg/Kg		03/24/25 16:12	03/25/25 13:05	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:12	03/25/25 13:05	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:12	03/25/25 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130				03/24/25 16:12	03/25/25 13:05	1
o-Terphenyl	116		70 - 130				03/24/25 16:12	03/25/25 13:05	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-9

Date Collected: 03/21/25 09:20

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	619		10.0		mg/Kg			03/26/25 07:29	1

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-10

Date Collected: 03/21/25 09:25

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.392		0.00200		mg/Kg		03/24/25 14:49	03/25/25 14:39	1
Toluene	40.4		0.498		mg/Kg		03/26/25 08:49	03/26/25 14:45	250
Ethylbenzene	24.1		0.498		mg/Kg		03/26/25 08:49	03/26/25 14:45	250
m-Xylene & p-Xylene	0.452		0.00401		mg/Kg		03/24/25 14:49	03/25/25 14:39	1
o-Xylene	34.4		0.498		mg/Kg		03/26/25 08:49	03/26/25 14:45	250
Xylenes, Total	141		0.996		mg/Kg		03/26/25 08:49	03/26/25 14:45	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1524	S1+	70 - 130	03/24/25 14:49	03/25/25 14:39	1
1,4-Difluorobenzene (Surr)	115		70 - 130	03/24/25 14:49	03/25/25 14:39	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	99.7		0.498		mg/Kg			03/26/25 14:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	14500		1010		mg/Kg			03/26/25 22:21	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	3910		1010		mg/Kg		03/26/25 07:04	03/26/25 22:21	20
Diesel Range Organics (Over C10-C28)	10600		1010		mg/Kg		03/26/25 07:04	03/26/25 22:21	20
Oil Range Organics (Over C28-C36)	<1010	U	1010		mg/Kg		03/26/25 07:04	03/26/25 22:21	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	190	S1+	70 - 130	03/26/25 07:04	03/26/25 22:21	20
o-Terphenyl	274	S1+	70 - 130	03/26/25 07:04	03/26/25 22:21	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1360		49.7		mg/Kg			03/26/25 07:35	5

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-11

Date Collected: 03/21/25 09:30

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00227		0.00199		mg/Kg		03/24/25 14:49	03/25/25 16:54	1
Toluene	0.157		0.00199		mg/Kg		03/24/25 14:49	03/25/25 16:54	1
Ethylbenzene	0.208		0.00199		mg/Kg		03/24/25 14:49	03/25/25 16:54	1
m-Xylene & p-Xylene	0.689		0.00398		mg/Kg		03/24/25 14:49	03/25/25 16:54	1
o-Xylene	0.369		0.00199		mg/Kg		03/24/25 14:49	03/25/25 16:54	1
Xylenes, Total	1.06		0.00398		mg/Kg		03/24/25 14:49	03/25/25 16:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	369	S1+	70 - 130	03/24/25 14:49	03/25/25 16:54	1
1,4-Difluorobenzene (Surr)	107		70 - 130	03/24/25 14:49	03/25/25 16:54	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.43		0.00398		mg/Kg			03/25/25 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1580		50.0		mg/Kg			03/25/25 16:42	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	208		50.0		mg/Kg		03/24/25 16:12	03/25/25 16:42	1
Diesel Range Organics (Over C10-C28)	1370		50.0		mg/Kg		03/24/25 16:12	03/25/25 16:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	03/24/25 16:12	03/25/25 16:42	1
o-Terphenyl	131	S1+	70 - 130	03/24/25 16:12	03/25/25 16:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	905		49.8		mg/Kg			03/26/25 07:41	5

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-12

Date Collected: 03/21/25 09:35

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00657		0.00198		mg/Kg		03/24/25 14:49	03/25/25 17:14	1
Toluene	0.00639		0.00198		mg/Kg		03/24/25 14:49	03/25/25 17:14	1
Ethylbenzene	0.00422		0.00198		mg/Kg		03/24/25 14:49	03/25/25 17:14	1
m-Xylene & p-Xylene	0.0218		0.00396		mg/Kg		03/24/25 14:49	03/25/25 17:14	1
o-Xylene	0.0161		0.00198		mg/Kg		03/24/25 14:49	03/25/25 17:14	1
Xylenes, Total	0.0379		0.00396		mg/Kg		03/24/25 14:49	03/25/25 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	03/24/25 14:49	03/25/25 17:14	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-12

Date Collected: 03/21/25 09:35

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	03/24/25 14:49	03/25/25 17:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0551		0.00396		mg/Kg			03/25/25 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	<49.7	U	49.7		mg/Kg			03/25/25 16:58	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	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 16:58	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 16:58	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/24/25 16:12	03/25/25 16:58	1
o-Terphenyl	118		70 - 130	03/24/25 16:12	03/25/25 16:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1070		9.92		mg/Kg			03/26/25 07:46	1

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-13

Date Collected: 03/21/25 09:40

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 14:49	03/25/25 17:35	1
Toluene	0.00468		0.00199		mg/Kg		03/24/25 14:49	03/25/25 17:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:49	03/25/25 17:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:49	03/25/25 17:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:49	03/25/25 17:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:49	03/25/25 17:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	03/24/25 14:49	03/25/25 17:35	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/24/25 14:49	03/25/25 17:35	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00468		0.00398		mg/Kg			03/25/25 17:35	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			03/25/25 17:14	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-13

Date Collected: 03/21/25 09:40

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 16:12	03/25/25 17:14	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 17:14	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				03/24/25 16:12	03/25/25 17:14	1
o-Terphenyl	108		70 - 130				03/24/25 16:12	03/25/25 17:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2000		50.2		mg/Kg			03/26/25 07:52	5

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-14

Date Collected: 03/21/25 09:45

Matrix: Solid

Date Received: 03/24/25 08:13

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		03/24/25 14:49	03/25/25 17:55	1
Toluene	0.00253		0.00200		mg/Kg		03/24/25 14:49	03/25/25 17:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 17:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 17:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 17:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 17:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				03/24/25 14:49	03/25/25 17:55	1
1,4-Difluorobenzene (Surr)	96		70 - 130				03/24/25 14:49	03/25/25 17:55	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			03/25/25 17:55	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			03/25/25 17:30	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		03/24/25 16:12	03/25/25 17:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/24/25 16:12	03/25/25 17:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/25 16:12	03/25/25 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				03/24/25 16:12	03/25/25 17:30	1
o-Terphenyl	107		70 - 130				03/24/25 16:12	03/25/25 17:30	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-14

Date Collected: 03/21/25 09:45

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2210		50.2		mg/Kg			03/26/25 07:58	5

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-15

Date Collected: 03/21/25 09:50

Matrix: Solid

Date Received: 03/24/25 08:13

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		03/24/25 14:49	03/25/25 18:16	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 18:16	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 18:16	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/24/25 14:49	03/25/25 18:16	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 18:16	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/24/25 14:49	03/25/25 18:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				03/24/25 14:49	03/25/25 18:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130				03/24/25 14:49	03/25/25 18:16	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/25/25 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/25/25 17:46	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		03/24/25 16:12	03/25/25 17:46	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 17:46	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				03/24/25 16:12	03/25/25 17:46	1
o-Terphenyl	108		70 - 130				03/24/25 16:12	03/25/25 17:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		9.92		mg/Kg			03/26/25 23:10	1

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-16

Date Collected: 03/21/25 09:55

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.162		0.00200		mg/Kg		03/24/25 14:49	03/25/25 18:36	1
Toluene	12.9		0.495		mg/Kg		03/26/25 08:49	03/26/25 15:05	250
Ethylbenzene	0.0912		0.00200		mg/Kg		03/24/25 14:49	03/25/25 18:36	1
m-Xylene & p-Xylene	36.8		0.990		mg/Kg		03/26/25 08:49	03/26/25 15:05	250
o-Xylene	15.0		0.495		mg/Kg		03/26/25 08:49	03/26/25 15:05	250
Xylenes, Total	51.8		0.990		mg/Kg		03/26/25 08:49	03/26/25 15:05	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	585	S1+	70 - 130	03/24/25 14:49	03/25/25 18:36	1
1,4-Difluorobenzene (Surr)	80		70 - 130	03/24/25 14:49	03/25/25 18:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	65.0		0.990		mg/Kg			03/26/25 15:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19500		496		mg/Kg			03/25/25 18:03	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	4340		496		mg/Kg		03/24/25 16:12	03/25/25 18:03	10
Diesel Range Organics (Over C10-C28)	15200		496		mg/Kg		03/24/25 16:12	03/25/25 18:03	10
Oil Range Organics (Over C28-C36)	<496	U	496		mg/Kg		03/24/25 16:12	03/25/25 18:03	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	253	S1+	70 - 130	03/24/25 16:12	03/25/25 18:03	10
o-Terphenyl	446	S1+	70 - 130	03/24/25 16:12	03/25/25 18:03	10

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		50.1		mg/Kg			03/26/25 23:32	5

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-17

Date Collected: 03/21/25 10:00

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00660		0.00198		mg/Kg		03/24/25 14:49	03/25/25 18:57	1
Toluene	0.357		0.00198		mg/Kg		03/24/25 14:49	03/25/25 18:57	1
Ethylbenzene	0.273		0.00198		mg/Kg		03/24/25 14:49	03/25/25 18:57	1
m-Xylene & p-Xylene	2.90		1.00		mg/Kg		03/26/25 08:49	03/26/25 15:26	250
o-Xylene	0.981		0.502		mg/Kg		03/26/25 08:49	03/26/25 15:26	250
Xylenes, Total	3.88		1.00		mg/Kg		03/26/25 08:49	03/26/25 15:26	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	402	S1+	70 - 130	03/24/25 14:49	03/25/25 18:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-17

Date Collected: 03/21/25 10:00

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	118		70 - 130	03/24/25 14:49	03/25/25 18:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	4.52		1.00		mg/Kg			03/26/25 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3270		49.7		mg/Kg			03/25/25 18:19	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	311		49.7		mg/Kg		03/24/25 16:12	03/25/25 18:19	1
Diesel Range Organics (Over C10-C28)	2960		49.7		mg/Kg		03/24/25 16:12	03/25/25 18:19	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 18:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	03/24/25 16:12	03/25/25 18:19	1
o-Terphenyl	163	S1+	70 - 130	03/24/25 16:12	03/25/25 18:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1230		49.8		mg/Kg			03/26/25 23:40	5

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-18

Date Collected: 03/21/25 10:05

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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		03/26/25 08:49	03/26/25 13:43	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/26/25 08:49	03/26/25 13:43	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/26/25 08:49	03/26/25 13:43	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/26/25 08:49	03/26/25 13:43	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/26/25 08:49	03/26/25 13:43	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/26/25 08:49	03/26/25 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/26/25 08:49	03/26/25 13:43	1
1,4-Difluorobenzene (Surr)	90		70 - 130	03/26/25 08:49	03/26/25 13:43	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			03/26/25 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/25/25 18:35	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-18

Date Collected: 03/21/25 10:05

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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		03/24/25 16:12	03/25/25 18:35	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 18:35	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:12	03/25/25 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				03/24/25 16:12	03/25/25 18:35	1
o-Terphenyl	119		70 - 130				03/24/25 16:12	03/25/25 18:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	196		9.92		mg/Kg			03/26/25 23:47	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-19

Date Collected: 03/21/25 10:10

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 14:49	03/25/25 19:38	1
Toluene	0.00269		0.00200		mg/Kg		03/24/25 14:49	03/25/25 19:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 19:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 19:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 19:38	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 19:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				03/24/25 14:49	03/25/25 19:38	1
1,4-Difluorobenzene (Surr)	98		70 - 130				03/24/25 14:49	03/25/25 19:38	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			03/25/25 19:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/25/25 18:52	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		03/24/25 16:12	03/25/25 18:52	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 18:52	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:12	03/25/25 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130				03/24/25 16:12	03/25/25 18:52	1
o-Terphenyl	116		70 - 130				03/24/25 16:12	03/25/25 18:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-19

Date Collected: 03/21/25 10:10

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	569		10.1		mg/Kg			03/26/25 23:55	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-20

Date Collected: 03/21/25 10:15

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 4

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		03/24/25 14:49	03/25/25 19:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:49	03/25/25 19:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:49	03/25/25 19:58	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/24/25 14:49	03/25/25 19:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:49	03/25/25 19:58	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/24/25 14:49	03/25/25 19:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/24/25 14:49	03/25/25 19:58	1
1,4-Difluorobenzene (Surr)	95		70 - 130				03/24/25 14:49	03/25/25 19:58	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			03/25/25 19:58	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			03/25/25 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 19:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 19:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 19:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				03/24/25 16:12	03/25/25 19:08	1
o-Terphenyl	114		70 - 130				03/24/25 16:12	03/25/25 19:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	402		9.94		mg/Kg			03/27/25 00:17	1

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-21

Date Collected: 03/21/25 10:20

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 6

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		03/24/25 14:52	03/25/25 18:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/24/25 14:52	03/25/25 18:47	1
Ethylbenzene	<0.00202	U F1	0.00202		mg/Kg		03/24/25 14:52	03/25/25 18:47	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/24/25 14:52	03/25/25 18:47	1
o-Xylene	<0.00202	U F1	0.00202		mg/Kg		03/24/25 14:52	03/25/25 18:47	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/24/25 14:52	03/25/25 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/24/25 14:52	03/25/25 18:47	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/24/25 14:52	03/25/25 18:47	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			03/25/25 18:47	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			03/28/25 05:28	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		03/24/25 16:20	03/28/25 05:28	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 05:28	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	03/24/25 16:20	03/28/25 05:28	1
o-Terphenyl	129		70 - 130	03/24/25 16:20	03/28/25 05:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	988		9.92		mg/Kg			03/27/25 00:24	1

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-22

Date Collected: 03/21/25 10:25

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.163		0.00199		mg/Kg		03/24/25 14:52	03/25/25 19:08	1
Toluene	13.8		0.497		mg/Kg		03/26/25 08:49	03/26/25 15:46	250
Ethylbenzene	10.1		0.497		mg/Kg		03/26/25 08:49	03/26/25 15:46	250
m-Xylene & p-Xylene	44.6		0.994		mg/Kg		03/26/25 08:49	03/26/25 15:46	250
o-Xylene	15.1		0.497		mg/Kg		03/26/25 08:49	03/26/25 15:46	250
Xylenes, Total	59.7		0.994		mg/Kg		03/26/25 08:49	03/26/25 15:46	250

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1092	S1+	70 - 130	03/24/25 14:52	03/25/25 19:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-22

Date Collected: 03/21/25 10:25

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	03/24/25 14:52	03/25/25 19:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	83.8		0.994		mg/Kg			03/26/25 15:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	31900		992		mg/Kg			03/28/25 06:17	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	5670		992		mg/Kg		03/24/25 16:20	03/28/25 06:17	20
Diesel Range Organics (Over C10-C28)	26200		992		mg/Kg		03/24/25 16:20	03/28/25 06:17	20
Oil Range Organics (Over C28-C36)	<992	U	992		mg/Kg		03/24/25 16:20	03/28/25 06:17	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	394	S1+	70 - 130	03/24/25 16:20	03/28/25 06:17	20
o-Terphenyl	792	S1+	70 - 130	03/24/25 16:20	03/28/25 06:17	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23000		502		mg/Kg			03/27/25 00:32	50

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-23

Date Collected: 03/21/25 10:30

Matrix: Solid

Date Received: 03/24/25 08:13

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		03/26/25 08:49	03/26/25 17:20	1
Toluene	0.0163		0.00200		mg/Kg		03/26/25 08:49	03/26/25 17:20	1
Ethylbenzene	0.0400		0.00200		mg/Kg		03/26/25 08:49	03/26/25 17:20	1
m-Xylene & p-Xylene	0.223		0.00401		mg/Kg		03/26/25 08:49	03/26/25 17:20	1
o-Xylene	0.0943		0.00200		mg/Kg		03/26/25 08:49	03/26/25 17:20	1
Xylenes, Total	0.317		0.00401		mg/Kg		03/26/25 08:49	03/26/25 17:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	178	S1+	70 - 130	03/26/25 08:49	03/26/25 17:20	1
1,4-Difluorobenzene (Surr)	112		70 - 130	03/26/25 08:49	03/26/25 17:20	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.374		0.00401		mg/Kg			03/26/25 17:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1210		49.7		mg/Kg			03/28/25 06:33	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-23

Date Collected: 03/21/25 10:30

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 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	83.8		49.7		mg/Kg		03/24/25 16:20	03/28/25 06:33	1
Diesel Range Organics (Over C10-C28)	1130		49.7		mg/Kg		03/24/25 16:20	03/28/25 06:33	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 06:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	03/24/25 16:20	03/28/25 06:33	1
o-Terphenyl	146	S1+	70 - 130	03/24/25 16:20	03/28/25 06:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8860		201		mg/Kg			03/27/25 00:39	20

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-24

Date Collected: 03/21/25 10:35

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

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		03/24/25 14:52	03/25/25 19:48	1
Toluene	0.00933		0.00200		mg/Kg		03/24/25 14:52	03/25/25 19:48	1
Ethylbenzene	0.00254		0.00200		mg/Kg		03/24/25 14:52	03/25/25 19:48	1
m-Xylene & p-Xylene	0.0133		0.00401		mg/Kg		03/24/25 14:52	03/25/25 19:48	1
o-Xylene	0.00632		0.00200		mg/Kg		03/24/25 14:52	03/25/25 19:48	1
Xylenes, Total	0.0196		0.00401		mg/Kg		03/24/25 14:52	03/25/25 19:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	03/24/25 14:52	03/25/25 19:48	1
1,4-Difluorobenzene (Surr)	101		70 - 130	03/24/25 14:52	03/25/25 19:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0315		0.00401		mg/Kg			03/25/25 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/28/25 06:50	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		03/24/25 16:20	03/28/25 06:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 06:50	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 06:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	03/24/25 16:20	03/28/25 06:50	1
o-Terphenyl	133	S1+	70 - 130	03/24/25 16:20	03/28/25 06:50	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-24

Date Collected: 03/21/25 10:35

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10300		100		mg/Kg			03/27/25 00:47	10

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-25

Date Collected: 03/21/25 10:40

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 3

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		03/24/25 14:52	03/25/25 20:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 20:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 20:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 20:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 20:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 20:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/24/25 14:52	03/25/25 20:09	1
1,4-Difluorobenzene (Surr)	95		70 - 130				03/24/25 14:52	03/25/25 20:09	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			03/25/25 20:09	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			03/28/25 07:05	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	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 07:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 07:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 07:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				03/24/25 16:20	03/28/25 07:05	1
o-Terphenyl	128		70 - 130				03/24/25 16:20	03/28/25 07:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2780	F1	49.8		mg/Kg			03/27/25 00:54	5

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-26

Date Collected: 03/21/25 10:45

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 4

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		03/24/25 14:52	03/25/25 20:29	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 20:29	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 20:29	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/25/25 20:29	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 20:29	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/25/25 20:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/24/25 14:52	03/25/25 20:29	1
1,4-Difluorobenzene (Surr)	89		70 - 130				03/24/25 14:52	03/25/25 20:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/25/25 20:29	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			03/28/25 07:22	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		03/24/25 16:20	03/28/25 07:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 07:22	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 07:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130				03/24/25 16:20	03/28/25 07:22	1
o-Terphenyl	131	S1+	70 - 130				03/24/25 16:20	03/28/25 07:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		9.92		mg/Kg			03/27/25 01:16	1

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-27

Date Collected: 03/21/25 10:50

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 6

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		03/24/25 14:52	03/25/25 20:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 20:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 20:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/25/25 20:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 20:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/25/25 20:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				03/24/25 14:52	03/25/25 20:50	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-27

Date Collected: 03/21/25 10:50

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93		70 - 130	03/24/25 14:52	03/25/25 20:50	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			03/25/25 20:50	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			03/28/25 07:38	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	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 07:38	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 07:38	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 07:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	03/24/25 16:20	03/28/25 07:38	1
o-Terphenyl	132	S1+	70 - 130	03/24/25 16:20	03/28/25 07:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	254		10.0		mg/Kg			03/27/25 01:24	1

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-28

Date Collected: 03/21/25 10:55

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.27		0.202		mg/Kg		03/28/25 14:07	03/31/25 17:03	100
Toluene	36.6		0.202		mg/Kg		03/28/25 14:07	03/31/25 17:03	100
Ethylbenzene	21.2		0.202		mg/Kg		03/28/25 14:07	03/31/25 17:03	100
m-Xylene & p-Xylene	67.8		0.403		mg/Kg		03/28/25 14:07	03/31/25 17:03	100
o-Xylene	29.7		0.202		mg/Kg		03/28/25 14:07	03/31/25 17:03	100
Xylenes, Total	97.5		0.403		mg/Kg		03/28/25 14:07	03/31/25 17:03	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	371	S1+	70 - 130	03/28/25 14:07	03/31/25 17:03	100
1,4-Difluorobenzene (Surr)	78		70 - 130	03/28/25 14:07	03/31/25 17:03	100

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	158		0.403		mg/Kg			03/31/25 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60100		997		mg/Kg			03/28/25 07:53	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-28

Date Collected: 03/21/25 10:55

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 0.5

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	12900		997		mg/Kg		03/24/25 16:20	03/28/25 07:53	20
Diesel Range Organics (Over C10-C28)	47200		997		mg/Kg		03/24/25 16:20	03/28/25 07:53	20
Oil Range Organics (Over C28-C36)	<997	U	997		mg/Kg		03/24/25 16:20	03/28/25 07:53	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	756	S1+	70 - 130				03/24/25 16:20	03/28/25 07:53	20
o-Terphenyl	1333	S1+	70 - 130				03/24/25 16:20	03/28/25 07:53	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17200		200		mg/Kg			03/27/25 01:46	20

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-29

Date Collected: 03/21/25 11:00

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 1

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		03/24/25 14:52	03/25/25 21:31	1
Toluene	0.0254		0.00201		mg/Kg		03/24/25 14:52	03/25/25 21:31	1
Ethylbenzene	0.0187		0.00201		mg/Kg		03/24/25 14:52	03/25/25 21:31	1
m-Xylene & p-Xylene	0.0732		0.00402		mg/Kg		03/24/25 14:52	03/25/25 21:31	1
o-Xylene	0.0275		0.00201		mg/Kg		03/24/25 14:52	03/25/25 21:31	1
Xylenes, Total	0.101		0.00402		mg/Kg		03/24/25 14:52	03/25/25 21:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130				03/24/25 14:52	03/25/25 21:31	1
1,4-Difluorobenzene (Surr)	99		70 - 130				03/24/25 14:52	03/25/25 21:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.145		0.00402		mg/Kg			03/25/25 21:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	148		49.7		mg/Kg			03/28/25 08:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 08:10	1
Diesel Range Organics (Over C10-C28)	148		49.7		mg/Kg		03/24/25 16:20	03/28/25 08:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 08:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				03/24/25 16:20	03/28/25 08:10	1
o-Terphenyl	140	S1+	70 - 130				03/24/25 16:20	03/28/25 08:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6
 Date Collected: 03/21/25 11:00
 Date Received: 03/24/25 08:13
 Sample Depth: 1

Lab Sample ID: 890-7836-29
 Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4770		99.4		mg/Kg			03/27/25 01:53	10

Client Sample ID: HA - 6
 Date Collected: 03/21/25 11:05
 Date Received: 03/24/25 08:13
 Sample Depth: 2

Lab Sample ID: 890-7836-30
 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		03/24/25 14:52	03/25/25 21:51	1
Toluene	0.00249		0.00200		mg/Kg		03/24/25 14:52	03/25/25 21:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 21:51	1
m-Xylene & p-Xylene	0.0151		0.00401		mg/Kg		03/24/25 14:52	03/25/25 21:51	1
o-Xylene	0.00800		0.00200		mg/Kg		03/24/25 14:52	03/25/25 21:51	1
Xylenes, Total	0.0231		0.00401		mg/Kg		03/24/25 14:52	03/25/25 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				03/24/25 14:52	03/25/25 21:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130				03/24/25 14:52	03/25/25 21:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0256		0.00401		mg/Kg			03/25/25 21:51	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			03/28/25 08:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 08:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 08:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 08:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				03/24/25 16:20	03/28/25 08:25	1
o-Terphenyl	132	S1+	70 - 130				03/24/25 16:20	03/28/25 08:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270		49.9		mg/Kg			03/27/25 02:01	5

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6
Date Collected: 03/21/25 11:10
Date Received: 03/24/25 08:13
Sample Depth: 3

Lab Sample ID: 890-7836-31
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		03/24/25 14:52	03/25/25 23:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 23:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 23:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/25/25 23:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/25/25 23:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/25/25 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				03/24/25 14:52	03/25/25 23:25	1
1,4-Difluorobenzene (Surr)	94		70 - 130				03/24/25 14:52	03/25/25 23:25	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			03/25/25 23:25	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			03/28/25 08:57	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	<49.6	U	49.6		mg/Kg		03/24/25 16:20	03/28/25 08:57	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:20	03/28/25 08:57	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:20	03/28/25 08:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				03/24/25 16:20	03/28/25 08:57	1
o-Terphenyl	138	S1+	70 - 130				03/24/25 16:20	03/28/25 08:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1770		50.2		mg/Kg			03/27/25 02:08	5

Client Sample ID: HA - 6
Date Collected: 03/21/25 11:15
Date Received: 03/24/25 08:13
Sample Depth: 4

Lab Sample ID: 890-7836-32
Matrix: Solid

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		03/24/25 14:52	03/25/25 23:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 23:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 23:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/25/25 23:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/25/25 23:45	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/25/25 23:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				03/24/25 14:52	03/25/25 23:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-32

Date Collected: 03/21/25 11:15

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	03/24/25 14:52	03/25/25 23:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/25/25 23:45	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			03/28/25 09:14	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	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 09:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 09:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 09:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	03/24/25 16:20	03/28/25 09:14	1
o-Terphenyl	134	S1+	70 - 130	03/24/25 16:20	03/28/25 09:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1870		49.9		mg/Kg			03/27/25 02:15	5

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-33

Date Collected: 03/21/25 11:20

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 7

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		03/24/25 14:52	03/26/25 00:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 00:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 00:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/26/25 00:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 00:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/26/25 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/25 14:52	03/26/25 00:06	1
1,4-Difluorobenzene (Surr)	97		70 - 130	03/24/25 14:52	03/26/25 00:06	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			03/26/25 00:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/28/25 09:29	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-33

Date Collected: 03/21/25 11:20

Matrix: Solid

Date Received: 03/24/25 08:13

Sample Depth: 7

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		03/24/25 16:20	03/28/25 09:29	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 09:29	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 09:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	03/24/25 16:20	03/28/25 09:29	1
o-Terphenyl	139	S1+	70 - 130	03/24/25 16:20	03/28/25 09:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3320		49.8		mg/Kg			03/27/25 02:23	5

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, 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)
890-7836-1	HA - 1	1022 S1+	80
890-7836-2	HA - 1	107	97
890-7836-2 MS	HA - 1	110	101
890-7836-2 MSD	HA - 1	108	101
890-7836-3	HA - 1	111	100
890-7836-4	HA - 1	102	90
890-7836-5	HA - 2	620 S1+	80
890-7836-6	HA - 2	111	97
890-7836-7	HA - 2	109	96
890-7836-8	HA - 2	110	98
890-7836-9	HA - 2	108	94
890-7836-10	HA - 3	1524 S1+	115
890-7836-11	HA - 3	369 S1+	107
890-7836-12	HA - 3	130	99
890-7836-13	HA - 3	110	97
890-7836-14	HA - 3	108	96
890-7836-15	HA - 3	117	97
890-7836-16	HA - 4	585 S1+	80
890-7836-17	HA - 4	402 S1+	118
890-7836-18	HA - 4	100	90
890-7836-19	HA - 4	113	98
890-7836-20	HA - 4	107	95
890-7836-21	HA - 4	100	93
890-7836-21 MS	HA - 4	103	100
890-7836-21 MSD	HA - 4	100	97
890-7836-22	HA - 5	1092 S1+	104
890-7836-23	HA - 5	178 S1+	112
890-7836-24	HA - 5	121	101
890-7836-25	HA - 5	107	95
890-7836-26	HA - 5	107	89
890-7836-27	HA - 5	104	93
890-7836-28	HA - 6	371 S1+	78
890-7836-29	HA - 6	121	99
890-7836-30	HA - 6	108	98
890-7836-31	HA - 6	104	94
890-7836-32	HA - 6	104	95
890-7836-33	HA - 6	102	97
LCS 880-105909/1-A	Lab Control Sample	99	94
LCS 880-105910/1-A	Lab Control Sample	100	100
LCS 880-106086/1-A	Lab Control Sample	99	94
LCS 880-106349/1-A	Lab Control Sample	111	96
LCSD 880-105909/2-A	Lab Control Sample Dup	99	93
LCSD 880-105910/2-A	Lab Control Sample Dup	105	98
LCSD 880-106086/2-A	Lab Control Sample Dup	101	94
LCSD 880-106349/2-A	Lab Control Sample Dup	114	97
MB 880-105909/5-A	Method Blank	102	86
MB 880-105910/5-A	Method Blank	99	89
MB 880-106086/5-A	Method Blank	105	86
MB 880-106349/5-A	Method Blank	96	82

