



November 15, 2024

New Mexico Oil Conservation Division
1220 South St, Francis Drive
Santa Fe, NM 87505

Re: Closure Report – Cotton Draw Unit 604
Incident #: nAPP2216522711
Devon Energy
Site Location: Unit D, S26, T24S, R31E
(Lat 32.1945389°, Long -103.753072°)
Eddy County, New Mexico
ESRR Project No. 1264

To whom it may concern:

On behalf of Devon Energy (Devon), Earth Systems Response & Restoration (ESRR) has prepared this letter to document the Cotton Draw Unit 604 (site) release assessment and remediation activities. The site is located at GPS coordinates 32.1945389°, -103.753072° within Unit D, S26, T24S, R31E in Eddy County, New Mexico.

Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on June 09, 2022, due to operator error while filling the mixing plant. It resulted in 5 bbls of produced water being released into a lined temporary containment and 0.6 bbls released outside of the containment to the caliche pad. The original impacted area on the caliche pad measured approximately 67 feet (ft) long by 15 to 44 ft wide with a total square footage of approximately 1,726 square (sq.) ft. Due to the caliche pad being bladed after drilling activities were completed, the release was spread out and measured to approximately 284 ft. long by 133 ft. wide with a total square footage of approximately 32,249 sq. ft.

Site Characterization

Based on a review of the New Mexico Office of State Engineers and United States Geological Survey (USGS) databases, the site is located in a low karst potential area and there are no known surface water features within a 0.50-mile radius of the location. The nearest water well was installed under Earth Systems oversight on the behalf of Devon and is located approximately 2,000 ft. to the east at GPS coordinates 32.1944437°, -103.746306°. The water well was drilled within a 0.5-mile radius of the location in February 2024 with no indication of groundwater encountered within 59 ft. of the surface, please see the soil boring attached as Figure 7. The next nearest identified water well (C-048388-POD1) is located approximately 0.83 miles north of the site in S23, T24S, R31E. The well has a reported depth to groundwater of 868 feet (ft) below grade surface (bgs) in February 2020.

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Regulatory Criteria

The following criteria were utilized in assessing and remediating the site per client request and in accordance with the NMOCD Regulatory Standards established in 19.15.29.12 NMAC.

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total Petroleum Hydrocarbons (TPH): 2,500 mg/kg (GRO + DRO + ORO)
- TPH: 1,000 mg/kg (GRO + DRO)
- Chloride: 10,000 mg/kg

Initial Site Assessment

On August 10, 2022, ESRR conducted an initial release response to evaluate active onsite conditions including creating a GPS perimeter and collecting photos. ESRR advanced seven (7) delineation soil borings to collect ten (10) soil samples from depths ranging from surface to 1 foot (ft.) below grade surface (bgs) within and surrounding the release area to assess potential impacts vertically and horizontally. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The delineation and perimeter soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with delineation soil borings HA-1, HA-2, and HA-3 exceed NMOCD regulatory criteria to a depth of 0.5 - 1 ft. bgs.

On August 30, 2022, ESRR advanced four (4) delineation soil borings to collect four (4) soil samples from depths ranging from surface to 0.5 ft. bgs. surrounding the release area to complete horizontal release delineation. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with delineation soil borings P-1 through P-4 exceed NMOCD regulatory criteria to a depth of surface to 0.5 ft. bgs.

On August 31, 2022, ESRR advanced one (1) delineation soil boring to collect three (3) soil samples from depths ranging from 1.5 to 4 ft. bgs in the vicinity of delineation soil boring HA-2 to vertically delineate the on-site chloride concentrations. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with delineation soil boring HA-4 exceed NMOCD regulatory criteria to a depth of surface to 2 ft. bgs.

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On September 1, 2022, ESRR advanced eighteen (18) delineation soil borings to collect thirty-eight (38) soil samples from depths ranging from surface to 2 ft. bgs within and surrounding the release area to vertically delineate identified soil impacts. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with delineation soil borings HA-8, HA-9, HA-11, HA-12, HA-13, HA-14, HA-15, HA-16, HA-17, HA-18, HA-19, and HA-20 exceed NMOCD regulatory criteria to depths ranging from 0.5 to 1 ft. bgs.