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Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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)
890-7836-1	HA - 1	375 S1+	621 S1+
890-7836-2	HA - 1	102	103
890-7836-2 MS	HA - 1	120	121
890-7836-2 MSD	HA - 1	145 S1+	123
890-7836-3	HA - 1	117	116
890-7836-4	HA - 1	120	117
890-7836-5	HA - 2	694 S1+	983 S1+
890-7836-6	HA - 2	116	111
890-7836-7	HA - 2	122	117
890-7836-8	HA - 2	112	108
890-7836-9	HA - 2	123	116
890-7836-10	HA - 3	190 S1+	274 S1+
890-7836-11	HA - 3	110	131 S1+
890-7836-12	HA - 3	113	118
890-7836-13	HA - 3	102	108
890-7836-14	HA - 3	102	107
890-7836-15	HA - 3	104	108
890-7836-16	HA - 4	253 S1+	446 S1+
890-7836-17	HA - 4	121	163 S1+
890-7836-18	HA - 4	115	119
890-7836-19	HA - 4	111	116
890-7836-20	HA - 4	110	114
890-7836-21	HA - 4	122	129
890-7836-21 MS	HA - 4	130	125
890-7836-21 MSD	HA - 4	133 S1+	128
890-7836-22	HA - 5	394 S1+	792 S1+
890-7836-23	HA - 5	122	146 S1+
890-7836-24	HA - 5	125	133 S1+
890-7836-25	HA - 5	119	128
890-7836-26	HA - 5	123	131 S1+
890-7836-27	HA - 5	126	132 S1+
890-7836-28	HA - 6	756 S1+	1333 S1+
890-7836-29	HA - 6	131 S1+	140 S1+
890-7836-30	HA - 6	126	132 S1+
890-7836-31	HA - 6	131 S1+	138 S1+
890-7836-32	HA - 6	127	134 S1+
890-7836-33	HA - 6	135 S1+	139 S1+
LCS 880-105920/2-A	Lab Control Sample	85	84
LCS 880-105923/2-A	Lab Control Sample	113	132 S1+
LCS 880-106065/2-A	Lab Control Sample	162 S1+	150 S1+
LCSD 880-105920/3-A	Lab Control Sample Dup	94	100
LCSD 880-105923/3-A	Lab Control Sample Dup	115	134 S1+
LCSD 880-106065/3-A	Lab Control Sample Dup	134 S1+	145 S1+
MB 880-105920/1-A	Method Blank	114	114
MB 880-105923/1-A	Method Blank	113	116
MB 880-106065/1-A	Method Blank	163 S1+	163 S1+

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
SDG: Eddy, NM

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-105909/5-A
 Matrix: Solid
 Analysis Batch: 105967

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 105909

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 11:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 11:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 11:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 11:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:49	03/25/25 11:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:49	03/25/25 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/25 14:49	03/25/25 11:54	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/24/25 14:49	03/25/25 11:54	1

Lab Sample ID: LCS 880-105909/1-A
 Matrix: Solid
 Analysis Batch: 105967

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 105909

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08763		mg/Kg		88	70 - 130
Toluene	0.100	0.08068		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.08355		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1743		mg/Kg		87	70 - 130
o-Xylene	0.100	0.08761		mg/Kg		88	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-105909/2-A
 Matrix: Solid
 Analysis Batch: 105967

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 105909

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09513		mg/Kg		95	70 - 130	8	35
Toluene	0.100	0.08709		mg/Kg		87	70 - 130	8	35
Ethylbenzene	0.100	0.09125		mg/Kg		91	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1892		mg/Kg		95	70 - 130	8	35
o-Xylene	0.100	0.09498		mg/Kg		95	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 890-7836-2 MS
 Matrix: Solid
 Analysis Batch: 105967

Client Sample ID: HA - 1
 Prep Type: Total/NA
 Prep Batch: 105909

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.1026		mg/Kg		103	70 - 130
Toluene	0.00239		0.100	0.09612		mg/Kg		94	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: 890-7836-2 MS

Client Sample ID: HA - 1

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 105967

Prep Batch: 105909

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.09677		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.00507		0.200	0.2032		mg/Kg		99	70 - 130
o-Xylene	0.00242		0.100	0.1019		mg/Kg		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-7836-2 MSD

Client Sample ID: HA - 1

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 105967

Prep Batch: 105909

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1003		mg/Kg		100	70 - 130	2	35
Toluene	0.00239		0.100	0.09382		mg/Kg		91	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09421		mg/Kg		94	70 - 130	3	35
m-Xylene & p-Xylene	0.00507		0.200	0.1978		mg/Kg		96	70 - 130	3	35
o-Xylene	0.00242		0.100	0.09925		mg/Kg		97	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-105910/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 106008

Prep Batch: 105910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 18:25	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/24/25 14:52	03/25/25 18:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/24/25 14:52	03/25/25 18:25	1

Lab Sample ID: LCS 880-105910/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 106008

Prep Batch: 105910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1036		mg/Kg		104	70 - 130
Toluene	0.100	0.09160		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08840		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1831		mg/Kg		92	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: LCS 880-105910/1-A
Matrix: Solid
Analysis Batch: 106008

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.08691		mg/Kg		87	70 - 130

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

Lab Sample ID: LCSD 880-105910/2-A
Matrix: Solid
Analysis Batch: 106008

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 105910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09825		mg/Kg		98	70 - 130	5	35
Toluene	0.100	0.09029		mg/Kg		90	70 - 130	1	35
Ethylbenzene	0.100	0.08906		mg/Kg		89	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1860		mg/Kg		93	70 - 130	2	35
o-Xylene	0.100	0.08817		mg/Kg		88	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-7836-21 MS
Matrix: Solid
Analysis Batch: 106008

Client Sample ID: HA - 4
Prep Type: Total/NA
Prep Batch: 105910

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.07816		mg/Kg		78	70 - 130
Toluene	<0.00202	U	0.100	0.07147		mg/Kg		71	70 - 130
Ethylbenzene	<0.00202	U F1	0.100	0.06883	F1	mg/Kg		69	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1455		mg/Kg		73	70 - 130
o-Xylene	<0.00202	U F1	0.100	0.06942	F1	mg/Kg		69	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-7836-21 MSD
Matrix: Solid
Analysis Batch: 106008

Client Sample ID: HA - 4
Prep Type: Total/NA
Prep Batch: 105910

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00202	U	0.100	0.08048		mg/Kg		80	70 - 130	3	35
Toluene	<0.00202	U	0.100	0.07193		mg/Kg		72	70 - 130	1	35
Ethylbenzene	<0.00202	U F1	0.100	0.06921	F1	mg/Kg		69	70 - 130	1	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1453		mg/Kg		73	70 - 130	0	35
o-Xylene	<0.00202	U F1	0.100	0.06908	F1	mg/Kg		69	70 - 130	0	35

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: 890-7836-21 MSD
Matrix: Solid
Analysis Batch: 106008

Client Sample ID: HA - 4
Prep Type: Total/NA
Prep Batch: 105910

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-106086/5-A
Matrix: Solid
Analysis Batch: 106083

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 106086

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		03/26/25 08:49	03/26/25 12:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/26/25 08:49	03/26/25 12:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/26/25 08:49	03/26/25 12:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/26/25 08:49	03/26/25 12:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/26/25 08:49	03/26/25 12:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/26/25 08:49	03/26/25 12:20	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	105		70 - 130	03/26/25 08:49	03/26/25 12:20	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/26/25 08:49	03/26/25 12:20	1

Lab Sample ID: LCS 880-106086/1-A
Matrix: Solid
Analysis Batch: 106083

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 106086

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Benzene	0.100	0.08566		mg/Kg		86	70 - 130
Toluene	0.100	0.07762		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.08091		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	0.200	0.1718		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08736		mg/Kg		87	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-106086/2-A
Matrix: Solid
Analysis Batch: 106083

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 106086

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	0.100	0.1009		mg/Kg		101	70 - 130	16	35
Toluene	0.100	0.09158		mg/Kg		92	70 - 130	17	35
Ethylbenzene	0.100	0.09595		mg/Kg		96	70 - 130	17	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	17	35
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130	16	35

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: LCSD 880-106086/2-A
 Matrix: Solid
 Analysis Batch: 106083

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 106086

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

Lab Sample ID: MB 880-106349/5-A
 Matrix: Solid
 Analysis Batch: 106452

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 106349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/28/25 13:06	03/31/25 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/28/25 13:06	03/31/25 12:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/28/25 13:06	03/31/25 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/28/25 13:06	03/31/25 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/28/25 13:06	03/31/25 12:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/28/25 13:06	03/31/25 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	03/28/25 13:06	03/31/25 12:04	1
1,4-Difluorobenzene (Surr)	82		70 - 130	03/28/25 13:06	03/31/25 12:04	1

Lab Sample ID: LCS 880-106349/1-A
 Matrix: Solid
 Analysis Batch: 106452

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 106349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09780		mg/Kg		98	70 - 130
Toluene	0.100	0.09201		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08745		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1860		mg/Kg		93	70 - 130
o-Xylene	0.100	0.08870		mg/Kg		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-106349/2-A
 Matrix: Solid
 Analysis Batch: 106452

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 106349

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1039		mg/Kg		104	70 - 130	6	35
Toluene	0.100	0.09730		mg/Kg		97	70 - 130	6	35
Ethylbenzene	0.100	0.09450		mg/Kg		94	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2040		mg/Kg		102	70 - 130	9	35
o-Xylene	0.100	0.09703		mg/Kg		97	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: MB 880-105920/1-A
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 105920

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		03/24/25 16:12	03/25/25 04:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 04:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:12	03/25/25 04:42	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	114		70 - 130	03/24/25 16:12	03/25/25 04:42	1
o-Terphenyl	114		70 - 130	03/24/25 16:12	03/25/25 04:42	1

Lab Sample ID: LCS 880-105920/2-A
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	779.0		mg/Kg		78	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	85		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-105920/3-A
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 105920

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	881.7		mg/Kg		88	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	908.5		mg/Kg		91	70 - 130	15	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	94		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: 890-7836-2 MS
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: HA - 1
Prep Type: Total/NA
Prep Batch: 105920

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	995	1024		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	995	1076		mg/Kg		107	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: 890-7836-2 MS
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: HA - 1
Prep Type: Total/NA
Prep Batch: 105920

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: 890-7836-2 MSD
Matrix: Solid
Analysis Batch: 105972

Client Sample ID: HA - 1
Prep Type: Total/NA
Prep Batch: 105920

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	995	1032		mg/Kg		104	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.6	U	995	1036		mg/Kg		103	70 - 130	4	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	145	S1+	70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: MB 880-105923/1-A
Matrix: Solid
Analysis Batch: 106259

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 105923

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		03/24/25 16:20	03/28/25 04:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 04:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 04:25	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	113		70 - 130	03/24/25 16:20	03/28/25 04:25	1
o-Terphenyl	116		70 - 130	03/24/25 16:20	03/28/25 04:25	1

Lab Sample ID: LCS 880-105923/2-A
Matrix: Solid
Analysis Batch: 106259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105923

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1189		mg/Kg		119	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	132	S1+	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: LCSD 880-105923/3-A
Matrix: Solid
Analysis Batch: 106259

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 105923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit	
										RPD
Gasoline Range Organics (GRO)-C6-C10	1000	1030		mg/Kg		103	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)	1000	1199		mg/Kg		120	70 - 130	1	20	
		LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	115		70 - 130							
o-Terphenyl	134	S1+	70 - 130							

Lab Sample ID: 890-7836-21 MS
Matrix: Solid
Analysis Batch: 106259

Client Sample ID: HA - 4
Prep Type: Total/NA
Prep Batch: 105923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	920.8		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1055		mg/Kg		106	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	130		70 - 130								
o-Terphenyl	125		70 - 130								

Lab Sample ID: 890-7836-21 MSD
Matrix: Solid
Analysis Batch: 106259

Client Sample ID: HA - 4
Prep Type: Total/NA
Prep Batch: 105923

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	938.5		mg/Kg		94	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	1072		mg/Kg		107	70 - 130	2	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	133	S1+	70 - 130								
o-Terphenyl	128		70 - 130								

Lab Sample ID: MB 880-106065/1-A
Matrix: Solid
Analysis Batch: 106122

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 106065

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		03/26/25 07:03	03/26/25 11:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/26/25 07:03	03/26/25 11:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/26/25 07:03	03/26/25 11:43	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

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

Lab Sample ID: MB 880-106065/1-A
 Matrix: Solid
 Analysis Batch: 106122

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 106065

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	163	S1+	70 - 130	03/26/25 07:03	03/26/25 11:43	1
o-Terphenyl	163	S1+	70 - 130	03/26/25 07:03	03/26/25 11:43	1

Lab Sample ID: LCS 880-106065/2-A
 Matrix: Solid
 Analysis Batch: 106122

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 106065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1171		mg/Kg		117	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1209		mg/Kg		121	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	162	S1+	70 - 130
o-Terphenyl	150	S1+	70 - 130

Lab Sample ID: LCSD 880-106065/3-A
 Matrix: Solid
 Analysis Batch: 106122

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 106065

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1160		mg/Kg		116	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	1000	1233		mg/Kg		123	70 - 130	2	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	145	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-105996/1-A
 Matrix: Solid
 Analysis Batch: 106009

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			03/26/25 05:15	1

Lab Sample ID: LCS 880-105996/2-A
 Matrix: Solid
 Analysis Batch: 106009

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	250	251.4		mg/Kg		101	90 - 110	

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-105996/3-A
Matrix: Solid
Analysis Batch: 106009

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	252.9		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-7836-5 MS
Matrix: Solid
Analysis Batch: 106009

Client Sample ID: HA - 2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7960		2480	10370		mg/Kg		97	90 - 110

Lab Sample ID: 890-7836-5 MSD
Matrix: Solid
Analysis Batch: 106009

Client Sample ID: HA - 2
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7960		2480	10380		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-105997/1-A
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/26/25 22:48	1

Lab Sample ID: LCS 880-105997/2-A
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	267.8		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-105997/3-A
Matrix: Solid
Analysis Batch: 106026

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	267.0		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-7836-15 MS
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: HA - 3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	267		248	528.7		mg/Kg		106	90 - 110

Lab Sample ID: 890-7836-15 MSD
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: HA - 3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	267		248	520.5		mg/Kg		102	90 - 110	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-7836-25 MS
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: HA - 5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2780	F1	1250	4543	F1	mg/Kg		141	90 - 110

Lab Sample ID: 890-7836-25 MSD
Matrix: Solid
Analysis Batch: 106026

Client Sample ID: HA - 5
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2780	F1	1250	4563	F1	mg/Kg		143	90 - 110	0	20

- 1
- 2
- 3
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- 7
- 8
- 9
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- 12
- 13
- 14

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC VOA

Prep Batch: 105909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	5035	
890-7836-2	HA - 1	Total/NA	Solid	5035	
890-7836-3	HA - 1	Total/NA	Solid	5035	
890-7836-4	HA - 1	Total/NA	Solid	5035	
890-7836-5	HA - 2	Total/NA	Solid	5035	
890-7836-6	HA - 2	Total/NA	Solid	5035	
890-7836-7	HA - 2	Total/NA	Solid	5035	
890-7836-8	HA - 2	Total/NA	Solid	5035	
890-7836-9	HA - 2	Total/NA	Solid	5035	
890-7836-10	HA - 3	Total/NA	Solid	5035	
890-7836-11	HA - 3	Total/NA	Solid	5035	
890-7836-12	HA - 3	Total/NA	Solid	5035	
890-7836-13	HA - 3	Total/NA	Solid	5035	
890-7836-14	HA - 3	Total/NA	Solid	5035	
890-7836-15	HA - 3	Total/NA	Solid	5035	
890-7836-16	HA - 4	Total/NA	Solid	5035	
890-7836-17	HA - 4	Total/NA	Solid	5035	
890-7836-19	HA - 4	Total/NA	Solid	5035	
890-7836-20	HA - 4	Total/NA	Solid	5035	
MB 880-105909/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105909/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105909/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7836-2 MS	HA - 1	Total/NA	Solid	5035	
890-7836-2 MSD	HA - 1	Total/NA	Solid	5035	

Prep Batch: 105910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-21	HA - 4	Total/NA	Solid	5035	
890-7836-22	HA - 5	Total/NA	Solid	5035	
890-7836-24	HA - 5	Total/NA	Solid	5035	
890-7836-25	HA - 5	Total/NA	Solid	5035	
890-7836-26	HA - 5	Total/NA	Solid	5035	
890-7836-27	HA - 5	Total/NA	Solid	5035	
890-7836-29	HA - 6	Total/NA	Solid	5035	
890-7836-30	HA - 6	Total/NA	Solid	5035	
890-7836-31	HA - 6	Total/NA	Solid	5035	
890-7836-32	HA - 6	Total/NA	Solid	5035	
890-7836-33	HA - 6	Total/NA	Solid	5035	
MB 880-105910/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105910/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105910/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7836-21 MS	HA - 4	Total/NA	Solid	5035	
890-7836-21 MSD	HA - 4	Total/NA	Solid	5035	

Analysis Batch: 105967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	8021B	105909
890-7836-2	HA - 1	Total/NA	Solid	8021B	105909
890-7836-3	HA - 1	Total/NA	Solid	8021B	105909
890-7836-4	HA - 1	Total/NA	Solid	8021B	105909
890-7836-5	HA - 2	Total/NA	Solid	8021B	105909

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC VOA (Continued)

Analysis Batch: 105967 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-6	HA - 2	Total/NA	Solid	8021B	105909
890-7836-7	HA - 2	Total/NA	Solid	8021B	105909
890-7836-8	HA - 2	Total/NA	Solid	8021B	105909
890-7836-9	HA - 2	Total/NA	Solid	8021B	105909
890-7836-10	HA - 3	Total/NA	Solid	8021B	105909
890-7836-11	HA - 3	Total/NA	Solid	8021B	105909
890-7836-12	HA - 3	Total/NA	Solid	8021B	105909
890-7836-13	HA - 3	Total/NA	Solid	8021B	105909
890-7836-14	HA - 3	Total/NA	Solid	8021B	105909
890-7836-15	HA - 3	Total/NA	Solid	8021B	105909
890-7836-16	HA - 4	Total/NA	Solid	8021B	105909
890-7836-17	HA - 4	Total/NA	Solid	8021B	105909
890-7836-19	HA - 4	Total/NA	Solid	8021B	105909
890-7836-20	HA - 4	Total/NA	Solid	8021B	105909
MB 880-105909/5-A	Method Blank	Total/NA	Solid	8021B	105909
LCS 880-105909/1-A	Lab Control Sample	Total/NA	Solid	8021B	105909
LCSD 880-105909/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105909
890-7836-2 MS	HA - 1	Total/NA	Solid	8021B	105909
890-7836-2 MSD	HA - 1	Total/NA	Solid	8021B	105909

Analysis Batch: 106008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-21	HA - 4	Total/NA	Solid	8021B	105910
890-7836-22	HA - 5	Total/NA	Solid	8021B	105910
890-7836-24	HA - 5	Total/NA	Solid	8021B	105910
890-7836-25	HA - 5	Total/NA	Solid	8021B	105910
890-7836-26	HA - 5	Total/NA	Solid	8021B	105910
890-7836-27	HA - 5	Total/NA	Solid	8021B	105910
890-7836-29	HA - 6	Total/NA	Solid	8021B	105910
890-7836-30	HA - 6	Total/NA	Solid	8021B	105910
890-7836-31	HA - 6	Total/NA	Solid	8021B	105910
890-7836-32	HA - 6	Total/NA	Solid	8021B	105910
890-7836-33	HA - 6	Total/NA	Solid	8021B	105910
MB 880-105910/5-A	Method Blank	Total/NA	Solid	8021B	105910
LCS 880-105910/1-A	Lab Control Sample	Total/NA	Solid	8021B	105910
LCSD 880-105910/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105910
890-7836-21 MS	HA - 4	Total/NA	Solid	8021B	105910
890-7836-21 MSD	HA - 4	Total/NA	Solid	8021B	105910

Analysis Batch: 106083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	8021B	106086
890-7836-5	HA - 2	Total/NA	Solid	8021B	106086
890-7836-10	HA - 3	Total/NA	Solid	8021B	106086
890-7836-16	HA - 4	Total/NA	Solid	8021B	106086
890-7836-17	HA - 4	Total/NA	Solid	8021B	106086
890-7836-18	HA - 4	Total/NA	Solid	8021B	106086
890-7836-22	HA - 5	Total/NA	Solid	8021B	106086
890-7836-23	HA - 5	Total/NA	Solid	8021B	106086
MB 880-106086/5-A	Method Blank	Total/NA	Solid	8021B	106086
LCS 880-106086/1-A	Lab Control Sample	Total/NA	Solid	8021B	106086

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC VOA (Continued)

Analysis Batch: 106083 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-106086/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	106086

Prep Batch: 106086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	5035	
890-7836-5	HA - 2	Total/NA	Solid	5035	
890-7836-10	HA - 3	Total/NA	Solid	5035	
890-7836-16	HA - 4	Total/NA	Solid	5035	
890-7836-17	HA - 4	Total/NA	Solid	5035	
890-7836-18	HA - 4	Total/NA	Solid	5035	
890-7836-22	HA - 5	Total/NA	Solid	5035	
890-7836-23	HA - 5	Total/NA	Solid	5035	
MB 880-106086/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-106086/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-106086/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 106133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	Total BTEX	
890-7836-2	HA - 1	Total/NA	Solid	Total BTEX	
890-7836-3	HA - 1	Total/NA	Solid	Total BTEX	
890-7836-4	HA - 1	Total/NA	Solid	Total BTEX	
890-7836-5	HA - 2	Total/NA	Solid	Total BTEX	
890-7836-6	HA - 2	Total/NA	Solid	Total BTEX	
890-7836-7	HA - 2	Total/NA	Solid	Total BTEX	
890-7836-8	HA - 2	Total/NA	Solid	Total BTEX	
890-7836-9	HA - 2	Total/NA	Solid	Total BTEX	
890-7836-10	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-11	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-12	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-13	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-14	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-15	HA - 3	Total/NA	Solid	Total BTEX	
890-7836-16	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-17	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-18	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-19	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-20	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-21	HA - 4	Total/NA	Solid	Total BTEX	
890-7836-22	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-23	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-24	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-25	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-26	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-27	HA - 5	Total/NA	Solid	Total BTEX	
890-7836-28	HA - 6	Total/NA	Solid	Total BTEX	
890-7836-29	HA - 6	Total/NA	Solid	Total BTEX	
890-7836-30	HA - 6	Total/NA	Solid	Total BTEX	
890-7836-31	HA - 6	Total/NA	Solid	Total BTEX	
890-7836-32	HA - 6	Total/NA	Solid	Total BTEX	
890-7836-33	HA - 6	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC VOA

Prep Batch: 106349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-28	HA - 6	Total/NA	Solid	5035	
MB 880-106349/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-106349/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-106349/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 106452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-28	HA - 6	Total/NA	Solid	8021B	106349
MB 880-106349/5-A	Method Blank	Total/NA	Solid	8021B	106349
LCS 880-106349/1-A	Lab Control Sample	Total/NA	Solid	8021B	106349
LCSD 880-106349/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	106349

GC Semi VOA

Prep Batch: 105920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	8015NM Prep	
890-7836-2	HA - 1	Total/NA	Solid	8015NM Prep	
890-7836-3	HA - 1	Total/NA	Solid	8015NM Prep	
890-7836-4	HA - 1	Total/NA	Solid	8015NM Prep	
890-7836-5	HA - 2	Total/NA	Solid	8015NM Prep	
890-7836-6	HA - 2	Total/NA	Solid	8015NM Prep	
890-7836-7	HA - 2	Total/NA	Solid	8015NM Prep	
890-7836-8	HA - 2	Total/NA	Solid	8015NM Prep	
890-7836-9	HA - 2	Total/NA	Solid	8015NM Prep	
890-7836-11	HA - 3	Total/NA	Solid	8015NM Prep	
890-7836-12	HA - 3	Total/NA	Solid	8015NM Prep	
890-7836-13	HA - 3	Total/NA	Solid	8015NM Prep	
890-7836-14	HA - 3	Total/NA	Solid	8015NM Prep	
890-7836-15	HA - 3	Total/NA	Solid	8015NM Prep	
890-7836-16	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-17	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-18	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-19	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-20	HA - 4	Total/NA	Solid	8015NM Prep	
MB 880-105920/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-105920/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-105920/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7836-2 MS	HA - 1	Total/NA	Solid	8015NM Prep	
890-7836-2 MSD	HA - 1	Total/NA	Solid	8015NM Prep	

Prep Batch: 105923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-21	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-22	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-23	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-24	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-25	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-26	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-27	HA - 5	Total/NA	Solid	8015NM Prep	
890-7836-28	HA - 6	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC Semi VOA (Continued)

Prep Batch: 105923 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-29	HA - 6	Total/NA	Solid	8015NM Prep	
890-7836-30	HA - 6	Total/NA	Solid	8015NM Prep	
890-7836-31	HA - 6	Total/NA	Solid	8015NM Prep	
890-7836-32	HA - 6	Total/NA	Solid	8015NM Prep	
890-7836-33	HA - 6	Total/NA	Solid	8015NM Prep	
MB 880-105923/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-105923/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-105923/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7836-21 MS	HA - 4	Total/NA	Solid	8015NM Prep	
890-7836-21 MSD	HA - 4	Total/NA	Solid	8015NM Prep	

Analysis Batch: 105972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	8015B NM	105920
890-7836-2	HA - 1	Total/NA	Solid	8015B NM	105920
890-7836-3	HA - 1	Total/NA	Solid	8015B NM	105920
890-7836-4	HA - 1	Total/NA	Solid	8015B NM	105920
890-7836-5	HA - 2	Total/NA	Solid	8015B NM	105920
890-7836-6	HA - 2	Total/NA	Solid	8015B NM	105920
890-7836-7	HA - 2	Total/NA	Solid	8015B NM	105920
890-7836-8	HA - 2	Total/NA	Solid	8015B NM	105920
890-7836-9	HA - 2	Total/NA	Solid	8015B NM	105920
890-7836-11	HA - 3	Total/NA	Solid	8015B NM	105920
890-7836-12	HA - 3	Total/NA	Solid	8015B NM	105920
890-7836-13	HA - 3	Total/NA	Solid	8015B NM	105920
890-7836-14	HA - 3	Total/NA	Solid	8015B NM	105920
890-7836-15	HA - 3	Total/NA	Solid	8015B NM	105920
890-7836-16	HA - 4	Total/NA	Solid	8015B NM	105920
890-7836-17	HA - 4	Total/NA	Solid	8015B NM	105920
890-7836-18	HA - 4	Total/NA	Solid	8015B NM	105920
890-7836-19	HA - 4	Total/NA	Solid	8015B NM	105920
890-7836-20	HA - 4	Total/NA	Solid	8015B NM	105920
MB 880-105920/1-A	Method Blank	Total/NA	Solid	8015B NM	105920
LCS 880-105920/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	105920
LCSD 880-105920/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	105920
890-7836-2 MS	HA - 1	Total/NA	Solid	8015B NM	105920
890-7836-2 MSD	HA - 1	Total/NA	Solid	8015B NM	105920

Prep Batch: 106065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-10	HA - 3	Total/NA	Solid	8015NM Prep	
MB 880-106065/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-106065/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-106065/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 106122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-10	HA - 3	Total/NA	Solid	8015B NM	106065
MB 880-106065/1-A	Method Blank	Total/NA	Solid	8015B NM	106065
LCS 880-106065/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	106065
LCSD 880-106065/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	106065

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC Semi VOA

Analysis Batch: 106129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Total/NA	Solid	8015 NM	
890-7836-2	HA - 1	Total/NA	Solid	8015 NM	
890-7836-3	HA - 1	Total/NA	Solid	8015 NM	
890-7836-4	HA - 1	Total/NA	Solid	8015 NM	
890-7836-5	HA - 2	Total/NA	Solid	8015 NM	
890-7836-6	HA - 2	Total/NA	Solid	8015 NM	
890-7836-7	HA - 2	Total/NA	Solid	8015 NM	
890-7836-8	HA - 2	Total/NA	Solid	8015 NM	
890-7836-9	HA - 2	Total/NA	Solid	8015 NM	
890-7836-10	HA - 3	Total/NA	Solid	8015 NM	
890-7836-11	HA - 3	Total/NA	Solid	8015 NM	
890-7836-12	HA - 3	Total/NA	Solid	8015 NM	
890-7836-13	HA - 3	Total/NA	Solid	8015 NM	
890-7836-14	HA - 3	Total/NA	Solid	8015 NM	
890-7836-15	HA - 3	Total/NA	Solid	8015 NM	
890-7836-16	HA - 4	Total/NA	Solid	8015 NM	
890-7836-17	HA - 4	Total/NA	Solid	8015 NM	
890-7836-18	HA - 4	Total/NA	Solid	8015 NM	
890-7836-19	HA - 4	Total/NA	Solid	8015 NM	
890-7836-20	HA - 4	Total/NA	Solid	8015 NM	
890-7836-21	HA - 4	Total/NA	Solid	8015 NM	
890-7836-22	HA - 5	Total/NA	Solid	8015 NM	
890-7836-23	HA - 5	Total/NA	Solid	8015 NM	
890-7836-24	HA - 5	Total/NA	Solid	8015 NM	
890-7836-25	HA - 5	Total/NA	Solid	8015 NM	
890-7836-26	HA - 5	Total/NA	Solid	8015 NM	
890-7836-27	HA - 5	Total/NA	Solid	8015 NM	
890-7836-28	HA - 6	Total/NA	Solid	8015 NM	
890-7836-29	HA - 6	Total/NA	Solid	8015 NM	
890-7836-30	HA - 6	Total/NA	Solid	8015 NM	
890-7836-31	HA - 6	Total/NA	Solid	8015 NM	
890-7836-32	HA - 6	Total/NA	Solid	8015 NM	
890-7836-33	HA - 6	Total/NA	Solid	8015 NM	

Analysis Batch: 106259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-21	HA - 4	Total/NA	Solid	8015B NM	105923
890-7836-22	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-23	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-24	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-25	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-26	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-27	HA - 5	Total/NA	Solid	8015B NM	105923
890-7836-28	HA - 6	Total/NA	Solid	8015B NM	105923
890-7836-29	HA - 6	Total/NA	Solid	8015B NM	105923
890-7836-30	HA - 6	Total/NA	Solid	8015B NM	105923
890-7836-31	HA - 6	Total/NA	Solid	8015B NM	105923
890-7836-32	HA - 6	Total/NA	Solid	8015B NM	105923
890-7836-33	HA - 6	Total/NA	Solid	8015B NM	105923
MB 880-105923/1-A	Method Blank	Total/NA	Solid	8015B NM	105923
LCS 880-105923/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	105923

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

GC Semi VOA (Continued)

Analysis Batch: 106259 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-105923/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	105923
890-7836-21 MS	HA - 4	Total/NA	Solid	8015B NM	105923
890-7836-21 MSD	HA - 4	Total/NA	Solid	8015B NM	105923

HPLC/IC

Leach Batch: 105996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Soluble	Solid	DI Leach	
890-7836-2	HA - 1	Soluble	Solid	DI Leach	
890-7836-3	HA - 1	Soluble	Solid	DI Leach	
890-7836-4	HA - 1	Soluble	Solid	DI Leach	
890-7836-5	HA - 2	Soluble	Solid	DI Leach	
890-7836-6	HA - 2	Soluble	Solid	DI Leach	
890-7836-7	HA - 2	Soluble	Solid	DI Leach	
890-7836-8	HA - 2	Soluble	Solid	DI Leach	
890-7836-9	HA - 2	Soluble	Solid	DI Leach	
890-7836-10	HA - 3	Soluble	Solid	DI Leach	
890-7836-11	HA - 3	Soluble	Solid	DI Leach	
890-7836-12	HA - 3	Soluble	Solid	DI Leach	
890-7836-13	HA - 3	Soluble	Solid	DI Leach	
890-7836-14	HA - 3	Soluble	Solid	DI Leach	
MB 880-105996/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105996/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-105996/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7836-5 MS	HA - 2	Soluble	Solid	DI Leach	
890-7836-5 MSD	HA - 2	Soluble	Solid	DI Leach	

Leach Batch: 105997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-15	HA - 3	Soluble	Solid	DI Leach	
890-7836-16	HA - 4	Soluble	Solid	DI Leach	
890-7836-17	HA - 4	Soluble	Solid	DI Leach	
890-7836-18	HA - 4	Soluble	Solid	DI Leach	
890-7836-19	HA - 4	Soluble	Solid	DI Leach	
890-7836-20	HA - 4	Soluble	Solid	DI Leach	
890-7836-21	HA - 4	Soluble	Solid	DI Leach	
890-7836-22	HA - 5	Soluble	Solid	DI Leach	
890-7836-23	HA - 5	Soluble	Solid	DI Leach	
890-7836-24	HA - 5	Soluble	Solid	DI Leach	
890-7836-25	HA - 5	Soluble	Solid	DI Leach	
890-7836-26	HA - 5	Soluble	Solid	DI Leach	
890-7836-27	HA - 5	Soluble	Solid	DI Leach	
890-7836-28	HA - 6	Soluble	Solid	DI Leach	
890-7836-29	HA - 6	Soluble	Solid	DI Leach	
890-7836-30	HA - 6	Soluble	Solid	DI Leach	
890-7836-31	HA - 6	Soluble	Solid	DI Leach	
890-7836-32	HA - 6	Soluble	Solid	DI Leach	
890-7836-33	HA - 6	Soluble	Solid	DI Leach	
MB 880-105997/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105997/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
SDG: Eddy, NM

HPLC/IC (Continued)

Leach Batch: 105997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS8 880-105997/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7836-15 MS	HA - 3	Soluble	Solid	DI Leach	
890-7836-15 MSD	HA - 3	Soluble	Solid	DI Leach	
890-7836-25 MS	HA - 5	Soluble	Solid	DI Leach	
890-7836-25 MSD	HA - 5	Soluble	Solid	DI Leach	

Analysis Batch: 106009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-1	HA - 1	Soluble	Solid	300.0	105996
890-7836-2	HA - 1	Soluble	Solid	300.0	105996
890-7836-3	HA - 1	Soluble	Solid	300.0	105996
890-7836-4	HA - 1	Soluble	Solid	300.0	105996
890-7836-5	HA - 2	Soluble	Solid	300.0	105996
890-7836-6	HA - 2	Soluble	Solid	300.0	105996
890-7836-7	HA - 2	Soluble	Solid	300.0	105996
890-7836-8	HA - 2	Soluble	Solid	300.0	105996
890-7836-9	HA - 2	Soluble	Solid	300.0	105996
890-7836-10	HA - 3	Soluble	Solid	300.0	105996
890-7836-11	HA - 3	Soluble	Solid	300.0	105996
890-7836-12	HA - 3	Soluble	Solid	300.0	105996
890-7836-13	HA - 3	Soluble	Solid	300.0	105996
890-7836-14	HA - 3	Soluble	Solid	300.0	105996
MB 880-105996/1-A	Method Blank	Soluble	Solid	300.0	105996
LCS 880-105996/2-A	Lab Control Sample	Soluble	Solid	300.0	105996
LCS8 880-105996/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105996
890-7836-5 MS	HA - 2	Soluble	Solid	300.0	105996
890-7836-5 MSD	HA - 2	Soluble	Solid	300.0	105996

Analysis Batch: 106026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7836-15	HA - 3	Soluble	Solid	300.0	105997
890-7836-16	HA - 4	Soluble	Solid	300.0	105997
890-7836-17	HA - 4	Soluble	Solid	300.0	105997
890-7836-18	HA - 4	Soluble	Solid	300.0	105997
890-7836-19	HA - 4	Soluble	Solid	300.0	105997
890-7836-20	HA - 4	Soluble	Solid	300.0	105997
890-7836-21	HA - 4	Soluble	Solid	300.0	105997
890-7836-22	HA - 5	Soluble	Solid	300.0	105997
890-7836-23	HA - 5	Soluble	Solid	300.0	105997
890-7836-24	HA - 5	Soluble	Solid	300.0	105997
890-7836-25	HA - 5	Soluble	Solid	300.0	105997
890-7836-26	HA - 5	Soluble	Solid	300.0	105997
890-7836-27	HA - 5	Soluble	Solid	300.0	105997
890-7836-28	HA - 6	Soluble	Solid	300.0	105997
890-7836-29	HA - 6	Soluble	Solid	300.0	105997
890-7836-30	HA - 6	Soluble	Solid	300.0	105997
890-7836-31	HA - 6	Soluble	Solid	300.0	105997
890-7836-32	HA - 6	Soluble	Solid	300.0	105997
890-7836-33	HA - 6	Soluble	Solid	300.0	105997
MB 880-105997/1-A	Method Blank	Soluble	Solid	300.0	105997
LCS 880-105997/2-A	Lab Control Sample	Soluble	Solid	300.0	105997

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
SDG: Eddy, NM

HPLC/IC (Continued)

Analysis Batch: 106026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-105997/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105997
890-7836-15 MS	HA - 3	Soluble	Solid	300.0	105997
890-7836-15 MSD	HA - 3	Soluble	Solid	300.0	105997
890-7836-25 MS	HA - 5	Soluble	Solid	300.0	105997
890-7836-25 MSD	HA - 5	Soluble	Solid	300.0	105997

- 1
- 2
- 3
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- 14

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-1

Date Collected: 03/21/25 08:40

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	105967	03/25/25 14:59	MNR	EET MID
Total/NA	Prep	5035			5.04 g	5 mL	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 14:04	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 11:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	105972	03/25/25 11:08	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	106009	03/26/25 06:20	CH	EET MID

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-2

Date Collected: 03/21/25 08:45

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 12:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 12:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 10:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 10:18	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 06:26	CH	EET MID

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-3

Date Collected: 03/21/25 08:50

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 12:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 12:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 11:25	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 11:25	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106009	03/26/25 06:32	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7836-4

Date Collected: 03/21/25 08:55

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 12:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 12:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 11:42	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 11:42	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106009	03/26/25 06:38	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-5

Date Collected: 03/21/25 09:00

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	105967	03/25/25 15:20	MNR	EET MID
Total/NA	Prep	5035			5.02 g	5 mL	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 14:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 14:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 11:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	105972	03/25/25 11:58	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	106009	03/26/25 06:43	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-6

Date Collected: 03/21/25 09:05

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 13:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 13:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 12:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 12:15	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:01	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-7

Date Collected: 03/21/25 09:10

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 13:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 13:37	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 12:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 12:31	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:06	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-8

Date Collected: 03/21/25 09:15

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 13:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 13:58	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 12:48	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 12:48	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:24	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-7836-9

Date Collected: 03/21/25 09:20

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 14:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 14:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 13:05	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106009	03/26/25 07:29	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-10

Date Collected: 03/21/25 09:25

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 14:39	MNR	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-10

Date Collected: 03/21/25 09:25

Matrix: Solid

Date Received: 03/24/25 08:13

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	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 14:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 14:45	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/26/25 22:21	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	106065	03/26/25 07:04	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	106122	03/26/25 22:21	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:35	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-11

Date Collected: 03/21/25 09:30

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 16:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 16:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 16:42	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 16:42	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:41	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-12

Date Collected: 03/21/25 09:35

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 17:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 17:14	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 16:58	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 16:58	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106009	03/26/25 07:46	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-13

Date Collected: 03/21/25 09:40

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 17:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 17:35	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-13

Date Collected: 03/21/25 09:40

Matrix: Solid

Date Received: 03/24/25 08:13

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			106129	03/25/25 17:14	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 17:14	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:52	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-14

Date Collected: 03/21/25 09:45

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 17:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 17:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 17:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 17:30	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105996	03/25/25 14:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106009	03/26/25 07:58	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-7836-15

Date Collected: 03/21/25 09:50

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 18:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 18:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 17:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 17:46	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/26/25 23:10	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-16

Date Collected: 03/21/25 09:55

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 18:36	MNR	EET MID
Total/NA	Prep	5035			5.05 g	5 mL	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 15:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 15:05	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 18:03	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-16

Date Collected: 03/21/25 09:55

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	105972	03/25/25 18:03	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/26/25 23:32	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-17

Date Collected: 03/21/25 10:00

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 18:57	MNR	EET MID
Total/NA	Prep	5035			4.98 g	5 mL	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 15:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 15:26	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 18:19	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 18:19	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/26/25 23:40	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-18

Date Collected: 03/21/25 10:05

Matrix: Solid

Date Received: 03/24/25 08:13

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	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106083	03/26/25 13:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 13:43	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 18:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 18:35	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/26/25 23:47	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-19

Date Collected: 03/21/25 10:10

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 19:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 19:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 18:52	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-19

Date Collected: 03/21/25 10:10

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 18:52	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/26/25 23:55	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-20

Date Collected: 03/21/25 10:15

Matrix: Solid

Date Received: 03/24/25 08:13

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	105909	03/24/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	105967	03/25/25 19:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 19:58	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/25/25 19:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	105920	03/24/25 16:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	105972	03/25/25 19:08	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/27/25 00:17	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-7836-21

Date Collected: 03/21/25 10:20

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 18:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 18:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 05:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 05:28	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/27/25 00:24	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-22

Date Collected: 03/21/25 10:25

Matrix: Solid

Date Received: 03/24/25 08:13

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	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	106083	03/26/25 15:46	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 19:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 15:46	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 06:17	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-22

Date Collected: 03/21/25 10:25

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	106259	03/28/25 06:17	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	106026	03/27/25 00:32	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-23

Date Collected: 03/21/25 10:30

Matrix: Solid

Date Received: 03/24/25 08:13

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	106086	03/26/25 08:49	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106083	03/26/25 17:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 17:20	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 06:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 06:33	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	106026	03/27/25 00:39	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-24

Date Collected: 03/21/25 10:35

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 19:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 19:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 06:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 06:50	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	106026	03/27/25 00:47	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-25

Date Collected: 03/21/25 10:40

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 20:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 20:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 07:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 07:05	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-25

Date Collected: 03/21/25 10:40

Matrix: Solid

Date Received: 03/24/25 08:13

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	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 00:54	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-26

Date Collected: 03/21/25 10:45

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 20:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 20:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 07:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 07:22	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/27/25 01:16	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-7836-27

Date Collected: 03/21/25 10:50

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 20:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 20:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 07:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 07:38	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106026	03/27/25 01:24	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-28

Date Collected: 03/21/25 10:55

Matrix: Solid

Date Received: 03/24/25 08:13

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	106349	03/28/25 14:07	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	106452	03/31/25 17:03	EL	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/31/25 17:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 07:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	106259	03/28/25 07:53	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	106026	03/27/25 01:46	CH	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-29

Date Collected: 03/21/25 11:00

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 21:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 21:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 08:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 08:10	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	106026	03/27/25 01:53	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-30

Date Collected: 03/21/25 11:05

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 21:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 21:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 08:25	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 08:25	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 02:01	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-31

Date Collected: 03/21/25 11:10

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 23:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 23:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 08:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 08:57	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 02:08	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-32

Date Collected: 03/21/25 11:15

Matrix: Solid

Date Received: 03/24/25 08:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/25/25 23:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/25/25 23:45	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-32

Date Collected: 03/21/25 11:15

Matrix: Solid

Date Received: 03/24/25 08:13

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			106129	03/28/25 09:14	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 09:14	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 02:15	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-7836-33

Date Collected: 03/21/25 11:20

Matrix: Solid

Date Received: 03/24/25 08:13

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 00:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			106133	03/26/25 00:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			106129	03/28/25 09:29	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 09:29	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 02:23	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
SDG: Eddy, 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

Method Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7836-1
 SDG: Eddy, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7836-1	HA - 1	Solid	03/21/25 08:40	03/24/25 08:13	0.5
890-7836-2	HA - 1	Solid	03/21/25 08:45	03/24/25 08:13	1
890-7836-3	HA - 1	Solid	03/21/25 08:50	03/24/25 08:13	2
890-7836-4	HA - 1	Solid	03/21/25 08:55	03/24/25 08:13	3
890-7836-5	HA - 2	Solid	03/21/25 09:00	03/24/25 08:13	0.5
890-7836-6	HA - 2	Solid	03/21/25 09:05	03/24/25 08:13	1
890-7836-7	HA - 2	Solid	03/21/25 09:10	03/24/25 08:13	2
890-7836-8	HA - 2	Solid	03/21/25 09:15	03/24/25 08:13	3
890-7836-9	HA - 2	Solid	03/21/25 09:20	03/24/25 08:13	4
890-7836-10	HA - 3	Solid	03/21/25 09:25	03/24/25 08:13	0.5
890-7836-11	HA - 3	Solid	03/21/25 09:30	03/24/25 08:13	1
890-7836-12	HA - 3	Solid	03/21/25 09:35	03/24/25 08:13	2
890-7836-13	HA - 3	Solid	03/21/25 09:40	03/24/25 08:13	3
890-7836-14	HA - 3	Solid	03/21/25 09:45	03/24/25 08:13	4
890-7836-15	HA - 3	Solid	03/21/25 09:50	03/24/25 08:13	6
890-7836-16	HA - 4	Solid	03/21/25 09:55	03/24/25 08:13	0.5
890-7836-17	HA - 4	Solid	03/21/25 10:00	03/24/25 08:13	1
890-7836-18	HA - 4	Solid	03/21/25 10:05	03/24/25 08:13	2
890-7836-19	HA - 4	Solid	03/21/25 10:10	03/24/25 08:13	3
890-7836-20	HA - 4	Solid	03/21/25 10:15	03/24/25 08:13	4
890-7836-21	HA - 4	Solid	03/21/25 10:20	03/24/25 08:13	6
890-7836-22	HA - 5	Solid	03/21/25 10:25	03/24/25 08:13	0.5
890-7836-23	HA - 5	Solid	03/21/25 10:30	03/24/25 08:13	1
890-7836-24	HA - 5	Solid	03/21/25 10:35	03/24/25 08:13	2
890-7836-25	HA - 5	Solid	03/21/25 10:40	03/24/25 08:13	3
890-7836-26	HA - 5	Solid	03/21/25 10:45	03/24/25 08:13	4
890-7836-27	HA - 5	Solid	03/21/25 10:50	03/24/25 08:13	6
890-7836-28	HA - 6	Solid	03/21/25 10:55	03/24/25 08:13	0.5
890-7836-29	HA - 6	Solid	03/21/25 11:00	03/24/25 08:13	1
890-7836-30	HA - 6	Solid	03/21/25 11:05	03/24/25 08:13	2
890-7836-31	HA - 6	Solid	03/21/25 11:10	03/24/25 08:13	3
890-7836-32	HA - 6	Solid	03/21/25 11:15	03/24/25 08:13	4
890-7836-33	HA - 6	Solid	03/21/25 11:20	03/24/25 08:13	7

- 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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Page 1 of 4

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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	
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:	RDU 67-68 Tank Battery	Turn Around	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	122	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		None: NO		DI Water: H ₂ O
Project Location:	Eddy, NM	Due Date:	5 Day TAT	Cool: Cool		MtOH: MtE
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm		HCL: HC		HNO ₃ : HN
POTWVO #:		Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	H ₂ SO ₄ : H ₂		NaOH: Na
SAMPLE RECEIPT		Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	H ₃ PO ₄ : HP		
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	11111111	NaHSO ₄ : NABIS		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	1.02	Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	-0.6	Zn Acetate+NaOH: Zn		
Total Containers:	3	Corrected Temperature:	-0.61	NaOH+Ascorbic Acid: S/PC		



Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp # of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
HA-1	S	3.21.25	8:40	0.5	Grab/1	X	X	X			Incident Number NAPP2507627338
HA-1	S	3.21.25	8:45	1	Grab/1	X	X	X			
HA-1	S	3.21.25	8:50	2	Grab/1	X	X	X			
HA-1	S	3.21.25	8:55	3	Grab/1	X	X	X			
HA-2	S	3.21.25	9:00	0.5	Grab/1	X	X	X			
HA-2	S	3.21.25	9:05	1	Grab/1	X	X	X			
HA-2	S	3.21.25	9:10	2	Grab/1	X	X	X			
HA-2	S	3.21.25	9:15	3	Grab/1	X	X	X			
HA-2	S	3.21.25	9:20	4	Grab/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 SiO₂ Na Sr Ti Sn U V Zn

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

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<i>[Signature]</i>	<i>[Signature]</i>	3/24 8:13			



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Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 4

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Riley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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	
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:	RDU 67-68 Tank Battery	Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes	
		<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush		TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	None: NO	DI Water: H ₂ O							
Project Number:	122	Due Date:	5 Day TAT															
Project Location:	Eddy, NM	TAT starts the day received by the lab, if received by 4:30pm												Geol: Cool	MeOH: Me			
Sampler's Name:	Gilbert Moreno													HCL: HC	HNO ₃ : HN			
POTWO #:														H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No													H ₃ PO ₄ : HP			
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID: <i>11111111</i>													NaHSO ₄ : NABIS			
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor: <i>-0.2</i>													Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading: <i>-0.6</i>													Zn Acetate+NaOH: Zn			
Total Containers:		Corrected Temperature: <i>-0.1</i>													NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush						Sample Comments	
HA-3	S	3.21.25	9:25	0.5	Grab/1	1	X	X	X								Incident Number nAPP2507627338	
HA-3	S	3.21.25	9:30	1	Grab/1	1	X	X	X									
HA-3	S	3.21.25	9:35	2	Grab/1	1	X	X	X									
HA-3	S	3.21.25	9:40	3	Grab/1	1	X	X	X									
HA-3	S	3.21.25	9:45	4	Grab/1	1	X	X	X									
HA-3	S	3.21.25	9:50	6	Grab/1	1	X	X	X									
HA-4	S	3.21.25	9:55	0.5	Grab/1	1	X	X	X									
HA-4	S	3.21.25	10:00	1	Grab/1	1	X	X	X									
HA-4	S	3.21.25	10:05	2	Grab/1	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 SiO₂ Na Sr Ti Sn U V Zn

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

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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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Page 4 of 4

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

Program: <input type="checkbox"/> US/PT <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:	RDU 67-68 Tank Battery	Turn Around		Pres. Code	ANALYSIS REQUEST											Preservative Codes		
		<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush		TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	None: NO	DI Water: H ₂ O							
Project Number:	122	Due Date:	5 Day TAT															
Project Location:	Eddy, NM	TAT starts the day received by the lab, if received by 4:30pm														Geot-Gool	MeOH-Me	
Sampler's Name:	Gilbert Moreno															HCL-HC	HNO ₃ -HN	
POW/O #:		Temp Blank:	Yes No	Well Ice:	Yes No												H ₂ SO ₄ -H ₂	NaOH-Na
SAMPLE RECEIPT		Thermometer ID:	Yes No	Correction Factor:	Yes No												H ₃ PO ₄ -HP	
Samples Received Intact:	Yes No	Temperature Reading:	Yes No	Corrected Temperature:	Yes No												NaHSO ₄ -NABIS	
Cooler Custody Seals:	Yes No															Na ₂ S ₂ O ₃ -NaSO ₃		
Sample Custody Seals:	Yes No															Zn Acetate+NaOH-Zn		
Total Containers:	Yes No															NaOH+Ascorbic Acid-SAPC		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush							Sample Comments
HA-6	S	3.21.25	10:55	0.5	Grab/1	1	X	X	X									Incident Number nAPP2507627338
HA-6	S	3.21.25	11:00	1	Grab/1	1	X	X	X									
HA-6	S	3.21.25	11:05	2	Grab/1	1	X	X	X									
HA-6	S	3.21.25	11:10	3	Grab/1	1	X	X	X									
HA-6	S	3.21.25	11:15	4	Grab/1	1	X	X	X									
HA-6	S	3.21.25	11:20	7	Grab/1	1	X	X	X									

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed: Hg: 1631 / 245.1 / 7470 / 7471

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7836-1

SDG Number: Eddy, NM

Login Number: 7836

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7836-1

SDG Number: Eddy, NM

Login Number: 7836

List Number: 2

Creator: Lee, Randell

List Source: Eurofins Midland
List Creation: 03/25/25 07:55 AM

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").	True	

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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

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JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy, NM

JOB NUMBER

890-7837-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



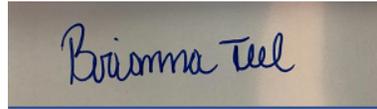
Eurofins Carlsbad

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
(432)704-5440

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-7837-1
SDG: Eddy, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
SDG: Eddy, 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: RDU 67-68 Tank Battery

Job ID: 890-7837-1

Job ID: 890-7837-1

Eurofins Carlsbad

Job Narrative 890-7837-1

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 3/24/2025 8:12 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-7 (890-7837-1), HA-7 (890-7837-2), HA-7A (890-7837-3) and HA-7A (890-7837-4).

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: Surrogate recovery for the following samples were outside control limits: HA-7 (890-7837-1), HA-7 (890-7837-2), HA-7A (890-7837-4), (LCS 880-105923/2-A) and (LCSD 880-105923/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-105923 and analytical batch 880-106259 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

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

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Client Sample ID: HA-7

Lab Sample ID: 890-7837-1

Date Collected: 03/21/25 11:25

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

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		03/25/25 13:08	03/26/25 13:31	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/25/25 13:08	03/26/25 13:31	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/25/25 13:08	03/26/25 13:31	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/25/25 13:08	03/26/25 13:31	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/25/25 13:08	03/26/25 13:31	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/25/25 13:08	03/26/25 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	03/25/25 13:08	03/26/25 13:31	1
1,4-Difluorobenzene (Surr)	96		70 - 130	03/25/25 13:08	03/26/25 13:31	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			03/28/25 09:46	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	<49.9	U	49.9		mg/Kg		03/24/25 16:20	03/28/25 09:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/24/25 16:20	03/28/25 09:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/25 16:20	03/28/25 09:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130	03/24/25 16:20	03/28/25 09:46	1
o-Terphenyl	135	S1+	70 - 130	03/24/25 16:20	03/28/25 09:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1730		50.3		mg/Kg			03/27/25 02:30	5

Client Sample ID: HA-7

Lab Sample ID: 890-7837-2

Date Collected: 03/21/25 11:30

Matrix: Solid

Date Received: 03/24/25 08:12

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		03/25/25 13:08	03/26/25 13:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/25/25 13:08	03/26/25 13:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/25/25 13:08	03/26/25 13:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/25/25 13:08	03/26/25 13:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/25/25 13:08	03/26/25 13:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/25/25 13:08	03/26/25 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	03/25/25 13:08	03/26/25 13:52	1
1,4-Difluorobenzene (Surr)	94		70 - 130	03/25/25 13:08	03/26/25 13:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Client Sample ID: HA-7

Lab Sample ID: 890-7837-2

Date Collected: 03/21/25 11:30

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 2

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			03/28/25 10:02	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	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 10:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 10:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 10:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130	03/24/25 16:20	03/28/25 10:02	1
o-Terphenyl	148	S1+	70 - 130	03/24/25 16:20	03/28/25 10:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	333		9.98		mg/Kg			03/26/25 15:08	1

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-3

Date Collected: 03/21/25 11:35

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 14:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 14:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 14:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/25/25 13:08	03/26/25 14:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 14:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/25/25 13:08	03/26/25 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/25/25 13:08	03/26/25 14:12	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/25/25 13:08	03/26/25 14:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			03/28/25 10:19	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	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 10:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 10:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/24/25 16:20	03/28/25 10:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	03/24/25 16:20	03/28/25 10:19	1
o-Terphenyl	129		70 - 130	03/24/25 16:20	03/28/25 10:19	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-3

Date Collected: 03/21/25 11:35

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1020		49.6		mg/Kg			03/26/25 15:31	5

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-4

Date Collected: 03/21/25 11:40

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 1

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		03/25/25 13:08	03/26/25 14:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/25/25 13:08	03/26/25 14:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/25/25 13:08	03/26/25 14:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/25/25 13:08	03/26/25 14:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/25/25 13:08	03/26/25 14:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/25/25 13:08	03/26/25 14:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				03/25/25 13:08	03/26/25 14:33	1
1,4-Difluorobenzene (Surr)	93		70 - 130				03/25/25 13:08	03/26/25 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	<49.7	U	49.7		mg/Kg			03/28/25 10:37	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	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 10:37	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 10:37	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:20	03/28/25 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				03/24/25 16:20	03/28/25 10:37	1
o-Terphenyl	131	S1+	70 - 130				03/24/25 16:20	03/28/25 10:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	357		10.1		mg/Kg			03/26/25 15:38	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-7837-1	HA-7	105	96
890-7837-2	HA-7	103	94
890-7837-3	HA-7A	101	95
890-7837-4	HA-7A	98	93
LCS 880-105990/1-A	Lab Control Sample	130	95
LCSD 880-105990/2-A	Lab Control Sample Dup	118	86
MB 880-105990/5-A	Method Blank	92	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-7837-1	HA-7	131 S1+	135 S1+
890-7837-2	HA-7	142 S1+	148 S1+
890-7837-3	HA-7A	128	129
890-7837-4	HA-7A	127	131 S1+
LCS 880-105923/2-A	Lab Control Sample	113	132 S1+
LCSD 880-105923/3-A	Lab Control Sample Dup	115	134 S1+
MB 880-105923/1-A	Method Blank	113	116

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-105990/5-A
 Matrix: Solid
 Analysis Batch: 106085

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 105990

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 11:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 11:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 11:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/25/25 13:08	03/26/25 11:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/25/25 13:08	03/26/25 11:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/25/25 13:08	03/26/25 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	03/25/25 13:08	03/26/25 11:27	1
1,4-Difluorobenzene (Surr)	90		70 - 130	03/25/25 13:08	03/26/25 11:27	1

Lab Sample ID: LCS 880-105990/1-A
 Matrix: Solid
 Analysis Batch: 106085

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 105990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1071		mg/Kg		107	70 - 130
Toluene	0.100	0.1057		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1082		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2505		mg/Kg		125	70 - 130
o-Xylene	0.100	0.1195		mg/Kg		119	70 - 130

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

Lab Sample ID: LCSD 880-105990/2-A
 Matrix: Solid
 Analysis Batch: 106085

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 105990

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09767		mg/Kg		98	70 - 130	9	35
Toluene	0.100	0.1046		mg/Kg		105	70 - 130	1	35
Ethylbenzene	0.100	0.1138		mg/Kg		114	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2265		mg/Kg		113	70 - 130	10	35
o-Xylene	0.100	0.1089		mg/Kg		109	70 - 130	9	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

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

Lab Sample ID: MB 880-105923/1-A
 Matrix: Solid
 Analysis Batch: 106259

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 105923

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		03/24/25 16:20	03/28/25 04:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 04:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:20	03/28/25 04:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/24/25 16:20	03/28/25 04:25	1
o-Terphenyl	116		70 - 130	03/24/25 16:20	03/28/25 04:25	1

Lab Sample ID: LCS 880-105923/2-A
 Matrix: Solid
 Analysis Batch: 106259

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 105923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1189		mg/Kg		119	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: LCSD 880-105923/3-A
 Matrix: Solid
 Analysis Batch: 106259

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 105923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1030		mg/Kg		103	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1199		mg/Kg		120	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	134	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-105997/1-A
 Matrix: Solid
 Analysis Batch: 106026

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/26/25 22:48	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-105997/2-A
 Matrix: Solid
 Analysis Batch: 106026

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	267.8		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-105997/3-A
 Matrix: Solid
 Analysis Batch: 106026

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	267.0		mg/Kg		107	90 - 110	0	20

Lab Sample ID: MB 880-105999/1-A
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/26/25 14:46	1

Lab Sample ID: LCS 880-105999/2-A
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	260.3		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-105999/3-A
 Matrix: Solid
 Analysis Batch: 106027

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	259.9		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-7837-2 MS
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: HA-7
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	333		250	607.1		mg/Kg		110	90 - 110

Lab Sample ID: 890-7837-2 MSD
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: HA-7
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	333		250	593.3		mg/Kg		104	90 - 110	2	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank BatteryJob ID: 890-7837-1
SDG: Eddy, NM

GC VOA

Prep Batch: 105990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Total/NA	Solid	5035	
890-7837-2	HA-7	Total/NA	Solid	5035	
890-7837-3	HA-7A	Total/NA	Solid	5035	
890-7837-4	HA-7A	Total/NA	Solid	5035	
MB 880-105990/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105990/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105990/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 106085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Total/NA	Solid	8021B	105990
890-7837-2	HA-7	Total/NA	Solid	8021B	105990
890-7837-3	HA-7A	Total/NA	Solid	8021B	105990
890-7837-4	HA-7A	Total/NA	Solid	8021B	105990
MB 880-105990/5-A	Method Blank	Total/NA	Solid	8021B	105990
LCS 880-105990/1-A	Lab Control Sample	Total/NA	Solid	8021B	105990
LCSD 880-105990/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105990

GC Semi VOA

Prep Batch: 105923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Total/NA	Solid	8015NM Prep	
890-7837-2	HA-7	Total/NA	Solid	8015NM Prep	
890-7837-3	HA-7A	Total/NA	Solid	8015NM Prep	
890-7837-4	HA-7A	Total/NA	Solid	8015NM Prep	
MB 880-105923/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-105923/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-105923/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 106259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Total/NA	Solid	8015B NM	105923
890-7837-2	HA-7	Total/NA	Solid	8015B NM	105923
890-7837-3	HA-7A	Total/NA	Solid	8015B NM	105923
890-7837-4	HA-7A	Total/NA	Solid	8015B NM	105923
MB 880-105923/1-A	Method Blank	Total/NA	Solid	8015B NM	105923
LCS 880-105923/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	105923
LCSD 880-105923/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	105923

Analysis Batch: 106335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Total/NA	Solid	8015 NM	
890-7837-2	HA-7	Total/NA	Solid	8015 NM	
890-7837-3	HA-7A	Total/NA	Solid	8015 NM	
890-7837-4	HA-7A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 105997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

HPLC/IC (Continued)

Leach Batch: 105997 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-105997/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105997/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-105997/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 105999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-2	HA-7	Soluble	Solid	DI Leach	
890-7837-3	HA-7A	Soluble	Solid	DI Leach	
890-7837-4	HA-7A	Soluble	Solid	DI Leach	
MB 880-105999/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105999/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-105999/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7837-2 MS	HA-7	Soluble	Solid	DI Leach	
890-7837-2 MSD	HA-7	Soluble	Solid	DI Leach	

Analysis Batch: 106026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-1	HA-7	Soluble	Solid	300.0	105997
MB 880-105997/1-A	Method Blank	Soluble	Solid	300.0	105997
LCS 880-105997/2-A	Lab Control Sample	Soluble	Solid	300.0	105997
LCSD 880-105997/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105997

Analysis Batch: 106027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7837-2	HA-7	Soluble	Solid	300.0	105999
890-7837-3	HA-7A	Soluble	Solid	300.0	105999
890-7837-4	HA-7A	Soluble	Solid	300.0	105999
MB 880-105999/1-A	Method Blank	Soluble	Solid	300.0	105999
LCS 880-105999/2-A	Lab Control Sample	Soluble	Solid	300.0	105999
LCSD 880-105999/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105999
890-7837-2 MS	HA-7	Soluble	Solid	300.0	105999
890-7837-2 MSD	HA-7	Soluble	Solid	300.0	105999

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Client Sample ID: HA-7

Lab Sample ID: 890-7837-1

Date Collected: 03/21/25 11:25

Matrix: Solid

Date Received: 03/24/25 08:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105990	03/25/25 13:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106085	03/26/25 13:31	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106335	03/28/25 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 09:46	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	105997	03/25/25 14:06	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106026	03/27/25 02:30	CH	EET MID

Client Sample ID: HA-7

Lab Sample ID: 890-7837-2

Date Collected: 03/21/25 11:30

Matrix: Solid

Date Received: 03/24/25 08:12

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	105990	03/25/25 13:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106085	03/26/25 13:52	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106335	03/28/25 10:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 10:02	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106027	03/26/25 15:08	CH	EET MID

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-3

Date Collected: 03/21/25 11:35

Matrix: Solid

Date Received: 03/24/25 08:12

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	105990	03/25/25 13:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106085	03/26/25 14:12	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106335	03/28/25 10:19	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 10:19	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106027	03/26/25 15:31	CH	EET MID

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-4

Date Collected: 03/21/25 11:40

Matrix: Solid

Date Received: 03/24/25 08:12

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	105990	03/25/25 13:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106085	03/26/25 14:33	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106335	03/28/25 10:37	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105923	03/24/25 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106259	03/28/25 10:37	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
SDG: Eddy, NM

Client Sample ID: HA-7A

Lab Sample ID: 890-7837-4

Date Collected: 03/21/25 11:40

Matrix: Solid

Date Received: 03/24/25 08:12

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	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106027	03/26/25 15:38	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: RDU 67-68 Tank Battery

Job ID: 890-7837-1
SDG: Eddy, 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

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Method Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
 SDG: Eddy, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	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.

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7837-1
SDG: Eddy, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7837-1	HA-7	Solid	03/21/25 11:25	03/24/25 08:12	0.5
890-7837-2	HA-7	Solid	03/21/25 11:30	03/24/25 08:12	2
890-7837-3	HA-7A	Solid	03/21/25 11:35	03/24/25 08:12	0.5
890-7837-4	HA-7A	Solid	03/21/25 11:40	03/24/25 08:12	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



890-7837 Chain of Custody

www.xenco.com

Page 1 of 1

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

Program: <input type="checkbox"/> UST/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:	RDU 67-68 Tank Battery	Turn Around	ANALYSIS REQUEST	Preservative Codes								
Project Number:	122	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		None: NO DI Water: H ₂ O								
Project Location:	Eddy, NM	Due Date: 5 Day TAT		Geel: Geel MeOH: Me								
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm		HCL: HC HNO ₃ : HN								
POWVO #:				H ₂ SO ₄ : H ₂ 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 ₃ PO ₄ : HP								
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID: TMM02		NaHSO ₄ : NABIS								
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor: -0.2		Na ₂ S ₂ O ₃ : NaSO ₃								
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading: -0.6		Zn Acetate+NaOH: Zn								
Total Containers:		Corrected Temperature: -0.9		NaOH+Ascorbic Acid: SAPC								
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
HA-7	S	3.21.25	11:25	0.5	Grab/	1	X	X	X			Incident Number
HA-7	S	3.21.25	11:30	2	Grab/	1	X	X	X			nAPP2507627338
HA-7A	S	3.21.25	11:35	0.5	Grab/	1	X	X	X			
HA-7A	S	3.21.25	11:40	1	Grab/	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 SiO₂ Na Sr Ti Sn U V Zn

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 \$9 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/24 8:12			

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Eurofins Carlisbad

1089 N Canal St.
 Carlisbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Brianna	Carrier Tracking No(s): N/A	COC No: 890-4785-1
Shipping/Receiving: N/A		Phone: N/A	E-Mail: Brianna.Teel@eurofins.com	State of Origin: Texas	Page: 1 of 1
Company: Eurofins Environment Testing South Center		Accreditations Required (See note): NELAP - Texas		Job #: 890-7837-1	Page: 1 of 1
Address: 1211 W. Florida Ave.		Due Date Requested: 3/28/2025	Analysis Requested		Preservation Codes: 890-7837-1
City: Midland		TAT Requested (days): N/A			
State, Zip: TX, 79701					
Phone: 432-704-5440(Tel)		PO #: N/A			
Email: N/A		WO #: N/A			
Project Name: RDU 67-68 TANK BATTERY		Project #: 88001228			
Site: N/A		SSOW#: N/A			
		Other: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (Type, Solid, Overpack, Stripped, A&A)	Field Filtered Sample (Yes or No)				Perform MS/MSD (Yes or No)				Total Number of containers	Special Instructions/Note:
					8021B/5035FP_Calc BTEX	300_ORGFM_28D/DL_LEACH Chloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep 8015 NM	8021B/5035FP_Calc BTEX	300_ORGFM_28D/DL_LEACH Chloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep 8015 NM		
HA-7 (890-7837-1)	3/21/25	11:25	G	Solid	X	X	X	X	X	X	X	X	1	
HA-7 (890-7837-2)	3/21/25	11:30	G	Solid	X	X	X	X	X	X	X	X	1	
HA-7A (890-7837-3)	3/21/25	11:35	G	Solid	X	X	X	X	X	X	X	X	1	
HA-7A (890-7837-4)	3/21/25	11:40	G	Solid	X	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Center, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin, listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Center, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Center, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Center, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (Specify) Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: _____ Date/Time: _____ Company: _____ Received By: *Teddy M. ...* Date/Time: *3/25/25* 0800 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____ Received By: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____

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Eurofins Carlsbad

1089 N Canal St
 Carlsbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Teel, Brianna	Carrier Tracking No(s): N/A	COC No: 890-4764-4
Shipping/Receiving: Eurofins Environment Testing South Center		Phone: N/A	E-Mail: Brianna.Teel@eurofins.com	State of Origin: Texas	Page: Page 4 of 4
Address: 1211 W. Florida Ave.		Due Date Requested: 3/28/2025	Accreditations Required (See note): NELAP - Texas	Job #: 890-7836-1	Preservation Codes: 890-7836-1
City: Midland		TAT Requested (days): N/A	Analysis Requested		
State-Zip: TX, 79701		PO #: N/A			
Phone: 432-704-5440(Tel)		WO #: N/A			
Email: N/A		Project #: 88001228			
Project Name: RDU 67 - 68 TANK BATTERY		SSOW#: N/A			
Site: N/A		Matrix (Wet, Solid, Organic, Aqueous):			
		Sample Type (C=Comp, G=grab):			
		Preservation Code:			
		Field Filtered Sample (Yes or No)			
		Perform MS/MSD (Yes or No)			
		Total_BTEX_GCV			
		8021B/5035FP_Calc BTEX			
		300_ORGFM_28D/DI_LEACH Chloride			
		8015MOD_Calc			
		8015MOD_NM/8015NM_S_Prep 8015 NM			
		Total Number of containers			
		Special Instructions/Note:			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type	Matrix
HA - 6 (890-7836-28)	3/21/25	10:55 Central	G	Solid	X X X X X
HA - 6 (890-7836-29)	3/21/25	11:00 Central	G	Solid	X X X X X
HA - 6 (890-7836-30)	3/21/25	11:05 Central	G	Solid	X X X X X
HA - 6 (890-7836-31)	3/21/25	11:10 Central	G	Solid	X X X X X
HA - 6 (890-7836-32)	3/21/25	11:15 Central	G	Solid	X X X X X
HA - 6 (890-7836-33)	3/21/25	11:20 Central	G	Solid	X X X X X

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Center, LLC places the ownership of method, analyte & accreditation compliance upon our subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Center, LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Center, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Center, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time:	Company:	Received By: <i>Teddy Anderson</i>
Relinquished by:	Date/Time:	Company:	Date/Time: 3/25/25 0800
Relinquished by:	Date/Time:	Company:	Received By:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7837-1

SDG Number: Eddy, NM

Login Number: 7837

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7837-1

SDG Number: Eddy, NM

Login Number: 7837

List Number: 2

Creator: Lee, Randell

List Source: Eurofins Midland
List Creation: 03/25/25 07:53 AM

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").	True	

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/31/2025 1:14:18 PM

JOB DESCRIPTION

RDU 67-68 Tank Battery
Eddy, NM

JOB NUMBER

890-7838-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



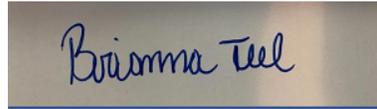
Eurofins Carlsbad

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
3/31/2025 1:14:18 PM

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

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-7838-1
SDG: Eddy, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
SDG: Eddy, 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: RDU 67-68 Tank Battery

Job ID: 890-7838-1

Job ID: 890-7838-1

Eurofins Carlsbad

Job Narrative 890-7838-1

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 3/24/2025 8:12 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -0.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-8 (890-7838-1), HA-8 (890-7838-2), HA-8 (890-7838-3), HA-8 (890-7838-4), HA-8A (890-7838-5) and HA-8A (890-7838-6).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-106008 recovered under the lower control limit for Ethylbenzene and o-Xylene. 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 sample was outside control limits: (890-7838-A-1-D MSD). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8

Lab Sample ID: 890-7838-1

Date Collected: 03/21/25 11:45

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 00:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 00:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 00:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 00:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 00:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/24/25 14:52	03/26/25 00:46	1
1,4-Difluorobenzene (Surr)	94		70 - 130	03/24/25 14:52	03/26/25 00:46	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			03/29/25 02:14	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	<49.7	U	49.7		mg/Kg		03/24/25 16:29	03/29/25 02:14	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:29	03/29/25 02:14	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:29	03/29/25 02:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	03/24/25 16:29	03/29/25 02:14	1
o-Terphenyl	99		70 - 130	03/24/25 16:29	03/29/25 02:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17800		199		mg/Kg			03/26/25 15:45	20

Client Sample ID: HA-8

Lab Sample ID: 890-7838-2

Date Collected: 03/21/25 11:50

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 2

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		03/24/25 14:52	03/26/25 01:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/24/25 14:52	03/26/25 01:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/24/25 14:52	03/26/25 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	03/24/25 14:52	03/26/25 01:07	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/24/25 14:52	03/26/25 01:07	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8

Lab Sample ID: 890-7838-2

Date Collected: 03/21/25 11:50

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 2

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			03/29/25 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	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:03	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:03	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130	03/24/25 16:29	03/29/25 03:03	1
o-Terphenyl	114		70 - 130	03/24/25 16:29	03/29/25 03:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4130		49.6		mg/Kg			03/26/25 15:53	5

Client Sample ID: HA-8

Lab Sample ID: 890-7838-3

Date Collected: 03/21/25 11:55

Matrix: Solid

Date Received: 03/24/25 08:12

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		03/24/25 14:52	03/26/25 01:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 01:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 01:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 01:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	03/24/25 14:52	03/26/25 01:27	1
1,4-Difluorobenzene (Surr)	94		70 - 130	03/24/25 14:52	03/26/25 01:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/29/25 03:20	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		03/24/25 16:29	03/29/25 03:20	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		03/24/25 16:29	03/29/25 03:20	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/24/25 16:29	03/29/25 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	03/24/25 16:29	03/29/25 03:20	1
o-Terphenyl	108		70 - 130	03/24/25 16:29	03/29/25 03:20	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8

Lab Sample ID: 890-7838-3

Date Collected: 03/21/25 11:55

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	315		10.0		mg/Kg			03/26/25 16:15	1

Client Sample ID: HA-8

Lab Sample ID: 890-7838-4

Date Collected: 03/21/25 12:00

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 6

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		03/24/25 14:52	03/26/25 01:48	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/26/25 01:48	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/26/25 01:48	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/26/25 01:48	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/24/25 14:52	03/26/25 01:48	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/24/25 14:52	03/26/25 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/24/25 14:52	03/26/25 01:48	1
1,4-Difluorobenzene (Surr)	92		70 - 130				03/24/25 14:52	03/26/25 01:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/29/25 03:35	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	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:35	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:35	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/24/25 16:29	03/29/25 03:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				03/24/25 16:29	03/29/25 03:35	1
o-Terphenyl	109		70 - 130				03/24/25 16:29	03/29/25 03:35	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		9.94		mg/Kg			03/26/25 16:22	1

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-5

Date Collected: 03/21/25 12:05

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 02:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 02:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 02:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/26/25 02:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-5

Date Collected: 03/21/25 12:05

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/24/25 14:52	03/26/25 02:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/24/25 14:52	03/26/25 02:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				03/24/25 14:52	03/26/25 02:08	1
1,4-Difluorobenzene (Surr)	97		70 - 130				03/24/25 14:52	03/26/25 02:08	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			03/29/25 03:52	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		03/24/25 16:29	03/29/25 03:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/24/25 16:29	03/29/25 03:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/24/25 16:29	03/29/25 03:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				03/24/25 16:29	03/29/25 03:52	1
o-Terphenyl	114		70 - 130				03/24/25 16:29	03/29/25 03:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7350		100		mg/Kg			03/26/25 16:30	10

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-6

Date Collected: 03/21/25 12:10

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 2

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		03/24/25 14:52	03/26/25 02:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 02:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 02:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 02:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/26/25 02:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/26/25 02:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				03/24/25 14:52	03/26/25 02:28	1
1,4-Difluorobenzene (Surr)	93		70 - 130				03/24/25 14:52	03/26/25 02:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/29/25 04:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-6

Date Collected: 03/21/25 12:10

Matrix: Solid

Date Received: 03/24/25 08:12

Sample Depth: 2

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		03/24/25 16:29	03/29/25 04:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:29	03/29/25 04:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:29	03/29/25 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	03/24/25 16:29	03/29/25 04:08	1
o-Terphenyl	106		70 - 130	03/24/25 16:29	03/29/25 04:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4550		49.9		mg/Kg			03/26/25 16:37	5

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, 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)
890-7838-1	HA-8	104	94
890-7838-2	HA-8	102	93
890-7838-3	HA-8	101	94
890-7838-4	HA-8	107	92
890-7838-5	HA-8A	101	97
890-7838-6	HA-8A	107	93
LCS 880-105910/1-A	Lab Control Sample	100	100
LCSD 880-105910/2-A	Lab Control Sample Dup	105	98
MB 880-105910/5-A	Method Blank	99	89

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)
890-7838-1	HA-8	101	99
890-7838-1 MS	HA-8	123	120
890-7838-1 MSD	HA-8	131 S1+	121
890-7838-2	HA-8	117	114
890-7838-3	HA-8	108	108
890-7838-4	HA-8	110	109
890-7838-5	HA-8A	118	114
890-7838-6	HA-8A	110	106
LCS 880-105926/2-A	Lab Control Sample	105	114
LCSD 880-105926/3-A	Lab Control Sample Dup	110	122
MB 880-105926/1-A	Method Blank	101	100

Surrogate Legend
 1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-105910/5-A
 Matrix: Solid
 Analysis Batch: 106008

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 105910

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/24/25 14:52	03/25/25 18:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/24/25 14:52	03/25/25 18:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	03/24/25 14:52	03/25/25 18:25	1
1,4-Difluorobenzene (Surr)	89		70 - 130	03/24/25 14:52	03/25/25 18:25	1

Lab Sample ID: LCS 880-105910/1-A
 Matrix: Solid
 Analysis Batch: 106008

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 105910

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1036		mg/Kg		104	70 - 130
Toluene	0.100	0.09160		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.08840		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1831		mg/Kg		92	70 - 130
o-Xylene	0.100	0.08691		mg/Kg		87	70 - 130

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

Lab Sample ID: LCSD 880-105910/2-A
 Matrix: Solid
 Analysis Batch: 106008

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 105910

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09825		mg/Kg		98	70 - 130	5	35
Toluene	0.100	0.09029		mg/Kg		90	70 - 130	1	35
Ethylbenzene	0.100	0.08906		mg/Kg		89	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1860		mg/Kg		93	70 - 130	2	35
o-Xylene	0.100	0.08817		mg/Kg		88	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

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

Lab Sample ID: MB 880-105926/1-A
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 105926

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		03/24/25 16:29	03/29/25 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/24/25 16:29	03/29/25 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/24/25 16:29	03/29/25 01:24	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	101		70 - 130	03/24/25 16:29	03/29/25 01:24	1
o-Terphenyl	100		70 - 130	03/24/25 16:29	03/29/25 01:24	1

Lab Sample ID: LCS 880-105926/2-A
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 105926

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	968.8		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1030		mg/Kg		103	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	105		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-105926/3-A
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 105926

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	1000	978.7		mg/Kg		98	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1094		mg/Kg		109	70 - 130	6	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	110		70 - 130
o-Terphenyl	122		70 - 130

Lab Sample ID: 890-7838-1 MS
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: HA-8
 Prep Type: Total/NA
 Prep Batch: 105926

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	848.9		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<49.7	U	999	908.7		mg/Kg		91	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

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

Lab Sample ID: 890-7838-1 MS
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: HA-8
 Prep Type: Total/NA
 Prep Batch: 105926

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-7838-1 MSD
 Matrix: Solid
 Analysis Batch: 106360

Client Sample ID: HA-8
 Prep Type: Total/NA
 Prep Batch: 105926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	922.6		mg/Kg		92	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	<49.7	U	999	943.5		mg/Kg		94	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	131	S1+	70 - 130
o-Terphenyl	121		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-105999/1-A
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			03/26/25 14:46	1

Lab Sample ID: LCS 880-105999/2-A
 Matrix: Solid
 Analysis Batch: 106027

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	260.3		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-105999/3-A
 Matrix: Solid
 Analysis Batch: 106027

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	259.9		mg/Kg		104	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

GC VOA

Prep Batch: 105910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Total/NA	Solid	5035	
890-7838-2	HA-8	Total/NA	Solid	5035	
890-7838-3	HA-8	Total/NA	Solid	5035	
890-7838-4	HA-8	Total/NA	Solid	5035	
890-7838-5	HA-8A	Total/NA	Solid	5035	
890-7838-6	HA-8A	Total/NA	Solid	5035	
MB 880-105910/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-105910/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-105910/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 106008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Total/NA	Solid	8021B	105910
890-7838-2	HA-8	Total/NA	Solid	8021B	105910
890-7838-3	HA-8	Total/NA	Solid	8021B	105910
890-7838-4	HA-8	Total/NA	Solid	8021B	105910
890-7838-5	HA-8A	Total/NA	Solid	8021B	105910
890-7838-6	HA-8A	Total/NA	Solid	8021B	105910
MB 880-105910/5-A	Method Blank	Total/NA	Solid	8021B	105910
LCS 880-105910/1-A	Lab Control Sample	Total/NA	Solid	8021B	105910
LCSD 880-105910/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	105910

GC Semi VOA

Prep Batch: 105926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Total/NA	Solid	8015NM Prep	
890-7838-2	HA-8	Total/NA	Solid	8015NM Prep	
890-7838-3	HA-8	Total/NA	Solid	8015NM Prep	
890-7838-4	HA-8	Total/NA	Solid	8015NM Prep	
890-7838-5	HA-8A	Total/NA	Solid	8015NM Prep	
890-7838-6	HA-8A	Total/NA	Solid	8015NM Prep	
MB 880-105926/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-105926/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-105926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7838-1 MS	HA-8	Total/NA	Solid	8015NM Prep	
890-7838-1 MSD	HA-8	Total/NA	Solid	8015NM Prep	

Analysis Batch: 106360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Total/NA	Solid	8015B NM	105926
890-7838-2	HA-8	Total/NA	Solid	8015B NM	105926
890-7838-3	HA-8	Total/NA	Solid	8015B NM	105926
890-7838-4	HA-8	Total/NA	Solid	8015B NM	105926
890-7838-5	HA-8A	Total/NA	Solid	8015B NM	105926
890-7838-6	HA-8A	Total/NA	Solid	8015B NM	105926
MB 880-105926/1-A	Method Blank	Total/NA	Solid	8015B NM	105926
LCS 880-105926/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	105926
LCSD 880-105926/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	105926
890-7838-1 MS	HA-8	Total/NA	Solid	8015B NM	105926
890-7838-1 MSD	HA-8	Total/NA	Solid	8015B NM	105926

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

GC Semi VOA

Analysis Batch: 106517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Total/NA	Solid	8015 NM	
890-7838-2	HA-8	Total/NA	Solid	8015 NM	
890-7838-3	HA-8	Total/NA	Solid	8015 NM	
890-7838-4	HA-8	Total/NA	Solid	8015 NM	
890-7838-5	HA-8A	Total/NA	Solid	8015 NM	
890-7838-6	HA-8A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 105999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Soluble	Solid	DI Leach	
890-7838-2	HA-8	Soluble	Solid	DI Leach	
890-7838-3	HA-8	Soluble	Solid	DI Leach	
890-7838-4	HA-8	Soluble	Solid	DI Leach	
890-7838-5	HA-8A	Soluble	Solid	DI Leach	
890-7838-6	HA-8A	Soluble	Solid	DI Leach	
MB 880-105999/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-105999/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-105999/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 106027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7838-1	HA-8	Soluble	Solid	300.0	105999
890-7838-2	HA-8	Soluble	Solid	300.0	105999
890-7838-3	HA-8	Soluble	Solid	300.0	105999
890-7838-4	HA-8	Soluble	Solid	300.0	105999
890-7838-5	HA-8A	Soluble	Solid	300.0	105999
890-7838-6	HA-8A	Soluble	Solid	300.0	105999
MB 880-105999/1-A	Method Blank	Soluble	Solid	300.0	105999
LCS 880-105999/2-A	Lab Control Sample	Soluble	Solid	300.0	105999
LCSD 880-105999/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	105999

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8

Lab Sample ID: 890-7838-1

Date Collected: 03/21/25 11:45

Matrix: Solid

Date Received: 03/24/25 08:12

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 00:46	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 02:14	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 02:14	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	106027	03/26/25 15:45	CH	EET MID

Client Sample ID: HA-8

Lab Sample ID: 890-7838-2

Date Collected: 03/21/25 11:50

Matrix: Solid

Date Received: 03/24/25 08:12

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 01:07	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 03:03	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 03:03	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106027	03/26/25 15:53	CH	EET MID

Client Sample ID: HA-8

Lab Sample ID: 890-7838-3

Date Collected: 03/21/25 11:55

Matrix: Solid

Date Received: 03/24/25 08:12

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 01:27	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 03:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 03:20	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106027	03/26/25 16:15	CH	EET MID

Client Sample ID: HA-8

Lab Sample ID: 890-7838-4

Date Collected: 03/21/25 12:00

Matrix: Solid

Date Received: 03/24/25 08:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 01:48	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 03:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 03:35	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Client Sample ID: HA-8

Lab Sample ID: 890-7838-4

Date Collected: 03/21/25 12:00

Matrix: Solid

Date Received: 03/24/25 08:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	106027	03/26/25 16:22	CH	EET MID

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-5

Date Collected: 03/21/25 12:05

Matrix: Solid

Date Received: 03/24/25 08:12

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 02:08	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 03:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 03:52	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	106027	03/26/25 16:30	CH	EET MID

Client Sample ID: HA-8A

Lab Sample ID: 890-7838-6

Date Collected: 03/21/25 12:10

Matrix: Solid

Date Received: 03/24/25 08:12

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	105910	03/24/25 14:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	106008	03/26/25 02:28	MNR	EET MID
Total/NA	Analysis	8015 NM		1			106517	03/29/25 04:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	105926	03/24/25 16:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	106360	03/29/25 04:08	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	105999	03/25/25 14:09	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	106027	03/26/25 16:37	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
SDG: Eddy, 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

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

Method Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
 SDG: Eddy, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	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.

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-7838-1
SDG: Eddy, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7838-1	HA-8	Solid	03/21/25 11:45	03/24/25 08:12	0.5
890-7838-2	HA-8	Solid	03/21/25 11:50	03/24/25 08:12	2
890-7838-3	HA-8	Solid	03/21/25 11:55	03/24/25 08:12	4
890-7838-4	HA-8	Solid	03/21/25 12:00	03/24/25 08:12	6
890-7838-5	HA-8A	Solid	03/21/25 12:05	03/24/25 08:12	0.5
890-7838-6	HA-8A	Solid	03/21/25 12:10	03/24/25 08:12	2

- 1
- 2
- 3
- 4
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- 10
- 11
- 12
- 13
- 14



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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Wor



890-7838 Chain of Custody

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

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:	RDU 67-68 Tank Battery	Turn Around	ANALYSIS REQUEST	Preservative Codes								
Project Number:	122	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		None: NO DI Water: H ₂ O								
Project Location:	Eddy, NM	Due Date: 5 Day TAT		Geel: Geel MeOH: Me								
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm		HCL: HCL HNO ₃ : HN								
POWVO #:				H ₂ SO ₄ : H ₂ NaOH: Na								
SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		H ₃ PO ₄ : HP								
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID: T-1102		NaHSO ₄ : NABIS								
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Correction Factor: -0.2		Na ₂ S ₂ O ₃ : NaSO ₃								
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Temperature Reading: -0.5		Zn Acetate+NaOH: Zn								
Total Containers:		Corrected Temperature: -0.4		NaOH+Ascorbic Acid: SAPC								
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
HA-8	S	3.21.25	11:45	0.5	Grab/	1	X	X	X			Incident Number
HA-8	S	3.21.25	11:50	2	Grab/	1	X	X	X			nAPP2507627338
HA-8	S	3.21.25	11:55	4	Grab/	1	X	X	X			
HA-8	S	3.21.25	12:00	6	Grab/	1	X	X	X			
HA-8A	S	3.21.25	12:05	0.5	Grab/	1	X	X	X			
HA-8A	S	3.21.25	12:10	2	Grab/	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 SiO₂ Na Sr Ti Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/21/2012			

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Eurofins Carlsbad

1089 N Canal St.
 Carlsbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab P/N: Teel, Brianna	Carrier Tracking No(s): N/A	COC No: 890-4766-1				
Shipping/Receiving		Phone: N/A	E-Mail: Brianna_Teel@eurofins.com	State of Origin: Texas	Page: Page 1 of 1				
Company: Eurofins Environment Testing South Center		Accreditations Required (See note): NELAP - Texas		Lab #: 890-7838-1	Preservation Codes:				
Address: 1211 W. Florida Ave.		Due Date Requested: 3/28/2025	Analysis Requested						
City: Midland		TAT Requested (days): N/A							
State, Zip: TX, 79701		PO #: N/A							
Phone: 432-704-5440(Tel)		WO #: N/A							
Email: N/A		Project #: 88001228							
Project Name: RDU 67-68 TANK BATTERY		Site: S50W#:	Other: N/A						
Site: N/A		SSOW#:	Total Number of containers						
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (G=comp, G=grab)	Matrix (As-solid, Over-solid, BTR-Tissue, A&U)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Special Instructions/Note:	
HA-8 (890-7838-1)	3/21/25	11:45	Central	G	Solid	X	X	X	1
HA-8 (890-7838-2)	3/21/25	11:50	Central	G	Solid	X	X	X	1
HA-8 (890-7838-3)	3/21/25	11:55	Central	G	Solid	X	X	X	1
HA-8 (890-7838-4)	3/21/25	12:00	Central	G	Solid	X	X	X	1
HA-8A (890-7838-5)	3/21/25	12:05	Central	G	Solid	X	X	X	1
HA-8A (890-7838-6)	3/21/25	12:10	Central	G	Solid	X	X	X	1

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Center, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analyte/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Center, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Center, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Center, LLC.

Possible Hazard Identification

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: _____ Date/Time: _____ Company: _____ Received by: *[Signature]* Date/Time: *3/27/25* 0800 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____

Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7838-1

SDG Number: Eddy, NM

Login Number: 7838

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7838-1

SDG Number: Eddy, NM

Login Number: 7838

List Number: 2

Creator: Lee, Randell

List Source: Eurofins Midland
List Creation: 03/25/25 07:56 AM

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").	True	

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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 9/22/2025 9:48:15 AM

JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8804-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



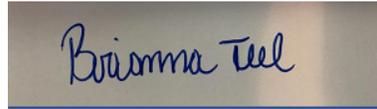
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/22/2025 9:48:15 AM

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

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-8804-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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: RDU 67-68 Tank Battery

Job ID: 890-8804-1

Job ID: 890-8804-1

Eurofins Carlsbad

Job Narrative 890-8804-1

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

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

Receipt

The samples were received on 9/15/2025 3:38 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 4.6°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS - 1 (890-8804-1), CS - 2 (890-8804-2), CS - 3 (890-8804-3), CS - 4 (890-8804-4), CS - 5 (890-8804-5), CS - 6 (890-8804-6), CS - 7 (890-8804-7), CS - 8 (890-8804-8), CS - 9 (890-8804-9), CS - 10 (890-8804-10), CS - 11 (890-8804-11), CS - 12 (890-8804-12), CS - 13 (890-8804-13), CS - 14 (890-8804-14), CS - 15 (890-8804-15), CS - 16 (890-8804-16) and CS - 17 (890-8804-17).

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-119089 and analytical batch 880-119360 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-119040 and analytical batch 880-119077 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Carlsbad



Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 1

Lab Sample ID: 890-8804-1

Date Collected: 09/15/25 09:20

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 13:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 13:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 13:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/17/25 09:04	09/17/25 13:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 13:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/17/25 09:04	09/17/25 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/17/25 09:04	09/17/25 13:05	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/17/25 09:04	09/17/25 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			09/17/25 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	<50.0	U	50.0		mg/Kg			09/19/25 19:59	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	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 19:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 19:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	09/17/25 08:02	09/19/25 19:59	1
o-Terphenyl	94		70 - 130	09/17/25 08:02	09/19/25 19:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	852		9.92		mg/Kg			09/17/25 12:56	1

Client Sample ID: CS - 2

Lab Sample ID: 890-8804-2

Date Collected: 09/15/25 09:25

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 13:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/17/25 09:04	09/17/25 13:26	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 2

Lab Sample ID: 890-8804-2

Date Collected: 09/15/25 09:25

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	09/17/25 09:04	09/17/25 13:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/17/25 13:26	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			09/19/25 20:14	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	<50.1	U	50.1		mg/Kg		09/17/25 08:02	09/19/25 20:14	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/17/25 08:02	09/19/25 20:14	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/17/25 08:02	09/19/25 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/17/25 08:02	09/19/25 20:14	1
o-Terphenyl	97		70 - 130	09/17/25 08:02	09/19/25 20:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2500		49.7		mg/Kg			09/17/25 13:02	5

Client Sample ID: CS - 3

Lab Sample ID: 890-8804-3

Date Collected: 09/15/25 09:30

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 13:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 13:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	09/17/25 09:04	09/17/25 13:46	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/17/25 09:04	09/17/25 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			09/17/25 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	<49.9	U	49.9		mg/Kg			09/19/25 20:29	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 3

Lab Sample ID: 890-8804-3

Date Collected: 09/15/25 09:30

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 20:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 20:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 20:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				09/17/25 08:02	09/19/25 20:29	1
o-Terphenyl	99		70 - 130				09/17/25 08:02	09/19/25 20:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1560		49.5		mg/Kg			09/17/25 13:19	5

Client Sample ID: CS - 4

Lab Sample ID: 890-8804-4

Date Collected: 09/15/25 09:35

Matrix: Solid

Date Received: 09/15/25 15:38

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		09/17/25 09:04	09/17/25 14:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 14:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				09/17/25 09:04	09/17/25 14:07	1
1,4-Difluorobenzene (Surr)	107		70 - 130				09/17/25 09:04	09/17/25 14:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/17/25 14:07	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			09/19/25 21:00	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	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/17/25 08:02	09/19/25 21:00	1
o-Terphenyl	100		70 - 130				09/17/25 08:02	09/19/25 21:00	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 4

Lab Sample ID: 890-8804-4

Date Collected: 09/15/25 09:35

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5660	F1	99.8		mg/Kg			09/17/25 16:30	10

Client Sample ID: CS - 5

Lab Sample ID: 890-8804-5

Date Collected: 09/15/25 09:40

Matrix: Solid

Date Received: 09/15/25 15:38

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		09/17/25 09:04	09/17/25 14:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:27	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/17/25 09:04	09/17/25 14:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 14:27	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/17/25 09:04	09/17/25 14:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				09/17/25 09:04	09/17/25 14:27	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/17/25 09:04	09/17/25 14:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/17/25 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	<49.8	U	49.8		mg/Kg			09/19/25 21:15	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		09/17/25 08:02	09/19/25 21:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 21:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 21:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/17/25 08:02	09/19/25 21:15	1
o-Terphenyl	106		70 - 130				09/17/25 08:02	09/19/25 21:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	551		9.92		mg/Kg			09/17/25 16:53	1

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 6

Lab Sample ID: 890-8804-6

Date Collected: 09/15/25 09:45

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 14:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				09/17/25 09:04	09/17/25 14:48	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/17/25 09:04	09/17/25 14:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/17/25 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			09/19/25 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/17/25 08:02	09/19/25 21:30	1
o-Terphenyl	105		70 - 130				09/17/25 08:02	09/19/25 21:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4340		99.6		mg/Kg			09/17/25 17:00	10

Client Sample ID: CS - 7

Lab Sample ID: 890-8804-7

Date Collected: 09/15/25 09:50

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 15:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				09/17/25 09:04	09/17/25 15:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 7

Lab Sample ID: 890-8804-7

Date Collected: 09/15/25 09:50

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	09/17/25 09:04	09/17/25 15:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/17/25 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	<50.0	U	50.0		mg/Kg			09/19/25 21:46	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	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 21:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/17/25 08:02	09/19/25 21:46	1
o-Terphenyl	100		70 - 130	09/17/25 08:02	09/19/25 21:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7380		99.4		mg/Kg			09/17/25 17:08	10

Client Sample ID: CS - 8

Lab Sample ID: 890-8804-8

Date Collected: 09/15/25 09:55

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 15:29	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 15:29	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 15:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 15:29	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 15:29	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 15:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/17/25 09:04	09/17/25 15:29	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/17/25 09:04	09/17/25 15:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/17/25 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	<49.9	U	49.9		mg/Kg			09/19/25 22:01	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 8

Lab Sample ID: 890-8804-8

Date Collected: 09/15/25 09:55

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 22:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 22:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/17/25 08:02	09/19/25 22:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/17/25 08:02	09/19/25 22:01	1
o-Terphenyl	109		70 - 130				09/17/25 08:02	09/19/25 22:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	975		9.92		mg/Kg			09/17/25 17:16	1

Client Sample ID: CS - 9

Lab Sample ID: 890-8804-9

Date Collected: 09/15/25 10:00

Matrix: Solid

Date Received: 09/15/25 15:38

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		09/17/25 09:04	09/17/25 15:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 15:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 15:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 15:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 15:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 15:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130				09/17/25 09:04	09/17/25 15:49	1
1,4-Difluorobenzene (Surr)	106		70 - 130				09/17/25 09:04	09/17/25 15:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/17/25 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	<50.0	U	50.0		mg/Kg			09/19/25 22:17	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	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/17/25 08:02	09/19/25 22:17	1
o-Terphenyl	108		70 - 130				09/17/25 08:02	09/19/25 22:17	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 9

Lab Sample ID: 890-8804-9

Date Collected: 09/15/25 10:00

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	966		10.0		mg/Kg			09/17/25 17:38	1

Client Sample ID: CS - 10

Lab Sample ID: 890-8804-10

Date Collected: 09/15/25 10:05

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/17/25 09:04	09/17/25 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130				09/17/25 09:04	09/17/25 16:10	1
1,4-Difluorobenzene (Surr)	101		70 - 130				09/17/25 09:04	09/17/25 16:10	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			09/17/25 16:10	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			09/19/25 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	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 22:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 22:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 22:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/17/25 08:02	09/19/25 22:32	1
o-Terphenyl	103		70 - 130				09/17/25 08:02	09/19/25 22:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5420		101		mg/Kg			09/17/25 17:46	10

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 11

Lab Sample ID: 890-8804-11

Date Collected: 09/15/25 10:10

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 17:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 17:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 17:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/17/25 09:04	09/17/25 17:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 17:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/17/25 09:04	09/17/25 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/17/25 09:04	09/17/25 17:44	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/17/25 09:04	09/17/25 17:44	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			09/17/25 17:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/25 22:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 22:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/17/25 08:02	09/19/25 22:48	1
o-Terphenyl	112		70 - 130	09/17/25 08:02	09/19/25 22:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6740		199		mg/Kg			09/17/25 17:54	20

Client Sample ID: CS - 12

Lab Sample ID: 890-8804-12

Date Collected: 09/15/25 10:15

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 18:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/17/25 09:04	09/17/25 18:05	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 12

Lab Sample ID: 890-8804-12

Date Collected: 09/15/25 10:15

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	09/17/25 09:04	09/17/25 18:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/17/25 18:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/19/25 23:03	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		09/17/25 08:02	09/19/25 23:03	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 23:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:02	09/19/25 23:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/17/25 08:02	09/19/25 23:03	1
o-Terphenyl	106		70 - 130	09/17/25 08:02	09/19/25 23:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4890		99.6		mg/Kg			09/17/25 18:01	10

Client Sample ID: CS - 13

Lab Sample ID: 890-8804-13

Date Collected: 09/15/25 10:20

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 18:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:04	09/17/25 18:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:04	09/17/25 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/17/25 09:04	09/17/25 18:25	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/17/25 09:04	09/17/25 18:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			09/17/25 18:25	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			09/19/25 23:20	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 13

Lab Sample ID: 890-8804-13

Date Collected: 09/15/25 10:20

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 23:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 23:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 23:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/17/25 08:02	09/19/25 23:20	1
o-Terphenyl	101		70 - 130				09/17/25 08:02	09/19/25 23:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4040		99.2		mg/Kg			09/17/25 18:09	10

Client Sample ID: CS - 14

Lab Sample ID: 890-8804-14

Date Collected: 09/15/25 10:25

Matrix: Solid

Date Received: 09/15/25 15:38

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		09/17/25 09:04	09/17/25 18:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 18:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 18:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 18:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 18:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:04	09/17/25 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				09/17/25 09:04	09/17/25 18:46	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/17/25 09:04	09/17/25 18:46	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			09/17/25 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/20/25 01:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 01:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 01:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 01:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/17/25 08:05	09/20/25 01:24	1
o-Terphenyl	104		70 - 130				09/17/25 08:05	09/20/25 01:24	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 14

Lab Sample ID: 890-8804-14

Date Collected: 09/15/25 10:25

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4510	F1	99.0		mg/Kg			09/17/25 18:16	10

Client Sample ID: CS - 15

Lab Sample ID: 890-8804-15

Date Collected: 09/15/25 10:30

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/17/25 09:04	09/17/25 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				09/17/25 09:04	09/17/25 19:06	1
1,4-Difluorobenzene (Surr)	106		70 - 130				09/17/25 09:04	09/17/25 19:06	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			09/17/25 19:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			09/20/25 02:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/17/25 08:05	09/20/25 02:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/17/25 08:05	09/20/25 02:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/17/25 08:05	09/20/25 02:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/17/25 08:05	09/20/25 02:10	1
o-Terphenyl	102		70 - 130				09/17/25 08:05	09/20/25 02:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	558		9.94		mg/Kg			09/17/25 18:39	1

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 16

Lab Sample ID: 890-8804-16

Date Collected: 09/15/25 10:35

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 19:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/17/25 09:04	09/17/25 19:27	1
1,4-Difluorobenzene (Surr)	103		70 - 130	09/17/25 09:04	09/17/25 19:27	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/17/25 19:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/20/25 02:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 02:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 02:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	09/17/25 08:05	09/20/25 02:26	1
o-Terphenyl	107		70 - 130	09/17/25 08:05	09/20/25 02:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2640		49.9		mg/Kg			09/17/25 18:47	5

Client Sample ID: CS - 17

Lab Sample ID: 890-8804-17

Date Collected: 09/15/25 10:40

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:47	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:47	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:47	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 19:47	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:04	09/17/25 19:47	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/17/25 09:04	09/17/25 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/17/25 09:04	09/17/25 19:47	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 17

Lab Sample ID: 890-8804-17

Date Collected: 09/15/25 10:40

Matrix: Solid

Date Received: 09/15/25 15:38

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	09/17/25 09:04	09/17/25 19:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			09/17/25 19:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			09/20/25 02:41	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	<49.8	U	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/17/25 08:05	09/20/25 02:41	1
o-Terphenyl	109		70 - 130	09/17/25 08:05	09/20/25 02:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	581		10.0		mg/Kg			09/17/25 19:09	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy 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)
890-8804-1	CS - 1	99	117
890-8804-1 MS	CS - 1	98	103
890-8804-1 MSD	CS - 1	102	100
890-8804-2	CS - 2	99	104
890-8804-3	CS - 3	90	103
890-8804-4	CS - 4	96	107
890-8804-5	CS - 5	98	104
890-8804-6	CS - 6	97	103
890-8804-7	CS - 7	97	103
890-8804-8	CS - 8	98	104
890-8804-9	CS - 9	97	106
890-8804-10	CS - 10	96	101
890-8804-11	CS - 11	93	107
890-8804-12	CS - 12	98	105
890-8804-13	CS - 13	103	106
890-8804-14	CS - 14	98	104
890-8804-15	CS - 15	99	106
890-8804-16	CS - 16	97	103
890-8804-17	CS - 17	101	104
LCS 880-119108/1-A	Lab Control Sample	99	102
LCSD 880-119108/2-A	Lab Control Sample Dup	100	98
MB 880-119108/5-A	Method Blank	88	112

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)
890-8804-1	CS - 1	91	94
890-8804-2	CS - 2	95	97
890-8804-3	CS - 3	97	99
890-8804-4	CS - 4	98	100
890-8804-5	CS - 5	104	106
890-8804-6	CS - 6	103	105
890-8804-7	CS - 7	97	100
890-8804-8	CS - 8	106	109
890-8804-9	CS - 9	104	108
890-8804-10	CS - 10	99	103
890-8804-11	CS - 11	108	112
890-8804-12	CS - 12	103	106
890-8804-13	CS - 13	98	101
890-8804-14	CS - 14	103	104
890-8804-14 MS	CS - 14	114	106
890-8804-14 MSD	CS - 14	112	104
890-8804-15	CS - 15	102	102

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Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-8804-16	CS - 16	106	107
890-8804-17	CS - 17	108	109
LCS 880-119088/2-A	Lab Control Sample	88	100
LCS 880-119089/2-A	Lab Control Sample	113	103
LCSD 880-119088/3-A	Lab Control Sample Dup	89	99
LCSD 880-119089/3-A	Lab Control Sample Dup	108	121
MB 880-119088/1-A	Method Blank	101	102
MB 880-119089/1-A	Method Blank	108	112

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119108/5-A
 Matrix: Solid
 Analysis Batch: 119097

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 09:04	09/17/25 12:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	09/17/25 09:04	09/17/25 12:44	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/17/25 09:04	09/17/25 12:44	1

Lab Sample ID: LCS 880-119108/1-A
 Matrix: Solid
 Analysis Batch: 119097

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1092		mg/Kg		109	70 - 130
Toluene	0.100	0.1073		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1054		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2041		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-119108/2-A
 Matrix: Solid
 Analysis Batch: 119097

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119108

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1085		mg/Kg		109	70 - 130	1	35
Toluene	0.100	0.1025		mg/Kg		103	70 - 130	5	35
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1936		mg/Kg		97	70 - 130	5	35
o-Xylene	0.100	0.09723		mg/Kg		97	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-8804-1 MS
 Matrix: Solid
 Analysis Batch: 119097

Client Sample ID: CS - 1
 Prep Type: Total/NA
 Prep Batch: 119108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.1068		mg/Kg		107	70 - 130
Toluene	<0.00201	U	0.100	0.1018		mg/Kg		102	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

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

Lab Sample ID: 890-8804-1 MS

Client Sample ID: CS - 1

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119097

Prep Batch: 119108

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00201	U	0.100	0.09839		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1897		mg/Kg		95	70 - 130
o-Xylene	<0.00201	U	0.100	0.09536		mg/Kg		95	70 - 130

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

Lab Sample ID: 890-8804-1 MSD

Client Sample ID: CS - 1

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119097

Prep Batch: 119108

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00201	U	0.100	0.09881		mg/Kg		99	70 - 130	8	35
Toluene	<0.00201	U	0.100	0.09378		mg/Kg		94	70 - 130	8	35
Ethylbenzene	<0.00201	U	0.100	0.09023		mg/Kg		90	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1744		mg/Kg		87	70 - 130	8	35
o-Xylene	<0.00201	U	0.100	0.08693		mg/Kg		87	70 - 130	9	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-119088/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119360

Prep Batch: 119088

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		09/17/25 08:02	09/19/25 14:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 14:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:02	09/19/25 14:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	101		70 - 130	09/17/25 08:02	09/19/25 14:16	1
o-Terphenyl	102		70 - 130	09/17/25 08:02	09/19/25 14:16	1

Lab Sample ID: LCS 880-119088/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119360

Prep Batch: 119088

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1017		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1005		mg/Kg		100	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCS 880-119088/2-A
Matrix: Solid
Analysis Batch: 119360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 119088

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	88		70 - 130
o-Terphenyl	100		70 - 130

Lab Sample ID: LCSD 880-119088/3-A
Matrix: Solid
Analysis Batch: 119360

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 119088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1035		mg/Kg		104	70 - 130	2		20
Diesel Range Organics (Over C10-C28)	1000	996.8		mg/Kg		100	70 - 130	1		20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	89		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: MB 880-119089/1-A
Matrix: Solid
Analysis Batch: 119360

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 119089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:04	09/20/25 00:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:04	09/20/25 00:37	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	108		70 - 130	09/17/25 08:04	09/20/25 00:37	1
o-Terphenyl	112		70 - 130	09/17/25 08:04	09/20/25 00:37	1

Lab Sample ID: LCS 880-119089/2-A
Matrix: Solid
Analysis Batch: 119360

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 119089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1022		mg/Kg		102	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	937.5		mg/Kg		94	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	113		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-119089/3-A
 Matrix: Solid
 Analysis Batch: 119360

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119089

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	1139		mg/Kg		114	70 - 130	11	20	
Diesel Range Organics (Over C10-C28)	1000	1169	*1	mg/Kg		117	70 - 130	22	20	
		LCSD	LCSD							
Surrogate		%Recovery	Qualifier	Limits						
1-Chlorooctane		108		70 - 130						
o-Terphenyl		121		70 - 130						

Lab Sample ID: 890-8804-14 MS
 Matrix: Solid
 Analysis Batch: 119360

Client Sample ID: CS - 14
 Prep Type: Total/NA
 Prep Batch: 119089

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	926.1		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *1	998	867.9		mg/Kg		87	70 - 130		
		MS	MS								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		114		70 - 130							
o-Terphenyl		106		70 - 130							

Lab Sample ID: 890-8804-14 MSD
 Matrix: Solid
 Analysis Batch: 119360

Client Sample ID: CS - 14
 Prep Type: Total/NA
 Prep Batch: 119089

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	927.0		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	998	864.2		mg/Kg		87	70 - 130	0	20
		MSD	MSD								
Surrogate		%Recovery	Qualifier	Limits							
1-Chlorooctane		112		70 - 130							
o-Terphenyl		104		70 - 130							

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119040/1-A
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 16:07	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-119040/2-A
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	236.2		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-119040/3-A
 Matrix: Solid
 Analysis Batch: 119077

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	249.0		mg/Kg		100	90 - 110	5	20

Lab Sample ID: 890-8804-4 MS
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: CS - 4
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5660	F1	2500	7749	F1	mg/Kg		84	90 - 110

Lab Sample ID: 890-8804-4 MSD
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: CS - 4
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5660	F1	2500	7843	F1	mg/Kg		87	90 - 110	1	20

Lab Sample ID: 890-8804-14 MS
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: CS - 14
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4510	F1	2480	8846	F1	mg/Kg		175	90 - 110

Lab Sample ID: 890-8804-14 MSD
 Matrix: Solid
 Analysis Batch: 119077

Client Sample ID: CS - 14
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4510	F1	2480	8963	F1	mg/Kg		180	90 - 110	1	20

Lab Sample ID: MB 880-119036/1-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 11:03	1

Lab Sample ID: LCS 880-119036/2-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.7		mg/Kg		106	90 - 110

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-119036/3-A
Matrix: Solid
Analysis Batch: 119078

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.4		mg/Kg		106	90 - 110	0	20

- 1
- 2
- 3
- 4
- 5
- 6
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- 9
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- 11
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- 13
- 14

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

GC VOA

Analysis Batch: 119097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	8021B	119108
890-8804-2	CS - 2	Total/NA	Solid	8021B	119108
890-8804-3	CS - 3	Total/NA	Solid	8021B	119108
890-8804-4	CS - 4	Total/NA	Solid	8021B	119108
890-8804-5	CS - 5	Total/NA	Solid	8021B	119108
890-8804-6	CS - 6	Total/NA	Solid	8021B	119108
890-8804-7	CS - 7	Total/NA	Solid	8021B	119108
890-8804-8	CS - 8	Total/NA	Solid	8021B	119108
890-8804-9	CS - 9	Total/NA	Solid	8021B	119108
890-8804-10	CS - 10	Total/NA	Solid	8021B	119108
890-8804-11	CS - 11	Total/NA	Solid	8021B	119108
890-8804-12	CS - 12	Total/NA	Solid	8021B	119108
890-8804-13	CS - 13	Total/NA	Solid	8021B	119108
890-8804-14	CS - 14	Total/NA	Solid	8021B	119108
890-8804-15	CS - 15	Total/NA	Solid	8021B	119108
890-8804-16	CS - 16	Total/NA	Solid	8021B	119108
890-8804-17	CS - 17	Total/NA	Solid	8021B	119108
MB 880-119108/5-A	Method Blank	Total/NA	Solid	8021B	119108
LCS 880-119108/1-A	Lab Control Sample	Total/NA	Solid	8021B	119108
LCSD 880-119108/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119108
890-8804-1 MS	CS - 1	Total/NA	Solid	8021B	119108
890-8804-1 MSD	CS - 1	Total/NA	Solid	8021B	119108

Prep Batch: 119108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	5035	
890-8804-2	CS - 2	Total/NA	Solid	5035	
890-8804-3	CS - 3	Total/NA	Solid	5035	
890-8804-4	CS - 4	Total/NA	Solid	5035	
890-8804-5	CS - 5	Total/NA	Solid	5035	
890-8804-6	CS - 6	Total/NA	Solid	5035	
890-8804-7	CS - 7	Total/NA	Solid	5035	
890-8804-8	CS - 8	Total/NA	Solid	5035	
890-8804-9	CS - 9	Total/NA	Solid	5035	
890-8804-10	CS - 10	Total/NA	Solid	5035	
890-8804-11	CS - 11	Total/NA	Solid	5035	
890-8804-12	CS - 12	Total/NA	Solid	5035	
890-8804-13	CS - 13	Total/NA	Solid	5035	
890-8804-14	CS - 14	Total/NA	Solid	5035	
890-8804-15	CS - 15	Total/NA	Solid	5035	
890-8804-16	CS - 16	Total/NA	Solid	5035	
890-8804-17	CS - 17	Total/NA	Solid	5035	
MB 880-119108/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119108/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119108/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8804-1 MS	CS - 1	Total/NA	Solid	5035	
890-8804-1 MSD	CS - 1	Total/NA	Solid	5035	

Analysis Batch: 119228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

GC VOA (Continued)

Analysis Batch: 119228 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-2	CS - 2	Total/NA	Solid	Total BTEX	
890-8804-3	CS - 3	Total/NA	Solid	Total BTEX	
890-8804-4	CS - 4	Total/NA	Solid	Total BTEX	
890-8804-5	CS - 5	Total/NA	Solid	Total BTEX	
890-8804-6	CS - 6	Total/NA	Solid	Total BTEX	
890-8804-7	CS - 7	Total/NA	Solid	Total BTEX	
890-8804-8	CS - 8	Total/NA	Solid	Total BTEX	
890-8804-9	CS - 9	Total/NA	Solid	Total BTEX	
890-8804-10	CS - 10	Total/NA	Solid	Total BTEX	
890-8804-11	CS - 11	Total/NA	Solid	Total BTEX	
890-8804-12	CS - 12	Total/NA	Solid	Total BTEX	
890-8804-13	CS - 13	Total/NA	Solid	Total BTEX	
890-8804-14	CS - 14	Total/NA	Solid	Total BTEX	
890-8804-15	CS - 15	Total/NA	Solid	Total BTEX	
890-8804-16	CS - 16	Total/NA	Solid	Total BTEX	
890-8804-17	CS - 17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	8015NM Prep	
890-8804-2	CS - 2	Total/NA	Solid	8015NM Prep	
890-8804-3	CS - 3	Total/NA	Solid	8015NM Prep	
890-8804-4	CS - 4	Total/NA	Solid	8015NM Prep	
890-8804-5	CS - 5	Total/NA	Solid	8015NM Prep	
890-8804-6	CS - 6	Total/NA	Solid	8015NM Prep	
890-8804-7	CS - 7	Total/NA	Solid	8015NM Prep	
890-8804-8	CS - 8	Total/NA	Solid	8015NM Prep	
890-8804-9	CS - 9	Total/NA	Solid	8015NM Prep	
890-8804-10	CS - 10	Total/NA	Solid	8015NM Prep	
890-8804-11	CS - 11	Total/NA	Solid	8015NM Prep	
890-8804-12	CS - 12	Total/NA	Solid	8015NM Prep	
890-8804-13	CS - 13	Total/NA	Solid	8015NM Prep	
MB 880-119088/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119088/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119088/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 119089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-14	CS - 14	Total/NA	Solid	8015NM Prep	
890-8804-15	CS - 15	Total/NA	Solid	8015NM Prep	
890-8804-16	CS - 16	Total/NA	Solid	8015NM Prep	
890-8804-17	CS - 17	Total/NA	Solid	8015NM Prep	
MB 880-119089/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119089/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8804-14 MS	CS - 14	Total/NA	Solid	8015NM Prep	
890-8804-14 MSD	CS - 14	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

GC Semi VOA

Analysis Batch: 119360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	8015B NM	119088
890-8804-2	CS - 2	Total/NA	Solid	8015B NM	119088
890-8804-3	CS - 3	Total/NA	Solid	8015B NM	119088
890-8804-4	CS - 4	Total/NA	Solid	8015B NM	119088
890-8804-5	CS - 5	Total/NA	Solid	8015B NM	119088
890-8804-6	CS - 6	Total/NA	Solid	8015B NM	119088
890-8804-7	CS - 7	Total/NA	Solid	8015B NM	119088
890-8804-8	CS - 8	Total/NA	Solid	8015B NM	119088
890-8804-9	CS - 9	Total/NA	Solid	8015B NM	119088
890-8804-10	CS - 10	Total/NA	Solid	8015B NM	119088
890-8804-11	CS - 11	Total/NA	Solid	8015B NM	119088
890-8804-12	CS - 12	Total/NA	Solid	8015B NM	119088
890-8804-13	CS - 13	Total/NA	Solid	8015B NM	119088
890-8804-14	CS - 14	Total/NA	Solid	8015B NM	119089
890-8804-15	CS - 15	Total/NA	Solid	8015B NM	119089
890-8804-16	CS - 16	Total/NA	Solid	8015B NM	119089
890-8804-17	CS - 17	Total/NA	Solid	8015B NM	119089
MB 880-119088/1-A	Method Blank	Total/NA	Solid	8015B NM	119088
MB 880-119089/1-A	Method Blank	Total/NA	Solid	8015B NM	119089
LCS 880-119088/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119088
LCS 880-119089/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119089
LCSD 880-119088/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119088
LCSD 880-119089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119089
890-8804-14 MS	CS - 14	Total/NA	Solid	8015B NM	119089
890-8804-14 MSD	CS - 14	Total/NA	Solid	8015B NM	119089

Analysis Batch: 119409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Total/NA	Solid	8015 NM	
890-8804-2	CS - 2	Total/NA	Solid	8015 NM	
890-8804-3	CS - 3	Total/NA	Solid	8015 NM	
890-8804-4	CS - 4	Total/NA	Solid	8015 NM	
890-8804-5	CS - 5	Total/NA	Solid	8015 NM	
890-8804-6	CS - 6	Total/NA	Solid	8015 NM	
890-8804-7	CS - 7	Total/NA	Solid	8015 NM	
890-8804-8	CS - 8	Total/NA	Solid	8015 NM	
890-8804-9	CS - 9	Total/NA	Solid	8015 NM	
890-8804-10	CS - 10	Total/NA	Solid	8015 NM	
890-8804-11	CS - 11	Total/NA	Solid	8015 NM	
890-8804-12	CS - 12	Total/NA	Solid	8015 NM	
890-8804-13	CS - 13	Total/NA	Solid	8015 NM	
890-8804-14	CS - 14	Total/NA	Solid	8015 NM	
890-8804-15	CS - 15	Total/NA	Solid	8015 NM	
890-8804-16	CS - 16	Total/NA	Solid	8015 NM	
890-8804-17	CS - 17	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

HPLC/IC (Continued)

Leach Batch: 119036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-2	CS - 2	Soluble	Solid	DI Leach	
890-8804-3	CS - 3	Soluble	Solid	DI Leach	
MB 880-119036/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 119040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-4	CS - 4	Soluble	Solid	DI Leach	
890-8804-5	CS - 5	Soluble	Solid	DI Leach	
890-8804-6	CS - 6	Soluble	Solid	DI Leach	
890-8804-7	CS - 7	Soluble	Solid	DI Leach	
890-8804-8	CS - 8	Soluble	Solid	DI Leach	
890-8804-9	CS - 9	Soluble	Solid	DI Leach	
890-8804-10	CS - 10	Soluble	Solid	DI Leach	
890-8804-11	CS - 11	Soluble	Solid	DI Leach	
890-8804-12	CS - 12	Soluble	Solid	DI Leach	
890-8804-13	CS - 13	Soluble	Solid	DI Leach	
890-8804-14	CS - 14	Soluble	Solid	DI Leach	
890-8804-15	CS - 15	Soluble	Solid	DI Leach	
890-8804-16	CS - 16	Soluble	Solid	DI Leach	
890-8804-17	CS - 17	Soluble	Solid	DI Leach	
MB 880-119040/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119040/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119040/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8804-4 MS	CS - 4	Soluble	Solid	DI Leach	
890-8804-4 MSD	CS - 4	Soluble	Solid	DI Leach	
890-8804-14 MS	CS - 14	Soluble	Solid	DI Leach	
890-8804-14 MSD	CS - 14	Soluble	Solid	DI Leach	

Analysis Batch: 119077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-4	CS - 4	Soluble	Solid	300.0	119040
890-8804-5	CS - 5	Soluble	Solid	300.0	119040
890-8804-6	CS - 6	Soluble	Solid	300.0	119040
890-8804-7	CS - 7	Soluble	Solid	300.0	119040
890-8804-8	CS - 8	Soluble	Solid	300.0	119040
890-8804-9	CS - 9	Soluble	Solid	300.0	119040
890-8804-10	CS - 10	Soluble	Solid	300.0	119040
890-8804-11	CS - 11	Soluble	Solid	300.0	119040
890-8804-12	CS - 12	Soluble	Solid	300.0	119040
890-8804-13	CS - 13	Soluble	Solid	300.0	119040
890-8804-14	CS - 14	Soluble	Solid	300.0	119040
890-8804-15	CS - 15	Soluble	Solid	300.0	119040
890-8804-16	CS - 16	Soluble	Solid	300.0	119040
890-8804-17	CS - 17	Soluble	Solid	300.0	119040
MB 880-119040/1-A	Method Blank	Soluble	Solid	300.0	119040
LCS 880-119040/2-A	Lab Control Sample	Soluble	Solid	300.0	119040
LCSD 880-119040/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119040
890-8804-4 MS	CS - 4	Soluble	Solid	300.0	119040
890-8804-4 MSD	CS - 4	Soluble	Solid	300.0	119040

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

HPLC/IC (Continued)

Analysis Batch: 119077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-14 MS	CS - 14	Soluble	Solid	300.0	119040
890-8804-14 MSD	CS - 14	Soluble	Solid	300.0	119040

Analysis Batch: 119078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8804-1	CS - 1	Soluble	Solid	300.0	119036
890-8804-2	CS - 2	Soluble	Solid	300.0	119036
890-8804-3	CS - 3	Soluble	Solid	300.0	119036
MB 880-119036/1-A	Method Blank	Soluble	Solid	300.0	119036
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	300.0	119036
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119036



Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 1
 Date Collected: 09/15/25 09:20
 Date Received: 09/15/25 15:38

Lab Sample ID: 890-8804-1
 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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 13:05	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 19:59	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 19:59	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119078	09/17/25 12:56	CS	EET MID

Client Sample ID: CS - 2
 Date Collected: 09/15/25 09:25
 Date Received: 09/15/25 15:38

Lab Sample ID: 890-8804-2
 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			5.02 g	5 mL	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 13:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 13:26	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 20:14	SA	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 20:14	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	119078	09/17/25 13:02	CS	EET MID

Client Sample ID: CS - 3
 Date Collected: 09/15/25 09:30
 Date Received: 09/15/25 15:38

Lab Sample ID: 890-8804-3
 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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 13:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 13:46	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 20:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 20:29	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	119078	09/17/25 13:19	CS	EET MID

Client Sample ID: CS - 4
 Date Collected: 09/15/25 09:35
 Date Received: 09/15/25 15:38

Lab Sample ID: 890-8804-4
 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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 14:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 14:07	SA	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 4

Lab Sample ID: 890-8804-4

Date Collected: 09/15/25 09:35

Matrix: Solid

Date Received: 09/15/25 15:38

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			119409	09/19/25 21:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 21:00	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 16:30	CS	EET MID

Client Sample ID: CS - 5

Lab Sample ID: 890-8804-5

Date Collected: 09/15/25 09:40

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 14:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 14:27	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 21:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 21:15	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119077	09/17/25 16:53	CS	EET MID

Client Sample ID: CS - 6

Lab Sample ID: 890-8804-6

Date Collected: 09/15/25 09:45

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 14:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 14:48	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 21:30	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 21:30	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 17:00	CS	EET MID

Client Sample ID: CS - 7

Lab Sample ID: 890-8804-7

Date Collected: 09/15/25 09:50

Matrix: Solid

Date Received: 09/15/25 15:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 15:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 15:08	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 21:46	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 21:46	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 7

Lab Sample ID: 890-8804-7

Date Collected: 09/15/25 09:50

Matrix: Solid

Date Received: 09/15/25 15:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 17:08	CS	EET MID

Client Sample ID: CS - 8

Lab Sample ID: 890-8804-8

Date Collected: 09/15/25 09:55

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 15:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 15:29	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 22:01	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 22:01	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119077	09/17/25 17:16	CS	EET MID

Client Sample ID: CS - 9

Lab Sample ID: 890-8804-9

Date Collected: 09/15/25 10:00

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 15:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 15:49	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 22:17	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 22:17	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119077	09/17/25 17:38	CS	EET MID

Client Sample ID: CS - 10

Lab Sample ID: 890-8804-10

Date Collected: 09/15/25 10:05

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 16:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 16:10	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 22:32	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 22:32	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 17:46	CS	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 11

Lab Sample ID: 890-8804-11

Date Collected: 09/15/25 10:10

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 17:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 17:44	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 22:48	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 22:48	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		20	10 mL	10 mL	119077	09/17/25 17:54	CS	EET MID

Client Sample ID: CS - 12

Lab Sample ID: 890-8804-12

Date Collected: 09/15/25 10:15

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 18:05	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 23:03	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 23:03	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 18:01	CS	EET MID

Client Sample ID: CS - 13

Lab Sample ID: 890-8804-13

Date Collected: 09/15/25 10:20

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 18:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 18:25	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/19/25 23:20	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119088	09/17/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/19/25 23:20	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 18:09	CS	EET MID

Client Sample ID: CS - 14

Lab Sample ID: 890-8804-14

Date Collected: 09/15/25 10:25

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 18:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 18:46	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
 SDG: Eddy County, NM

Client Sample ID: CS - 14

Lab Sample ID: 890-8804-14

Date Collected: 09/15/25 10:25

Matrix: Solid

Date Received: 09/15/25 15:38

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			119409	09/20/25 01:24	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 01:24	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		10	10 mL	10 mL	119077	09/17/25 18:16	CS	EET MID

Client Sample ID: CS - 15

Lab Sample ID: 890-8804-15

Date Collected: 09/15/25 10:30

Matrix: Solid

Date Received: 09/15/25 15:38

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	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 19:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 19:06	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/20/25 02:10	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 02:10	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119077	09/17/25 18:39	CS	EET MID

Client Sample ID: CS - 16

Lab Sample ID: 890-8804-16

Date Collected: 09/15/25 10:35

Matrix: Solid

Date Received: 09/15/25 15:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 19:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 19:27	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/20/25 02:26	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 02:26	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	119077	09/17/25 18:47	CS	EET MID

Client Sample ID: CS - 17

Lab Sample ID: 890-8804-17

Date Collected: 09/15/25 10:40

Matrix: Solid

Date Received: 09/15/25 15:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	119108	09/17/25 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/17/25 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119228	09/17/25 19:47	SA	EET MID
Total/NA	Analysis	8015 NM		1			119409	09/20/25 02:41	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 02:41	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Client Sample ID: CS - 17
Date Collected: 09/15/25 10:40
Date Received: 09/15/25 15:38

Lab Sample ID: 890-8804-17
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			4.98 g	50 mL	119040	09/16/25 14:58	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119077	09/17/25 19:09	CS	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: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8804-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8804-1	CS - 1	Solid	09/15/25 09:20	09/15/25 15:38	1
890-8804-2	CS - 2	Solid	09/15/25 09:25	09/15/25 15:38	1
890-8804-3	CS - 3	Solid	09/15/25 09:30	09/15/25 15:38	1
890-8804-4	CS - 4	Solid	09/15/25 09:35	09/15/25 15:38	1
890-8804-5	CS - 5	Solid	09/15/25 09:40	09/15/25 15:38	1
890-8804-6	CS - 6	Solid	09/15/25 09:45	09/15/25 15:38	1
890-8804-7	CS - 7	Solid	09/15/25 09:50	09/15/25 15:38	1
890-8804-8	CS - 8	Solid	09/15/25 09:55	09/15/25 15:38	1
890-8804-9	CS - 9	Solid	09/15/25 10:00	09/15/25 15:38	1
890-8804-10	CS - 10	Solid	09/15/25 10:05	09/15/25 15:38	1
890-8804-11	CS - 11	Solid	09/15/25 10:10	09/15/25 15:38	1
890-8804-12	CS - 12	Solid	09/15/25 10:15	09/15/25 15:38	1
890-8804-13	CS - 13	Solid	09/15/25 10:20	09/15/25 15:38	1
890-8804-14	CS - 14	Solid	09/15/25 10:25	09/15/25 15:38	1
890-8804-15	CS - 15	Solid	09/15/25 10:30	09/15/25 15:38	2
890-8804-16	CS - 16	Solid	09/15/25 10:35	09/15/25 15:38	2
890-8804-17	CS - 17	Solid	09/15/25 10:40	09/15/25 15:38	2

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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	
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:	RDU 67-68 Tank Battery	Turn Around		Pres. Code	ANALYSIS REQUEST																
		<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush		TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush												
Project Number:	122	Due Date:	Routine TAT																		
Project Location:	Eddy County, NM	TAT starts the day received by the lab, if received by 4:30pm																			
Sampler's Name:	Sanlago Giron																				
CCW/O #:	21535795																				
SAMPLE RECEIPT	Temp. Blank:	Yes	No	Wet Ice:	Yes	No															
Samples Received Intact:	Thermomater/ID:	Yes	No	Parameters																	
Cooler Custody Seals:	Correction Factor:	Yes	No	0.2																	
Sample Custody Seals:	Temperature Reading:	Yes	No	4.8																	
Total Containers:	Corrected Temperature:	Yes	No	4.6																	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp # of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush											
CS-10	S	9.15.25	10:05	1	Comp 1	X	X	X													
CS-11	S	9.15.25	10:10	1	Comp 1	X	X	X													
CS-12	S	9.15.25	10:15	1	Comp 1	X	X	X													
CS-13	S	9.15.25	10:20	1	Comp 1	X	X	X													
CS-14	S	9.15.25	10:25	1	Comp 1	X	X	X													
CS-15	S	9.15.25	10:30	2	Comp 1	X	X	X													
CS-16	S	9.15.25	10:35	2	Comp 1	X	X	X													
CS-17	S	9.15.25	10:40	2	Comp 1	X	X	X													

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

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 \$4 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
		9/15 15:18			

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Eurofins Carlsbad
1089 N Canal St
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)
Client Contact: **Shipping/Receiving** Eurofins Environment Testing South Central
Address: 1211 W. Florida Ave. Midland TX, 79701
City: Midland State: TX, Zip: 79701
Phone: 432-704-5440(Tel)
Email: N/A
Project Name: RDU 67 - 68 TANK BATTERY
Site: N/A
SSOW#: N/A

Sampler: N/A
Lab PM: Teel, Brianna
E-Mail: Brianna.Teel@et.eurofins.com
Accreditations Required (See note): NELAP - Texas
COC No: 890-5878-1
Page: Page 1 of 2
Job #: 890-8804-1
Preservation Codes:

Due Date Requested: 9/19/2025
TAT Requested (days): N/A
Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8015MOD_Calc	8021B/5035FP_CalcBTEX	300_ORGFM_28D/DI_LEACHChloride	8015MOD_NM/8015NM_S_Prep8015 NM	Total Number of containers	Special Instructions/Note:
CS - 1 (890-8804-1)	9/15/25	09:20	G	Solid	X	X	X	X	X	X	X	1	
CS - 2 (890-8804-2)	9/15/25	09:25	G	Solid	X	X	X	X	X	X	X	1	
CS - 3 (890-8804-3)	9/15/25	09:30	G	Solid	X	X	X	X	X	X	X	1	
CS - 4 (890-8804-4)	9/15/25	09:35	G	Solid	X	X	X	X	X	X	X	1	
CS - 5 (890-8804-5)	9/15/25	09:40	G	Solid	X	X	X	X	X	X	X	1	
CS - 6 (890-8804-6)	9/15/25	09:45	G	Solid	X	X	X	X	X	X	X	1	
CS - 7 (890-8804-7)	9/15/25	09:50	G	Solid	X	X	X	X	X	X	X	1	
CS - 8 (890-8804-8)	9/15/25	09:55	G	Solid	X	X	X	X	X	X	X	1	
CS - 9 (890-8804-9)	9/15/25	10:00	G	Solid	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/shipment being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For Months

Empty Kit Relinquished by: _____ Date: _____
Relinquished by: *[Signature]* Date/Time: 9/15 1630 Company: _____
Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____
Relinquished by: _____ Date/Time: _____ Company: _____

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Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____
Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____
Cooler Temperature(s) °C and Other Remarks: 33/32.1 Tps

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8804-1
SDG Number: Eddy County, NM

Login Number: 8804

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8804-1
SDG Number: Eddy County, NM

Login Number: 8804
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 09/16/25 11:56 AM

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

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/19/2025 2:20:05 PM

JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8800-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



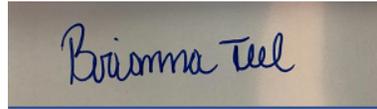
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/19/2025 2:20:05 PM

Authorized for release by
Brianna Teel, Project Manager
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Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-8800-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
SDG: Eddy County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project: RDU 67-68 Tank Battery

Job ID: 890-8800-1

Job ID: 890-8800-1

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Job Narrative 890-8800-1

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

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

Receipt

The sample was received on 9/15/2025 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW-1 (890-8800-1).

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-119107 and analytical batch 880-119098 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 surrogate recovery for the blank associated with preparation batch 880-119107 and analytical batch 880-119098 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-119098 recovered under the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. 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 sample was outside control limits: (LCSD 880-119075/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-119194 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-119194/85).

Passing CCV within 12 hours and 10 samples before and after.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-119075 and analytical batch 880-119194 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: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8800-1

Date Collected: 09/15/25 09:00

Matrix: Solid

Date Received: 09/15/25 15:18

Sample Depth: 0-1

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		09/17/25 08:56	09/17/25 19:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 19:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 19:40	1
m-Xylene & p-Xylene	<0.00399	U *	0.00399		mg/Kg		09/17/25 08:56	09/17/25 19:40	1
o-Xylene	<0.00200	U *	0.00200		mg/Kg		09/17/25 08:56	09/17/25 19:40	1
Xylenes, Total	<0.00399	U *	0.00399		mg/Kg		09/17/25 08:56	09/17/25 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/17/25 08:56	09/17/25 19:40	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/25 08:56	09/17/25 19:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/17/25 19:40	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			09/19/25 10:42	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		09/16/25 16:28	09/19/25 10:42	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/16/25 16:28	09/19/25 10:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/16/25 16:28	09/19/25 10:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/16/25 16:28	09/19/25 10:42	1
o-Terphenyl	116		70 - 130	09/16/25 16:28	09/19/25 10:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	871		9.94		mg/Kg			09/17/25 12:22	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-8800-1	SW-1	106	101
LCS 880-119107/1-A	Lab Control Sample	98	91
LCSD 880-119107/2-A	Lab Control Sample Dup	96	95
MB 880-119107/5-A	Method Blank	147 S1+	84

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-8800-1	SW-1	107	116
LCS 880-119075/2-A	Lab Control Sample	114	129
LCSD 880-119075/3-A	Lab Control Sample Dup	133 S1+	153 S1+
MB 880-119075/1-A	Method Blank	123	131 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119107/5-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	09/17/25 08:56	09/17/25 11:52	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09/17/25 08:56	09/17/25 11:52	1

Lab Sample ID: LCS 880-119107/1-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07766		mg/Kg		78	70 - 130
Toluene	0.100	0.07759		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.08544		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1578		mg/Kg		79	70 - 130
o-Xylene	0.100	0.06792	*-	mg/Kg		68	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-119107/2-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08094		mg/Kg		81	70 - 130	4	35
Toluene	0.100	0.07546		mg/Kg		75	70 - 130	3	35
Ethylbenzene	0.100	0.08205		mg/Kg		82	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1366	*-	mg/Kg		68	70 - 130	14	35
o-Xylene	0.100	0.06437	*-	mg/Kg		64	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

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

Lab Sample ID: MB 880-119075/1-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119075

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		09/16/25 16:28	09/19/25 01:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	123		70 - 130	09/16/25 16:28	09/19/25 01:43	1
o-Terphenyl	131	S1+	70 - 130	09/16/25 16:28	09/19/25 01:43	1

Lab Sample ID: LCS 880-119075/2-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	918.9		mg/Kg		92	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: LCSD 880-119075/3-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1147		mg/Kg		115	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	15	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	153	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119036/1-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 11:03	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-119036/2-A
Matrix: Solid
Analysis Batch: 119078

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.7		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-119036/3-A
Matrix: Solid
Analysis Batch: 119078

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.4		mg/Kg		106	90 - 110	0	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
SDG: Eddy County, NM

GC VOA

Analysis Batch: 119098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	8021B	119107
MB 880-119107/5-A	Method Blank	Total/NA	Solid	8021B	119107
LCS 880-119107/1-A	Lab Control Sample	Total/NA	Solid	8021B	119107
LCSD 880-119107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119107

Prep Batch: 119107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	5035	
MB 880-119107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 119234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	8015NM Prep	
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 119194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	8015B NM	119075
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015B NM	119075
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119075
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119075

Analysis Batch: 119339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Soluble	Solid	DI Leach	
MB 880-119036/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 119078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8800-1	SW-1	Soluble	Solid	300.0	119036
MB 880-119036/1-A	Method Blank	Soluble	Solid	300.0	119036
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	300.0	119036
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119036

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
 SDG: Eddy County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8800-1

Date Collected: 09/15/25 09:00

Matrix: Solid

Date Received: 09/15/25 15:18

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	119107	09/17/25 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/17/25 19:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119234	09/17/25 19:40	SA	EET MID
Total/NA	Analysis	8015 NM		1			119339	09/19/25 10:42	SA	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	119075	09/16/25 16:28	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119194	09/19/25 10:42	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119078	09/17/25 12:22	CS	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: RDU 67-68 Tank Battery

Job ID: 890-8800-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8800-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8800-1	SW-1	Solid	09/15/25 09:00	09/15/25 15:18	0-1

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Eurofins Carlsbad

1089 N Canal St.
 Carlsbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab) Sampler: N/A
 Client Contact: N/A
 Shipping/Receiving: N/A
 Company: Eurofins Environment Testing South Cent
 Address: 1211 W. Florida Ave.
 City: Midland
 State, Zip: TX, 79701
 Phone: 432-704-5440(Tel)
 Email: N/A
 Project Name: RDU 67 - 68 TANK BATTERY
 Site: N/A
 SSONV#: N/A

Lab PM: Brianna Teel
 E-Mail: Brianna.Teel@el.eurofins.com
 Accreditations Required (See note): NELAP - Texas
 Carrier Tracking No(s): N/A
 State of Origin: New Mexico
 Page: Page 1 of 1
 Job #: 890-8800-1
 Preservation Codes:

Due Date Requested: 9/19/2025
 TAT Requested (days): N/A
 Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=Overseal, B=Issue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8021B/5035FP_CalcBTEX	300_ORGFM_28/DI_LEACHChloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep8015 NM	Total Number of containers	Special Instructions/Note:
SW - 1 (890-8800-1)	9/15/25	09:00	G	Solid	X	X	X	X	X	X		1	

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Empty Kit Relinquished by: Date: _____ Time: _____ Method of Shipment: _____
 Relinquished by: [Signature] Date/Time: 9/15 1630 Company: _____ Received by: [Signature] Date/Time: 9/16/25 [Signature] Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: Δ Yes Δ No Custody Seal No.: 3.3/3.2 - 1 TRS
 Cooler Temperature(s) °C and Other Remarks:

Eurofins Carlisbad

1089 N Canal St.
 Carlisbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)

Client Contact: **Shipping/Receiving** Eurofins Environment Testing South Cent
 Address: 1211 W. Florida Ave.
 City: Midland
 State/Zip: TX, 79701
 Phone: 432-704-5440(Tel)
 Email: N/A
 Project Name: EVGSAU MCA BATTERY #4
 Site: N/A
 Carrier Tracking No(s): N/A
 State of Origin: New Mexico
 Page: Page 2 of 2
 Job #: 890-8797-1
 Preservation Codes:

Due Date Requested: 9/18/2025
 TAT Requested (days): N/A
 Analysis Requested

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wet/dry, Solid/Liquid, Overpack, Aali)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
BH - 11 (4.0) (890-8797-10)	9/11/25	12:27	G	Solid	X	X	8015MOD_NM/8015NM_S_Prep(MOD) Full TPH	1	
BH - 13 (4.0) (890-8797-11)	9/11/25	12:30	G	Solid	X	X	8021B/5035FP_CalcBTEX	1	
BH - 81 (9.0) (890-8797-12)	9/11/25	12:47	G	Solid	X	X	300_ORGFM_28D/DI_LEACHChloride	1	
BH - 91 (9.0) (890-8797-13)	9/11/25	12:51	G	Solid	X	X	Total_BTEX_GCV	1	
							8015MOD_Calc		

Sample Identification - Client ID (Lab ID)

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/systems/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: *Deann S* Date/Time: 9/15 1630 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____



Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8800-1
SDG Number: Eddy County, NM

Login Number: 8800
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8800-1
SDG Number: Eddy County, NM

Login Number: 8800
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 09/16/25 11:56 AM

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

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/19/2025 2:20:38 PM

JOB DESCRIPTION

RDU 67- 68 Tank Battery
 Eddy County, NN

JOB NUMBER

890-8801-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



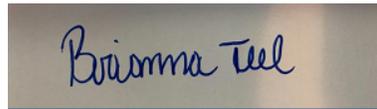
Eurofins Carlsbad

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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9/19/2025 2:20:38 PM

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

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Client: Earth Systems Response and Restoration
Project/Site: RDU 67- 68 Tank Battery

Laboratory Job ID: 890-8801-1
SDG: Eddy County, NN

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
SDG: Eddy County, NN

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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: RDU 67- 68 Tank Battery

Job ID: 890-8801-1

Job ID: 890-8801-1

Eurofins Carlsbad

Job Narrative 890-8801-1

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

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

Receipt

The sample was received on 9/15/2025 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW-2 (890-8801-1).

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-119106 and analytical batch 880-119095 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 sample was outside control limits: (LCSD 880-119075/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-119194 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-119194/85).

Passing CCV within 12 hours and 10 samples before and after.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-119075 and analytical batch 880-119194 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-2 (890-8801-1). Evidence of matrix interferences is not obvious.

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

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: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

Client Sample ID: SW-2

Lab Sample ID: 890-8801-1

Date Collected: 09/15/25 09:05

Matrix: Solid

Date Received: 09/15/25 15:18

Sample Depth: 0-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *-	0.00200		mg/Kg		09/17/25 08:55	09/17/25 19:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 19:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 19:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 08:55	09/17/25 19:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 19:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 08:55	09/17/25 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/17/25 08:55	09/17/25 19:17	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/17/25 08:55	09/17/25 19:17	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			09/17/25 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			09/19/25 10:58	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	<50.1	U	50.1		mg/Kg		09/16/25 16:28	09/19/25 10:58	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		09/16/25 16:28	09/19/25 10:58	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		09/16/25 16:28	09/19/25 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130	09/16/25 16:28	09/19/25 10:58	1
o-Terphenyl	149	S1+	70 - 130	09/16/25 16:28	09/19/25 10:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	588		9.92		mg/Kg			09/17/25 12:28	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

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)
890-8801-1	SW-2	109	105
LCS 880-119106/1-A	Lab Control Sample	100	98
LCSD 880-119106/2-A	Lab Control Sample Dup	94	93
MB 880-119106/5-A	Method Blank	104	98

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)
890-8801-1	SW-2	138 S1+	149 S1+
LCS 880-119075/2-A	Lab Control Sample	114	129
LCSD 880-119075/3-A	Lab Control Sample Dup	133 S1+	153 S1+
MB 880-119075/1-A	Method Blank	123	131 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119106/5-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 08:55	09/17/25 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/17/25 08:55	09/17/25 11:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/17/25 08:55	09/17/25 11:33	1

Lab Sample ID: LCS 880-119106/1-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06779	*-	mg/Kg		68	70 - 130
Toluene	0.100	0.07461		mg/Kg		75	70 - 130
Ethylbenzene	0.100	0.07500		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	0.200	0.1525		mg/Kg		76	70 - 130
o-Xylene	0.100	0.07785		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-119106/2-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.06745	*-	mg/Kg		67	70 - 130	0	35
Toluene	0.100	0.07405		mg/Kg		74	70 - 130	1	35
Ethylbenzene	0.100	0.07490		mg/Kg		75	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1517		mg/Kg		76	70 - 130	1	35
o-Xylene	0.100	0.07875		mg/Kg		79	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

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

Lab Sample ID: MB 880-119075/1-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119075

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		09/16/25 16:28	09/19/25 01:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	123		70 - 130	09/16/25 16:28	09/19/25 01:43	1
o-Terphenyl	131	S1+	70 - 130	09/16/25 16:28	09/19/25 01:43	1

Lab Sample ID: LCS 880-119075/2-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	918.9		mg/Kg		92	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: LCSD 880-119075/3-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1147		mg/Kg		115	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	15	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	153	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119036/1-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 11:03	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-119036/2-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.7		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-119036/3-A
 Matrix: Solid
 Analysis Batch: 119078

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.4		mg/Kg		106	90 - 110	0	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
SDG: Eddy County, NN

GC VOA

Analysis Batch: 119095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	8021B	119106
MB 880-119106/5-A	Method Blank	Total/NA	Solid	8021B	119106
LCS 880-119106/1-A	Lab Control Sample	Total/NA	Solid	8021B	119106
LCSD 880-119106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119106

Prep Batch: 119106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	5035	
MB 880-119106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 119222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	8015NM Prep	
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 119194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	8015B NM	119075
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015B NM	119075
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119075
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119075

Analysis Batch: 119340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Soluble	Solid	DI Leach	
MB 880-119036/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 119078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8801-1	SW-2	Soluble	Solid	300.0	119036
MB 880-119036/1-A	Method Blank	Soluble	Solid	300.0	119036
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	300.0	119036
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119036

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

Client Sample ID: SW-2

Lab Sample ID: 890-8801-1

Date Collected: 09/15/25 09:05

Matrix: Solid

Date Received: 09/15/25 15:18

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	119106	09/17/25 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119095	09/17/25 19:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119222	09/17/25 19:17	SA	EET MID
Total/NA	Analysis	8015 NM		1			119340	09/19/25 10:58	SA	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	119075	09/16/25 16:28	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119194	09/19/25 10:58	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119078	09/17/25 12:28	CS	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: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
SDG: Eddy County, NN

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
 SDG: Eddy County, NN

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67- 68 Tank Battery

Job ID: 890-8801-1
SDG: Eddy County, NN

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8801-1	SW-2	Solid	09/15/25 09:05	09/15/25 15:18	0-2

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8801-1
SDG Number: Eddy County, NN

Login Number: 8801
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8801-1
SDG Number: Eddy County, NN

Login Number: 8801
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 09/16/25 11:56 AM

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

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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

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JOB DESCRIPTION

RDU 67 - 68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8802-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



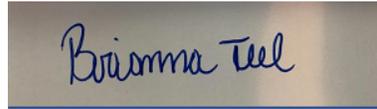
Eurofins Carlsbad

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
(432)704-5440

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Client: Earth Systems Response and Restoration
Project/Site: RDU 67 - 68 Tank Battery

Laboratory Job ID: 890-8802-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
SDG: Eddy County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1

Job ID: 890-8802-1

Eurofins Carlsbad

Job Narrative 890-8802-1

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

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

Receipt

The sample was received on 9/15/2025 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW-3 (890-8802-1).

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-119106 and analytical batch 880-119095 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 sample was outside control limits: (LCSD 880-119075/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-119194 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-119194/85).

Passing CCV within 12 hours and 10 samples before and after.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-119075 and analytical batch 880-119194 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-3 (890-8802-1). Evidence of matrix interferences is not obvious.

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

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: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

Client Sample ID: SW-3

Lab Sample ID: 890-8802-1

Date Collected: 09/15/25 09:10

Matrix: Solid

Date Received: 09/15/25 15:18

Sample Depth: 0-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *-	0.00201		mg/Kg		09/17/25 08:55	09/17/25 19:37	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:55	09/17/25 19:37	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:55	09/17/25 19:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/17/25 08:55	09/17/25 19:37	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:55	09/17/25 19:37	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/17/25 08:55	09/17/25 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/17/25 08:55	09/17/25 19:37	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/17/25 08:55	09/17/25 19:37	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/17/25 19:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			09/19/25 11:14	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	<49.7	U	49.7		mg/Kg		09/16/25 16:28	09/19/25 11:14	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/16/25 16:28	09/19/25 11:14	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/16/25 16:28	09/19/25 11:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	09/16/25 16:28	09/19/25 11:14	1
o-Terphenyl	136	S1+	70 - 130	09/16/25 16:28	09/19/25 11:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	677		9.96		mg/Kg			09/17/25 12:34	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy 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)
890-8802-1	SW-3	96	97
LCS 880-119106/1-A	Lab Control Sample	100	98
LCSD 880-119106/2-A	Lab Control Sample Dup	94	93
MB 880-119106/5-A	Method Blank	104	98

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)
890-8802-1	SW-3	124	136 S1+
LCS 880-119075/2-A	Lab Control Sample	114	129
LCSD 880-119075/3-A	Lab Control Sample Dup	133 S1+	153 S1+
MB 880-119075/1-A	Method Blank	123	131 S1+

Surrogate Legend
 1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119106/5-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:55	09/17/25 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 08:55	09/17/25 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/17/25 08:55	09/17/25 11:33	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/17/25 08:55	09/17/25 11:33	1

Lab Sample ID: LCS 880-119106/1-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06779	*-	mg/Kg		68	70 - 130
Toluene	0.100	0.07461		mg/Kg		75	70 - 130
Ethylbenzene	0.100	0.07500		mg/Kg		75	70 - 130
m-Xylene & p-Xylene	0.200	0.1525		mg/Kg		76	70 - 130
o-Xylene	0.100	0.07785		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-119106/2-A
 Matrix: Solid
 Analysis Batch: 119095

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119106

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.06745	*-	mg/Kg		67	70 - 130	0	35
Toluene	0.100	0.07405		mg/Kg		74	70 - 130	1	35
Ethylbenzene	0.100	0.07490		mg/Kg		75	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1517		mg/Kg		76	70 - 130	1	35
o-Xylene	0.100	0.07875		mg/Kg		79	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

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

Lab Sample ID: MB 880-119075/1-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119075

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		09/16/25 16:28	09/19/25 01:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	123		70 - 130	09/16/25 16:28	09/19/25 01:43	1
o-Terphenyl	131	S1+	70 - 130	09/16/25 16:28	09/19/25 01:43	1

Lab Sample ID: LCS 880-119075/2-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	918.9		mg/Kg		92	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: LCSD 880-119075/3-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1147		mg/Kg		115	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	15	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	153	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119036/1-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 11:03	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-119036/2-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.7		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-119036/3-A
 Matrix: Solid
 Analysis Batch: 119078

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.4		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

GC VOA

Analysis Batch: 119095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	8021B	119106
MB 880-119106/5-A	Method Blank	Total/NA	Solid	8021B	119106
LCS 880-119106/1-A	Lab Control Sample	Total/NA	Solid	8021B	119106
LCSD 880-119106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119106

Prep Batch: 119106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	5035	
MB 880-119106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 119223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	8015NM Prep	
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 119194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	8015B NM	119075
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015B NM	119075
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119075
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119075

Analysis Batch: 119341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Soluble	Solid	DI Leach	
MB 880-119036/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 119078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8802-1	SW-3	Soluble	Solid	300.0	119036
MB 880-119036/1-A	Method Blank	Soluble	Solid	300.0	119036
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	300.0	119036
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119036

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
 SDG: Eddy County, NM

Client Sample ID: SW-3

Lab Sample ID: 890-8802-1

Date Collected: 09/15/25 09:10

Matrix: Solid

Date Received: 09/15/25 15:18

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	119106	09/17/25 08:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119095	09/17/25 19:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119223	09/17/25 19:37	SA	EET MID
Total/NA	Analysis	8015 NM		1			119341	09/19/25 11:14	SA	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	119075	09/16/25 16:28	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119194	09/19/25 11:14	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119078	09/17/25 12:34	CS	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: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date												
Texas	NELAP	T104704400	06-30-26												
<p>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.</p> <table border="1"> <thead> <tr> <th>Analysis Method</th> <th>Prep Method</th> <th>Matrix</th> <th>Analyte</th> </tr> </thead> <tbody> <tr> <td>8015 NM</td> <td></td> <td>Solid</td> <td>Total TPH</td> </tr> <tr> <td>Total BTEX</td> <td></td> <td>Solid</td> <td>Total BTEX</td> </tr> </tbody> </table>				Analysis Method	Prep Method	Matrix	Analyte	8015 NM		Solid	Total TPH	Total BTEX		Solid	Total BTEX
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: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67 - 68 Tank Battery

Job ID: 890-8802-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8802-1	SW-3	Solid	09/15/25 09:10	09/15/25 15:18	0-1

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8802-1
SDG Number: Eddy County, NM

Login Number: 8802

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8802-1
SDG Number: Eddy County, NM

Login Number: 8802
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 09/16/25 11:56 AM

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

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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 10/7/2025 3:58:16 PM

JOB DESCRIPTION

RDU-67-68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8889-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



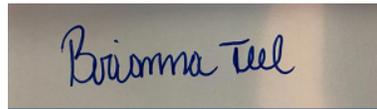
Eurofins Carlsbad

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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10/7/2025 3:58:16 PM

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

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Laboratory Job ID: 890-8889-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: RDU-67-68 Tank Battery

Job ID: 890-8889-1

Job ID: 890-8889-1

Eurofins Carlsbad

Job Narrative 890-8889-1

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

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

Receipt

The samples were received on 9/30/2025 1:43 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 -11.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-18 (890-8889-1), CS-19 (890-8889-2), CS-20 (890-8889-3), CS-21 (890-8889-4), CS-22 (890-8889-5), CS-23 (890-8889-6) and CS-24 (890-8889-7).

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 continuing calibration verification (CCV) associated with batch 880-120516 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10 and 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. The associated sample is:(CCV 880-120516/30).

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: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-18

Lab Sample ID: 890-8889-1

Date Collected: 09/29/25 08:00

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/01/25 23:25	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/01/25 23:25	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/01/25 23:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/01/25 10:22	10/01/25 23:25	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/01/25 23:25	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/01/25 10:22	10/01/25 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10/01/25 10:22	10/01/25 23:25	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 10:22	10/01/25 23:25	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			10/01/25 23:25	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			10/06/25 18:16	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		10/01/25 08:33	10/06/25 18:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 18:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 18:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	10/01/25 08:33	10/06/25 18:16	1
o-Terphenyl	109		70 - 130	10/01/25 08:33	10/06/25 18:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1170		49.6		mg/Kg			10/01/25 22:34	5

Client Sample ID: CS-19

Lab Sample ID: 890-8889-2

Date Collected: 09/29/25 08:05

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/01/25 23:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/01/25 23:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/01/25 23:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/01/25 10:22	10/01/25 23:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/01/25 23:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/01/25 10:22	10/01/25 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	10/01/25 10:22	10/01/25 23:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-19

Lab Sample ID: 890-8889-2

Date Collected: 09/29/25 08:05

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	10/01/25 10:22	10/01/25 23:45	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			10/01/25 23:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/06/25 18:36	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		10/01/25 08:33	10/06/25 18:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 18:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	10/01/25 08:33	10/06/25 18:36	1
o-Terphenyl	110		70 - 130	10/01/25 08:33	10/06/25 18:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	500		49.8		mg/Kg			10/01/25 22:40	5

Client Sample ID: CS-20

Lab Sample ID: 890-8889-3

Date Collected: 09/29/25 08:10

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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		10/01/25 10:22	10/02/25 00:06	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 00:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 00:06	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		10/01/25 10:22	10/02/25 00:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 00:06	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		10/01/25 10:22	10/02/25 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	10/01/25 10:22	10/02/25 00:06	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/01/25 10:22	10/02/25 00:06	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			10/02/25 00:06	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			10/06/25 18:56	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-20

Lab Sample ID: 890-8889-3

Date Collected: 09/29/25 08:10

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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		10/01/25 08:33	10/06/25 18:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 18:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 18:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				10/01/25 08:33	10/06/25 18:56	1
o-Terphenyl	107		70 - 130				10/01/25 08:33	10/06/25 18:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1710		50.4		mg/Kg			10/01/25 22:45	5

Client Sample ID: CS-21

Lab Sample ID: 890-8889-4

Date Collected: 09/29/25 08:15

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/01/25 10:22	10/02/25 00:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130				10/01/25 10:22	10/02/25 00:26	1
1,4-Difluorobenzene (Surr)	97		70 - 130				10/01/25 10:22	10/02/25 00:26	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			10/02/25 00:26	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			10/06/25 19:17	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	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				10/01/25 08:33	10/06/25 19:17	1
o-Terphenyl	104		70 - 130				10/01/25 08:33	10/06/25 19:17	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-21

Lab Sample ID: 890-8889-4

Date Collected: 09/29/25 08:15

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1670		50.5		mg/Kg			10/01/25 22:50	5

Client Sample ID: CS-22

Lab Sample ID: 890-8889-5

Date Collected: 09/29/25 08:20

Matrix: Solid

Date Received: 09/30/25 13:43

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		10/01/25 10:22	10/02/25 00:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 00:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 00:47	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/01/25 10:22	10/02/25 00:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 00:47	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/01/25 10:22	10/02/25 00:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10/01/25 10:22	10/02/25 00:47	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 10:22	10/02/25 00:47	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			10/02/25 00:47	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			10/06/25 19:37	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		10/01/25 08:33	10/06/25 19:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 19:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	10/01/25 08:33	10/06/25 19:37	1
o-Terphenyl	107		70 - 130	10/01/25 08:33	10/06/25 19:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4810		100		mg/Kg			10/01/25 23:06	10

Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-23

Lab Sample ID: 890-8889-6

Date Collected: 09/29/25 08:25

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/02/25 01:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/02/25 01:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/02/25 01:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/01/25 10:22	10/02/25 01:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/01/25 10:22	10/02/25 01:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/01/25 10:22	10/02/25 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	10/01/25 10:22	10/02/25 01:07	1
1,4-Difluorobenzene (Surr)	95		70 - 130	10/01/25 10:22	10/02/25 01:07	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			10/02/25 01:07	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			10/06/25 19:57	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	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	10/01/25 08:33	10/06/25 19:57	1
o-Terphenyl	102		70 - 130	10/01/25 08:33	10/06/25 19:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1740		50.1		mg/Kg			10/01/25 23:11	5

Client Sample ID: CS-24

Lab Sample ID: 890-8889-7

Date Collected: 09/29/25 08:30

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 13:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 13:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 13:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		10/07/25 08:46	10/07/25 13:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 13:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/07/25 08:46	10/07/25 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	10/07/25 08:46	10/07/25 13:17	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-24

Lab Sample ID: 890-8889-7

Date Collected: 09/29/25 08:30

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	10/07/25 08:46	10/07/25 13:17	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			10/07/25 13:17	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			10/06/25 20:18	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	<49.8	U	49.8		mg/Kg		10/01/25 08:33	10/06/25 20:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/01/25 08:33	10/06/25 20:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/01/25 08:33	10/06/25 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	10/01/25 08:33	10/06/25 20:18	1
o-Terphenyl	112		70 - 130	10/01/25 08:33	10/06/25 20:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6330		99.2		mg/Kg			10/01/25 23:27	10

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy 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)
890-8889-1	CS-18	83	98
890-8889-2	CS-19	81	95
890-8889-3	CS-20	85	96
890-8889-4	CS-21	84	97
890-8889-5	CS-22	83	98
890-8889-6	CS-23	85	95
890-8889-7	CS-24	107	111
LCS 880-120169/1-A	Lab Control Sample	89	89
LCS 880-120608/1-A	Lab Control Sample	100	117
LCS 880-120169/2-A	Lab Control Sample Dup	86	96
LCS 880-120608/2-A	Lab Control Sample Dup	99	91
MB 880-120009/5-A	Method Blank	78	93
MB 880-120169/5-A	Method Blank	77	98
MB 880-120608/5-A	Method Blank	119	85

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)
890-8889-1	CS-18	118	109
890-8889-2	CS-19	119	110
890-8889-3	CS-20	117	107
890-8889-4	CS-21	109	104
890-8889-5	CS-22	115	107
890-8889-6	CS-23	109	102
890-8889-7	CS-24	118	112
LCS 880-120145/2-A	Lab Control Sample	118	111
LCS 880-120145/3-A	Lab Control Sample Dup	121	107
MB 880-120145/1-A	Method Blank	114	101

Surrogate Legend
 1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-120009/5-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120009

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130				10/01/25 08:00	10/01/25 11:43	1
1,4-Difluorobenzene (Surr)	93		70 - 130				10/01/25 08:00	10/01/25 11:43	1

Lab Sample ID: MB 880-120169/5-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130				10/01/25 10:22	10/01/25 22:43	1
1,4-Difluorobenzene (Surr)	98		70 - 130				10/01/25 10:22	10/01/25 22:43	1

Lab Sample ID: LCS 880-120169/1-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09090		mg/Kg		91	70 - 130
Toluene	0.100	0.09302		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08322		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08232		mg/Kg		82	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	89		70 - 130				
1,4-Difluorobenzene (Surr)	89		70 - 130				

Lab Sample ID: LCSD 880-120169/2-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08889		mg/Kg		89	70 - 130	2	35

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-120169/2-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09008		mg/Kg		90	70 - 130	3	35
Ethylbenzene	0.100	0.08396		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1628		mg/Kg		81	70 - 130	0	35
o-Xylene	0.100	0.08091		mg/Kg		81	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-120608/5-A
 Matrix: Solid
 Analysis Batch: 120605

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/07/25 08:46	10/07/25 11:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/07/25 08:46	10/07/25 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/07/25 08:46	10/07/25 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	10/07/25 08:46	10/07/25 11:33	1
1,4-Difluorobenzene (Surr)	85		70 - 130	10/07/25 08:46	10/07/25 11:33	1

Lab Sample ID: LCS 880-120608/1-A
 Matrix: Solid
 Analysis Batch: 120605

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08167		mg/Kg		82	70 - 130
Toluene	0.100	0.07766		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.07992		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1653		mg/Kg		83	70 - 130
o-Xylene	0.100	0.08361		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: LCSD 880-120608/2-A
 Matrix: Solid
 Analysis Batch: 120605

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09488		mg/Kg		95	70 - 130	15	35
Toluene	0.100	0.09335		mg/Kg		93	70 - 130	18	35
Ethylbenzene	0.100	0.09757		mg/Kg		98	70 - 130	20	35

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-120608/2-A
 Matrix: Solid
 Analysis Batch: 120605

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120608

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.1972		mg/Kg		99	70 - 130	18	35
o-Xylene	0.100	0.09872		mg/Kg		99	70 - 130	17	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		70 - 130						
1,4-Difluorobenzene (Surr)	91		70 - 130						

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

Lab Sample ID: MB 880-120145/1-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120145

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		10/01/25 08:33	10/06/25 09:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 09:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 09:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	114		70 - 130						
o-Terphenyl	101		70 - 130						

Lab Sample ID: LCS 880-120145/2-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120145

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1135		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1205		mg/Kg		121	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	118		70 - 130						
o-Terphenyl	111		70 - 130						

Lab Sample ID: LCSD 880-120145/3-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120145

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1139		mg/Kg		114	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	1186		mg/Kg		119	70 - 130	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-120145/3-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120145

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	107		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120158/1-A
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 21:21	1

Lab Sample ID: LCS 880-120158/2-A
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.4		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-120158/3-A
 Matrix: Solid
 Analysis Batch: 120210

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	246.6		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 890-8889-4 MS
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: CS-21
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1670		1260	2970		mg/Kg		103	90 - 110

Lab Sample ID: 890-8889-4 MSD
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: CS-21
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1670		1260	2975		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

GC VOA

Prep Batch: 120009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-120009/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 120150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	8021B	120169
890-8889-2	CS-19	Total/NA	Solid	8021B	120169
890-8889-3	CS-20	Total/NA	Solid	8021B	120169
890-8889-4	CS-21	Total/NA	Solid	8021B	120169
890-8889-5	CS-22	Total/NA	Solid	8021B	120169
890-8889-6	CS-23	Total/NA	Solid	8021B	120169
MB 880-120009/5-A	Method Blank	Total/NA	Solid	8021B	120009
MB 880-120169/5-A	Method Blank	Total/NA	Solid	8021B	120169
LCS 880-120169/1-A	Lab Control Sample	Total/NA	Solid	8021B	120169
LCSD 880-120169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120169

Prep Batch: 120169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	5035	
890-8889-2	CS-19	Total/NA	Solid	5035	
890-8889-3	CS-20	Total/NA	Solid	5035	
890-8889-4	CS-21	Total/NA	Solid	5035	
890-8889-5	CS-22	Total/NA	Solid	5035	
890-8889-6	CS-23	Total/NA	Solid	5035	
MB 880-120169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 120313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	Total BTEX	
890-8889-2	CS-19	Total/NA	Solid	Total BTEX	
890-8889-3	CS-20	Total/NA	Solid	Total BTEX	
890-8889-4	CS-21	Total/NA	Solid	Total BTEX	
890-8889-5	CS-22	Total/NA	Solid	Total BTEX	
890-8889-6	CS-23	Total/NA	Solid	Total BTEX	
890-8889-7	CS-24	Total/NA	Solid	Total BTEX	

Analysis Batch: 120605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-7	CS-24	Total/NA	Solid	8021B	120608
MB 880-120608/5-A	Method Blank	Total/NA	Solid	8021B	120608
LCS 880-120608/1-A	Lab Control Sample	Total/NA	Solid	8021B	120608
LCSD 880-120608/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120608

Prep Batch: 120608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-7	CS-24	Total/NA	Solid	5035	
MB 880-120608/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120608/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120608/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

GC Semi VOA

Prep Batch: 120145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	8015NM Prep	
890-8889-2	CS-19	Total/NA	Solid	8015NM Prep	
890-8889-3	CS-20	Total/NA	Solid	8015NM Prep	
890-8889-4	CS-21	Total/NA	Solid	8015NM Prep	
890-8889-5	CS-22	Total/NA	Solid	8015NM Prep	
890-8889-6	CS-23	Total/NA	Solid	8015NM Prep	
890-8889-7	CS-24	Total/NA	Solid	8015NM Prep	
MB 880-120145/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120145/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120145/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 120516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	8015B NM	120145
890-8889-2	CS-19	Total/NA	Solid	8015B NM	120145
890-8889-3	CS-20	Total/NA	Solid	8015B NM	120145
890-8889-4	CS-21	Total/NA	Solid	8015B NM	120145
890-8889-5	CS-22	Total/NA	Solid	8015B NM	120145
890-8889-6	CS-23	Total/NA	Solid	8015B NM	120145
890-8889-7	CS-24	Total/NA	Solid	8015B NM	120145
MB 880-120145/1-A	Method Blank	Total/NA	Solid	8015B NM	120145
LCS 880-120145/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120145
LCSD 880-120145/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120145

Analysis Batch: 120658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Total/NA	Solid	8015 NM	
890-8889-2	CS-19	Total/NA	Solid	8015 NM	
890-8889-3	CS-20	Total/NA	Solid	8015 NM	
890-8889-4	CS-21	Total/NA	Solid	8015 NM	
890-8889-5	CS-22	Total/NA	Solid	8015 NM	
890-8889-6	CS-23	Total/NA	Solid	8015 NM	
890-8889-7	CS-24	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 120158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Soluble	Solid	DI Leach	
890-8889-2	CS-19	Soluble	Solid	DI Leach	
890-8889-3	CS-20	Soluble	Solid	DI Leach	
890-8889-4	CS-21	Soluble	Solid	DI Leach	
890-8889-5	CS-22	Soluble	Solid	DI Leach	
890-8889-6	CS-23	Soluble	Solid	DI Leach	
890-8889-7	CS-24	Soluble	Solid	DI Leach	
MB 880-120158/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120158/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120158/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8889-4 MS	CS-21	Soluble	Solid	DI Leach	
890-8889-4 MSD	CS-21	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

HPLC/IC

Analysis Batch: 120210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8889-1	CS-18	Soluble	Solid	300.0	120158
890-8889-2	CS-19	Soluble	Solid	300.0	120158
890-8889-3	CS-20	Soluble	Solid	300.0	120158
890-8889-4	CS-21	Soluble	Solid	300.0	120158
890-8889-5	CS-22	Soluble	Solid	300.0	120158
890-8889-6	CS-23	Soluble	Solid	300.0	120158
890-8889-7	CS-24	Soluble	Solid	300.0	120158
MB 880-120158/1-A	Method Blank	Soluble	Solid	300.0	120158
LCS 880-120158/2-A	Lab Control Sample	Soluble	Solid	300.0	120158
LCSD 880-120158/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120158
890-8889-4 MS	CS-21	Soluble	Solid	300.0	120158
890-8889-4 MSD	CS-21	Soluble	Solid	300.0	120158

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-18

Lab Sample ID: 890-8889-1

Date Collected: 09/29/25 08:00

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/01/25 23:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/01/25 23:25	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 18:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 18:16	SA	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120210	10/01/25 22:34	CS	EET MID

Client Sample ID: CS-19

Lab Sample ID: 890-8889-2

Date Collected: 09/29/25 08:05

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/01/25 23:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/01/25 23:45	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 18:36	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 18:36	SA	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120210	10/01/25 22:40	CS	EET MID

Client Sample ID: CS-20

Lab Sample ID: 890-8889-3

Date Collected: 09/29/25 08:10

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 00:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/02/25 00:06	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 18:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 18:56	SA	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120210	10/01/25 22:45	CS	EET MID

Client Sample ID: CS-21

Lab Sample ID: 890-8889-4

Date Collected: 09/29/25 08:15

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 00:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/02/25 00:26	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
 SDG: Eddy County, NM

Client Sample ID: CS-21

Lab Sample ID: 890-8889-4

Date Collected: 09/29/25 08:15

Matrix: Solid

Date Received: 09/30/25 13:43

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			120658	10/06/25 19:17	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 19:17	SA	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120210	10/01/25 22:50	CS	EET MID

Client Sample ID: CS-22

Lab Sample ID: 890-8889-5

Date Collected: 09/29/25 08:20

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/02/25 00:47	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 19:37	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 19:37	SA	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	120210	10/01/25 23:06	CS	EET MID

Client Sample ID: CS-23

Lab Sample ID: 890-8889-6

Date Collected: 09/29/25 08:25

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/02/25 01:07	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 19:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 19:57	SA	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120210	10/01/25 23:11	CS	EET MID

Client Sample ID: CS-24

Lab Sample ID: 890-8889-7

Date Collected: 09/29/25 08:30

Matrix: Solid

Date Received: 09/30/25 13:43

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	120608	10/07/25 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120605	10/07/25 13:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120313	10/07/25 13:17	SA	EET MID
Total/NA	Analysis	8015 NM		1			120658	10/06/25 20:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 20:18	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

Client Sample ID: CS-24

Lab Sample ID: 890-8889-7

Date Collected: 09/29/25 08:30

Matrix: Solid

Date Received: 09/30/25 13:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	120210	10/01/25 23:27	CS	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: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU-67-68 Tank Battery

Job ID: 890-8889-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8889-1	CS-18	Solid	09/29/25 08:00	09/30/25 13:43	0.5
890-8889-2	CS-19	Solid	09/29/25 08:05	09/30/25 13:43	0.5
890-8889-3	CS-20	Solid	09/29/25 08:10	09/30/25 13:43	0.5
890-8889-4	CS-21	Solid	09/29/25 08:15	09/30/25 13:43	0.5
890-8889-5	CS-22	Solid	09/29/25 08:20	09/30/25 13:43	0.5
890-8889-6	CS-23	Solid	09/29/25 08:25	09/30/25 13:43	0.5
890-8889-7	CS-24	Solid	09/29/25 08:30	09/30/25 13:43	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) 509-3334, EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296, Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



890-8889 Chain of Custody

WWW.XENCO.COM

Project Manager: Gilbert Moreno, Company Name: Earth Systems R&R, Address: 1910 Resource Ct., City: Carlsbad, NM, 88220, Phone: 832-541-7719, Email: gmoreno@earthsys.net

Work Order Comments: Program: UST/PRP, State of Project: Reporting: Level II, Deliverables: EDD, ADAPT, Other.

Table with columns: Project Name, Project Number, Project Location, Sampler's Name, CCWO #, SAMPLE RECEIPT, Samples Received Intact, Cooler Custody Seals, Sample Custody Seals, Total Containers, Sample Identification, Matrix, Date Sampled, Time Sampled, Depth (feet), Grab/Comp, # of Cont, TPH-NM, Chloride-NM, BTEX-NM, Hold, 24 Hr Rush, ANALYSIS REQUEST, Preservative Codes, Sample Comments.

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed: Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature), Received by: (Signature), Date/Time, Relinquished by: (Signature), Received by: (Signature), Date/Time

Eurofins Carlsbad

1089 N Canal St
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)

Client Contact: N/A
 Shipping/Receiving: N/A
 Company: Eurofins Environment Testing South Cent
 Address: 1211 W. Florida Ave.
 City: Midland
 State Zip: TX, 79701
 Phone: 432-704-5440(Tel)
 Email: N/A
 Project Name: RDU 67-68 TANK BATTERY
 Project #: 88001228
 Site: N/A
 SSOV#: N/A

Due Date Requested: 10/6/2025
 TAT Requested (days): N/A
 Lab PM: Teel, Brianna
 E-Mail: Brianna.Teel@eurofins.com
 Carrier Tracking No(s): N/A
 State of Origin: New Mexico
 Page: Page 1 of 1
 Job #: 890-8889-1
 Preservation Codes:

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Solid, O=Overstool, Br=Trace, A=As)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8021B/5035FP_CalcBTEX	300_ORGFM_28D/DI_LEACHChloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep8015 NM	Total Number of containers	Special Instructions/Note:
CS-18 (890-8889-1)	9/29/25	08:00	G	Solid	X	X	X	X	X	X	X	1	
CS-19 (890-8889-2)	9/29/25	08:05	G	Solid	X	X	X	X	X	X	X	1	
CS-20 (890-8889-3)	9/29/25	08:10	G	Solid	X	X	X	X	X	X	X	1	
CS-21 (890-8889-4)	9/29/25	08:15	G	Solid	X	X	X	X	X	X	X	1	
CS-22 (890-8889-5)	9/29/25	08:20	G	Solid	X	X	X	X	X	X	X	1	
CS-23 (890-8889-6)	9/29/25	08:25	G	Solid	X	X	X	X	X	X	X	1	
CS-24 (890-8889-7)	9/29/25	08:30	G	Solid	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/shipment being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: *B. Swans* Date/Time: 9/30 1630 Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____

Cooler Temperature(s) °C and Other Remarks: 3.9/3.8 - 1 TRV

Eurofins Carlsbad

1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Client Information (Sub Contract Lab)

Client Contact: **Samper: N/A**
 Shipping/Receiving: **Phone: N/A**
 Company: **Eurofins Environment Testing South Cent**
 Address: **1211 W. Florida Ave.**
 City: **Midland**
 State/Zip: **TX, 79701**
 Phone: **432-704-5440(Tel)**
 Email: **N/A**
 Project Name: **Goodnight pad TamMar Line Release**
 Site: **N/A**

Lab PM: **Teel, Brianna**
 E-Mail: **Brianna_Teel@eurofins.com**
 Carrier Tracking No(s): **N/A**
 State of Origin: **Texas**
 COC No: **890-5954-5**
 Page: **Page 5 of 5**
 Job #: **890-8886-1**
 Preservation Codes: **890-8886-1**

Analysis Requested

Due Date Requested: **10/3/2025**
 TAT Requested (days): **N/A**

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (Wet, Solid, Semisolid, Overweight, AALU)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total_BTEX_GCV(MOD) Copy Analytes	8021B/5035FP_CalcBTEX	300_ORGFM_28D/DI_LEACHChloride	8015MOD_Calc(MOD) Copy Analytes	8015MOD_NM/8015NM_S_Prep8015 NM	Total_BTEX_GCV(MOD) Copy Analytes (Hold)	8021B/5035FP_CalcBTEX (Hold)	300_ORGFM_28D/DI_LEACHChloride (Hold)	8015MOD_Calc(MOD) Copy Analytes (Hold)	8015MOD_NM/8015NM_S_Prep8015 NM (Hold)	Total Number of containers	Special Instructions/Note:
V-6 (890-8886-37)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-6 (890-8886-38)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-6 (890-8886-39)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-6 (890-8886-40)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-7 (890-8886-41)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-7 (890-8886-42)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-7 (890-8886-43)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-7 (890-8886-44)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	
V-7 (890-8886-45)	9/24/25	Central	G	Solid	X	X	X	X	X	X	X	X	X	X	X	X	1	

Primary Deliverable Rank: 2

Possible Hazard Identification

Unconfirmed

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Return To Client Disposal By Lab Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/shipment, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other institutions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Empty Kit Relinquished by: _____ **Date:** _____ **Method of Shipment:** _____

Relinquished by: *[Signature]* **Date/Time:** *9/30 1630* **Company:** _____

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Relinquished by: _____ **Date/Time:** _____ **Company:** _____

Custody Seals Intact: Yes No **Custody Seal No.:** _____

Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8889-1
SDG Number: Eddy County, NM

Login Number: 8889

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8889-1
SDG Number: Eddy County, NM

Login Number: 8889
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 10/01/25 07:57 AM

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

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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 10/7/2025 1:03:14 PM

JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8891-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



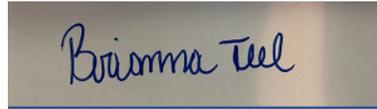
Eurofins Carlsbad

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
10/7/2025 1:03:14 PM

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

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Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-8891-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: RDU 67-68 Tank Battery

Job ID: 890-8891-1

Job ID: 890-8891-1

Eurofins Carlsbad

Job Narrative 890-8891-1

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

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

Receipt

The samples were received on 9/30/2025 1:43 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 -11.8°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 continuing calibration verification (CCV) associated with batch 880-120516 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10 and 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. The associated sample is:(CCV 880-120516/30).

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: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8891-1

Date Collected: 09/29/25 08:35

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0-1

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		10/01/25 10:22	10/02/25 01:28	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 01:28	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 01:28	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/01/25 10:22	10/02/25 01:28	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 01:28	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/01/25 10:22	10/02/25 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	10/01/25 10:22	10/02/25 01:28	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/01/25 10:22	10/02/25 01:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/02/25 01:28	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			10/06/25 20:39	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		10/01/25 08:33	10/06/25 20:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 20:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/01/25 08:33	10/06/25 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	10/01/25 08:33	10/06/25 20:39	1
o-Terphenyl	96		70 - 130	10/01/25 08:33	10/06/25 20:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	187		9.94		mg/Kg			10/01/25 23:32	1

Client Sample ID: SW-3

Lab Sample ID: 890-8891-2

Date Collected: 09/29/25 08:40

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0-1

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		10/01/25 10:22	10/02/25 01:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 01:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 01:48	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		10/01/25 10:22	10/02/25 01:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/01/25 10:22	10/02/25 01:48	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/01/25 10:22	10/02/25 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	10/01/25 10:22	10/02/25 01:48	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Client Sample ID: SW-3

Lab Sample ID: 890-8891-2

Date Collected: 09/29/25 08:40

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 10:22	10/02/25 01:48	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			10/02/25 01:48	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			10/06/25 20:59	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	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 20:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 20:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	10/01/25 08:33	10/06/25 20:59	1
o-Terphenyl	82		70 - 130	10/01/25 08:33	10/06/25 20:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	148		9.98		mg/Kg			10/01/25 23:37	1

Client Sample ID: SW-4

Lab Sample ID: 890-8891-3

Date Collected: 09/29/25 08:45

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0-1

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		10/01/25 10:22	10/02/25 02:09	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 02:09	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 02:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/01/25 10:22	10/02/25 02:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/01/25 10:22	10/02/25 02:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/01/25 10:22	10/02/25 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10/01/25 10:22	10/02/25 02:09	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 10:22	10/02/25 02:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/02/25 02:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/06/25 21:20	1

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Client Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Client Sample ID: SW-4

Lab Sample ID: 890-8891-3

Date Collected: 09/29/25 08:45

Matrix: Solid

Date Received: 09/30/25 13:43

Sample Depth: 0-1

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		10/01/25 08:33	10/06/25 21:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		10/01/25 08:33	10/06/25 21:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/01/25 08:33	10/06/25 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	10/01/25 08:33	10/06/25 21:20	1
o-Terphenyl	105		70 - 130	10/01/25 08:33	10/06/25 21:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		10.0		mg/Kg			10/01/25 23:42	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-8891-1	SW-1	86	96
890-8891-2	SW-3	89	98
890-8891-3	SW-4	83	98
LCS 880-120169/1-A	Lab Control Sample	89	89
LCSD 880-120169/2-A	Lab Control Sample Dup	86	96
MB 880-120009/5-A	Method Blank	78	93
MB 880-120169/5-A	Method Blank	77	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-8891-1	SW-1	106	96
890-8891-2	SW-3	89	82
890-8891-3	SW-4	113	105
LCS 880-120145/2-A	Lab Control Sample	118	111
LCSD 880-120145/3-A	Lab Control Sample Dup	121	107
MB 880-120145/1-A	Method Blank	114	101

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-120009/5-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120009

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 08:00	10/01/25 11:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 08:00	10/01/25 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	10/01/25 08:00	10/01/25 11:43	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/01/25 08:00	10/01/25 11:43	1

Lab Sample ID: MB 880-120169/5-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:22	10/01/25 22:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 10:22	10/01/25 22:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	10/01/25 10:22	10/01/25 22:43	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 10:22	10/01/25 22:43	1

Lab Sample ID: LCS 880-120169/1-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09090		mg/Kg		91	70 - 130
Toluene	0.100	0.09302		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08322		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08232		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-120169/2-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08889		mg/Kg		89	70 - 130	2	35

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-120169/2-A
 Matrix: Solid
 Analysis Batch: 120150

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09008		mg/Kg		90	70 - 130	3	35
Ethylbenzene	0.100	0.08396		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1628		mg/Kg		81	70 - 130	0	35
o-Xylene	0.100	0.08091		mg/Kg		81	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-120145/1-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 120145

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		10/01/25 08:33	10/06/25 09:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 09:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/01/25 08:33	10/06/25 09:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	10/01/25 08:33	10/06/25 09:50	1
o-Terphenyl	101		70 - 130	10/01/25 08:33	10/06/25 09:50	1

Lab Sample ID: LCS 880-120145/2-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 120145

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1135		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1205		mg/Kg		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: LCSD 880-120145/3-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120145

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1139		mg/Kg		114	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	1186		mg/Kg		119	70 - 130	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

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

Lab Sample ID: LCSD 880-120145/3-A
 Matrix: Solid
 Analysis Batch: 120516

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 120145

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	107		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120158/1-A
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 21:21	1

Lab Sample ID: LCS 880-120158/2-A
 Matrix: Solid
 Analysis Batch: 120210

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.4		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-120158/3-A
 Matrix: Solid
 Analysis Batch: 120210

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	246.6		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

GC VOA

Prep Batch: 120009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-120009/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 120150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	8021B	120169
890-8891-2	SW-3	Total/NA	Solid	8021B	120169
890-8891-3	SW-4	Total/NA	Solid	8021B	120169
MB 880-120009/5-A	Method Blank	Total/NA	Solid	8021B	120009
MB 880-120169/5-A	Method Blank	Total/NA	Solid	8021B	120169
LCS 880-120169/1-A	Lab Control Sample	Total/NA	Solid	8021B	120169
LCSD 880-120169/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120169

Prep Batch: 120169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	5035	
890-8891-2	SW-3	Total/NA	Solid	5035	
890-8891-3	SW-4	Total/NA	Solid	5035	
MB 880-120169/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120169/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120169/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 120314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	Total BTEX	
890-8891-2	SW-3	Total/NA	Solid	Total BTEX	
890-8891-3	SW-4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 120145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	8015NM Prep	
890-8891-2	SW-3	Total/NA	Solid	8015NM Prep	
890-8891-3	SW-4	Total/NA	Solid	8015NM Prep	
MB 880-120145/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120145/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120145/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 120516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	8015B NM	120145
890-8891-2	SW-3	Total/NA	Solid	8015B NM	120145
890-8891-3	SW-4	Total/NA	Solid	8015B NM	120145
MB 880-120145/1-A	Method Blank	Total/NA	Solid	8015B NM	120145
LCS 880-120145/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120145
LCSD 880-120145/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120145

Analysis Batch: 120659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Total/NA	Solid	8015 NM	
890-8891-2	SW-3	Total/NA	Solid	8015 NM	

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

GC Semi VOA (Continued)

Analysis Batch: 120659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-3	SW-4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 120158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Soluble	Solid	DI Leach	
890-8891-2	SW-3	Soluble	Solid	DI Leach	
890-8891-3	SW-4	Soluble	Solid	DI Leach	
MB 880-120158/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120158/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120158/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 120210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8891-1	SW-1	Soluble	Solid	300.0	120158
890-8891-2	SW-3	Soluble	Solid	300.0	120158
890-8891-3	SW-4	Soluble	Solid	300.0	120158
MB 880-120158/1-A	Method Blank	Soluble	Solid	300.0	120158
LCS 880-120158/2-A	Lab Control Sample	Soluble	Solid	300.0	120158
LCSD 880-120158/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120158

Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
 SDG: Eddy County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8891-1

Date Collected: 09/29/25 08:35

Matrix: Solid

Date Received: 09/30/25 13:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 01:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120314	10/02/25 01:28	SA	EET MID
Total/NA	Analysis	8015 NM		1			120659	10/06/25 20:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 20:39	SA	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120210	10/01/25 23:32	CS	EET MID

Client Sample ID: SW-3

Lab Sample ID: 890-8891-2

Date Collected: 09/29/25 08:40

Matrix: Solid

Date Received: 09/30/25 13:43

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	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 01:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120314	10/02/25 01:48	SA	EET MID
Total/NA	Analysis	8015 NM		1			120659	10/06/25 20:59	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 20:59	SA	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120210	10/01/25 23:37	CS	EET MID

Client Sample ID: SW-4

Lab Sample ID: 890-8891-3

Date Collected: 09/29/25 08:45

Matrix: Solid

Date Received: 09/30/25 13:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	120169	10/01/25 10:22	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120150	10/02/25 02:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120314	10/02/25 02:09	SA	EET MID
Total/NA	Analysis	8015 NM		1			120659	10/06/25 21:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	120145	10/01/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120516	10/06/25 21:20	SA	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	120158	10/01/25 08:57	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120210	10/01/25 23:42	CS	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8891-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8891-1	SW-1	Solid	09/29/25 08:35	09/30/25 13:43	0-1
890-8891-2	SW-3	Solid	09/29/25 08:40	09/30/25 13:43	0-1
890-8891-3	SW-4	Solid	09/29/25 08:45	09/30/25 13:43	0-1

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Eurofins Carlsbad

1089 N Canal St.
 Carlsbad, NM 88220
 Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab Pk: Teel, Brianna	COC No: 890-5957-1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Brianna.Teel@eurofins.com	Page: Page 1 of 1
Company: Eurofins Environment Testing South Cent	Due Date Requested: 10/6/2025	Accreditations Required (See note): NELAP - Texas	Job #: 890-8991-1
Address: 1211 W. Florida Ave.	City: Midland	State: TX	Zip: 79701
Phone: 432-704-5440(Tel)	PO #: N/A	WO #: N/A	Project #: 88001228
Email: N/A	SSON#: N/A		
Project Name: RDU 67-68 TANK BATTERY			
Site: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Overstabil, Bi-Tissue, Ash)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8021B/5035FP_CalcBTEX	300_ORGFM_28D/DI_LEACHChloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep8015 NM	Total Number of containers	Special Instructions/Note:
SW-1 (890-8891-1)	9/29/25	08:35	G	Solid	X	X	X	X	X	X	X	1	
SW-3 (890-8891-2)	9/29/25	08:40	G	Solid	X	X	X	X	X	X	X	1	
SW-4 (890-8891-3)	9/29/25	08:45	G	Solid	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/estimation, being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Relinquished by: <i>Downs</i>	Date/Time: 9/30 1630	Company:	Received by: <i>[Signature]</i>	Date/Time: 10/1/25	Company: <i>[Signature]</i>
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9/3.8 -1 TRK			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8891-1
SDG Number: Eddy County, NM

Login Number: 8891

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8891-1
SDG Number: Eddy County, NM

Login Number: 8891
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 10/01/25 07:57 AM

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

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/19/2025 2:21:10 PM

JOB DESCRIPTION

RDU 67-68 Tank Battery
 Eddy County, NM

JOB NUMBER

890-8803-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



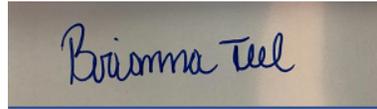
Eurofins Carlsbad

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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9/19/2025 2:21:10 PM

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

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Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Laboratory Job ID: 890-8803-1
SDG: Eddy County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project: RDU 67-68 Tank Battery

Job ID: 890-8803-1

Job ID: 890-8803-1

Eurofins Carlsbad

Job Narrative 890-8803-1

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

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

Receipt

The sample was received on 9/15/2025 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SW-4 (890-8803-1).

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-119107 and analytical batch 880-119098 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 surrogate recovery for the blank associated with preparation batch 880-119107 and analytical batch 880-119098 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-119098 recovered under the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. 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 sample was outside control limits: (LCSD 880-119075/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-119194 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-119194/85).

Passing CCV within 12 hours and 10 samples before and after.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-119075 and analytical batch 880-119194 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-4 (890-8803-1). Evidence of matrix interferences is not obvious.

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

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: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy County, NM

Client Sample ID: SW-4

Lab Sample ID: 890-8803-1

Date Collected: 09/15/25 09:15

Matrix: Solid

Date Received: 09/15/25 15:18

Sample Depth: 0-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:56	09/17/25 20:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:56	09/17/25 20:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 08:56	09/17/25 20:00	1
m-Xylene & p-Xylene	<0.00402	U *	0.00402		mg/Kg		09/17/25 08:56	09/17/25 20:00	1
o-Xylene	<0.00201	U *	0.00201		mg/Kg		09/17/25 08:56	09/17/25 20:00	1
Xylenes, Total	<0.00402	U *	0.00402		mg/Kg		09/17/25 08:56	09/17/25 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/17/25 08:56	09/17/25 20:00	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/17/25 08:56	09/17/25 20:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/17/25 20:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/19/25 11:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 11:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 11:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 11:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	09/16/25 16:28	09/19/25 11:29	1
o-Terphenyl	146	S1+	70 - 130	09/16/25 16:28	09/19/25 11:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	655		10.0		mg/Kg			09/17/25 12:39	1

Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy 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)
890-8803-1	SW-4	112	96
LCS 880-119107/1-A	Lab Control Sample	98	91
LCSD 880-119107/2-A	Lab Control Sample Dup	96	95
MB 880-119107/5-A	Method Blank	147 S1+	84

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)
890-8803-1	SW-4	137 S1+	146 S1+
LCS 880-119075/2-A	Lab Control Sample	114	129
LCSD 880-119075/3-A	Lab Control Sample Dup	133 S1+	153 S1+
MB 880-119075/1-A	Method Blank	123	131 S1+

Surrogate Legend

1CO = 1-Chlorooctane
 OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119107/5-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	09/17/25 08:56	09/17/25 11:52	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09/17/25 08:56	09/17/25 11:52	1

Lab Sample ID: LCS 880-119107/1-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07766		mg/Kg		78	70 - 130
Toluene	0.100	0.07759		mg/Kg		78	70 - 130
Ethylbenzene	0.100	0.08544		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	0.200	0.1578		mg/Kg		79	70 - 130
o-Xylene	0.100	0.06792	*-	mg/Kg		68	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-119107/2-A
 Matrix: Solid
 Analysis Batch: 119098

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08094		mg/Kg		81	70 - 130	4	35
Toluene	0.100	0.07546		mg/Kg		75	70 - 130	3	35
Ethylbenzene	0.100	0.08205		mg/Kg		82	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.1366	*-	mg/Kg		68	70 - 130	14	35
o-Xylene	0.100	0.06437	*-	mg/Kg		64	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy County, NM

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

Lab Sample ID: MB 880-119075/1-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 119075

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		09/16/25 16:28	09/19/25 01:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/16/25 16:28	09/19/25 01:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	123		70 - 130	09/16/25 16:28	09/19/25 01:43	1
o-Terphenyl	131	S1+	70 - 130	09/16/25 16:28	09/19/25 01:43	1

Lab Sample ID: LCS 880-119075/2-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	918.9		mg/Kg		92	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1-Chlorooctane	114		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: LCSD 880-119075/3-A
 Matrix: Solid
 Analysis Batch: 119194

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 119075

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1147		mg/Kg		115	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	1069		mg/Kg		107	70 - 130	15	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	153	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119036/1-A
 Matrix: Solid
 Analysis Batch: 119078

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			09/17/25 11:03	1

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QC Sample Results

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-119036/2-A
Matrix: Solid
Analysis Batch: 119078

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	265.7		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-119036/3-A
Matrix: Solid
Analysis Batch: 119078

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.4		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-8803-1 MS
Matrix: Solid
Analysis Batch: 119078

Client Sample ID: SW-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	655		250	911.6		mg/Kg		103	90 - 110

Lab Sample ID: 890-8803-1 MSD
Matrix: Solid
Analysis Batch: 119078

Client Sample ID: SW-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	655		250	914.8		mg/Kg		104	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

GC VOA

Analysis Batch: 119098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	8021B	119107
MB 880-119107/5-A	Method Blank	Total/NA	Solid	8021B	119107
LCS 880-119107/1-A	Lab Control Sample	Total/NA	Solid	8021B	119107
LCSD 880-119107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119107

Prep Batch: 119107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	5035	
MB 880-119107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 119235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	8015NM Prep	
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 119194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	8015B NM	119075
MB 880-119075/1-A	Method Blank	Total/NA	Solid	8015B NM	119075
LCS 880-119075/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119075
LCSD 880-119075/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119075

Analysis Batch: 119342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Soluble	Solid	DI Leach	
MB 880-119036/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8803-1 MS	SW-4	Soluble	Solid	DI Leach	
890-8803-1 MSD	SW-4	Soluble	Solid	DI Leach	

Analysis Batch: 119078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8803-1	SW-4	Soluble	Solid	300.0	119036
MB 880-119036/1-A	Method Blank	Soluble	Solid	300.0	119036
LCS 880-119036/2-A	Lab Control Sample	Soluble	Solid	300.0	119036

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

HPLC/IC (Continued)

Analysis Batch: 119078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-119036/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119036
890-8803-1 MS	SW-4	Soluble	Solid	300.0	119036
890-8803-1 MSD	SW-4	Soluble	Solid	300.0	119036

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Lab Chronicle

Client: Earth Systems Response and Restoration
 Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
 SDG: Eddy County, NM

Client Sample ID: SW-4

Lab Sample ID: 890-8803-1

Date Collected: 09/15/25 09:15

Matrix: Solid

Date Received: 09/15/25 15:18

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	119107	09/17/25 08:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/17/25 20:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119235	09/17/25 20:00	SA	EET MID
Total/NA	Analysis	8015 NM		1			119342	09/19/25 11:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	119075	09/16/25 16:28	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119194	09/19/25 11:29	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	119036	09/16/25 14:54	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119078	09/17/25 12:39	CS	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: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: RDU 67-68 Tank Battery

Job ID: 890-8803-1
SDG: Eddy County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8803-1	SW-4	Solid	09/15/25 09:15	09/15/25 15:18	0-1

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Eurofins Carlsbad

1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)

Client Contact: **Lab PM: Teel, Brianna**
 Shipping/Receiving: **Phone: N/A**
 Eurofins Environment Testing South Cent: **E-Mail: Brianna.Teel@eurofins.com**
 Address: **1211 W. Florida Ave.**
 City: **Midland**
 State, Zip: **TX, 79701**
 Phone: **432-704-5440(Tel)**
 Email: **N/A**
 Project Name: **RDU 67 - 68 TANK BATTERY**
 Site: **N/A**
 SSOV#: **N/A**

Due Date Requested: **9/19/2025**
 TAT Requested (days): **N/A**
 Analysis Requested

Carrier Tracking Notis: **N/A**
 State of Origin: **New Mexico**
 Page: **Page 1 of 1**
 Job #: **890-8803-1**
 Preservation Codes: **890-8803-1**
 COC No: **890-5877-1**
 Other: **N/A**

Sample ID (Lab ID)	Sample Date	Sample Time	Sample Type (G=Comp, G=grab)	Matrix (W=water, S=solid, O=organical, B=trace, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8021B/5035FP_CalcBTEX	300_ORGFM_28D/DI_LEACHChloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep8015 NM	Total Number of containers	Special Instructions/Note:
SW - 4 (890-8803-1)	9/15/25	09:15	G	Solid	X	X	X	X	X	X		1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/method being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification

Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) **Primary Deliverable Rank: 2**
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For **Months**

Empty Kit Relinquished by: **Date:**
 Relinquished by: **Date/Time:**
 Relinquished by: **Date/Time:**
 Relinquished by: **Date/Time:**

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 Relinquished by: **Date/Time:**
 Relinquished by: **Date/Time:**

Custody Seals Intact: **Δ Yes Δ No**
 Custody Seal No.: **33/B2 -1 TRS**
 Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8803-1
SDG Number: Eddy County, NM

Login Number: 8803
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8803-1
SDG Number: Eddy County, NM

Login Number: 8803
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 09/16/25 11:56 AM

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

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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 535992

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 535992
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2507627338
Incident Name	NAPP2507627338 RDU 67-68 TANK BATTERY @ 30-015-41976
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-41976] ROSS DRAW UNIT #055

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	RDU 67-68 TANK BATTERY
Date Release Discovered	03/14/2025
Surface Owner	Federal

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 24 BBL Recovered: 3 BBL Lost: 21 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Dump line from RDU 55 developed pinhole leak. This allowed approx. 24 bbls produced water to be released to pad surface of RDU 67-68 Tank Battery between tanks and production equipment, outside of lined secondary containment. Production equipment for RDU 55 well is located on the RDU 67-68 Pad. Approx. 3 bbls was recovered.

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QUESTIONS, Page 2

Action 535992

QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 535992
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	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	No
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 12/24/2025
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QUESTIONS, Page 3

Action 535992

QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 535992
	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 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	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	Greater than 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 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1000 (ft.) and ½ (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	23000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	60100
GRO+DRO (EPA SW-846 Method 8015M)	13800
BTEX (EPA SW-846 Method 8021B or 8260B)	158
Benzene (EPA SW-846 Method 8021B or 8260B)	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	09/01/2025
On what date will (or did) the final sampling or liner inspection occur	09/29/2025
On what date will (or was) the remediation complete(d)	10/12/2025
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	4800
What is the estimated volume (in cubic yards) that will be remediated	243

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 535992

QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 535992
	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 off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 12/24/2025
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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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Action 535992

QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 535992
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Action 535992

QUESTIONS (continued)

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	508803
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/29/2025
What was the (estimated) number of samples that were to be gathered	5
What was the sampling surface area in square feet	1000

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	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	4800
What was the total volume (cubic yards) remediated	243
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)	The Site was remediated according to Site Closure Criteria and has been backfilled with clean, locally sourced material.

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: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 12/24/2025
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QUESTIONS, Page 7

Action 535992

QUESTIONS (continued)

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	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 535992

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
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	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.	2/20/2026