The delineation soil sample laboratory analytical results from the site assessment are provided in Table 1. Additionally, copies of laboratory analysis and chain-of-custody documentation are attached. See Figure 2 for delineation soil sample locations.

Remediation and Confirmation Soil Sampling Activities

On February 14, 2024, ESRR drilled a 2 and 3/8-inch borehole to 59 ft. bgs. to verify that groundwater was greater than 51 ft. bgs. The borehole was measured utilizing a Solinst Water Level Meter 100' P2 upon completion and again after 72 hours. During both measuring events groundwater was not encountered, observed, or measured. Subsequent to the second measuring activities on February 19, 2024, the dry water well was plugged in accordance with state regulations. A soil boring log was completed during drilling operations and shown in Figure 7.

From June 18 – 21, 2024, Devon contractors excavated impacted soils associated with delineation soil borings P-4, HA-12, HA-17, HA-18, HA-19 to a depth of 0.5 ft. bgs. as directed by delineation laboratory analytical data. Upon excavation, the excavated soils were transported to the Lea Land Disposal Facility, a state regulated disposal facility.

On June 26, 2024, subsequent to excavation activities, ESRR collected confirmation soil samples from within the excavation area. A total of sixty-four (64) confirmation samples were collected (CS-1 through CS-64) and eight (8) sidewall samples were collected to demonstrate removal of the impacted soils. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with confirmation soil samples CS-10, CS-11, CS-20, CS-23, CS-24, CS-31, CS-35, CS-57, CS-58, CS-59, CS-60, CS-63 exceed NMOCD regulatory criteria to depths ranging from 0.5 to 1 ft. bgs.

On July 9, 2024, Devon contractors excavated impacted soils associated with confirmation soil samples CS-10, CS-11, CS-20, CS-23, CS-24, CS-31, CS-35, CS-57, CS-58, CS-59, CS-60, CS-63 to a depth of 1 ft. bgs. ESRR advanced test trenches in the areas of impacted confirmation soil samples to vertically delineate the

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TPH impacts. ESRR collected confirmation samples from within the excavation area. A total of twenty-six (26) confirmation soil samples were collected to verify field screen data. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified.

Laboratory analytical data suggest surface soils associated with confirmation soil samples CS-20, CS-24, and CS-35 exceed NMOCD regulatory criteria to depths ranging from 1 to 7 ft. bgs.

On July 23, 2024, Devon contractors excavated the impacted soils associated with confirmation samples CS-20, CS-24, and CS-35 to depths ranging from 2.5 to 7 ft. bgs. ESRR collected three (3) confirmation samples from the floor of the excavation and eight (8) sidewall samples. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified.

Laboratory analytical data suggests soils exceeding NMOCD regulatory criteria are not present, no additional excavation is required, and a total of 345 cubic yards were transported to Lea Land Landfill for final disposal. Subsequent to favorable laboratory analytical data review, the excavated area was backfilled with clean locally sourced caliche material and leveled to the surrounding grade surface.

The confirmation soil sample analytical results are provided in Tables 2, 3, and 4. Additionally, copies of laboratory analysis and chain-of-custody documentation are attached. See Figures 4, 5, and 6 for confirmation soil sample locations.

On September 25, 2024, the NMOCD requested additional delineation soil samples be collected from the perimeter of the release area.

On October 11, 2024, ESRR advanced four (4) delineation soil borings to collect four (4) soil samples from depths ranging from surface to 0.5 ft. bgs. surrounding the release area to complete horizontal release delineation. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

On November 01, 2024, ESRR advanced three (3) delineation soil borings to collect three (3) soil samples from depths ranging from surface to 0.5 ft. bgs. surrounding the release area to complete horizontal release delineation. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified.

It should be noted that soil samples P-7, P-8, and P-9 were not analyzed for BTEX or chloride due to the previous samples redundantly exhibiting these chemicals of concern are not present.

Earth Systems
Response & Restoration

Conclusions

Sincerely,

Kris Williams, CHMM, REM
Operations Manager - Texas

Released to Imaging: 3/31/2025 11:38:41 AM



Figure 1 - Site Location Map

Cotton Draw Unit 604
GPS: 32.1945389°, -103.753072°
Eddy County, New Mexico

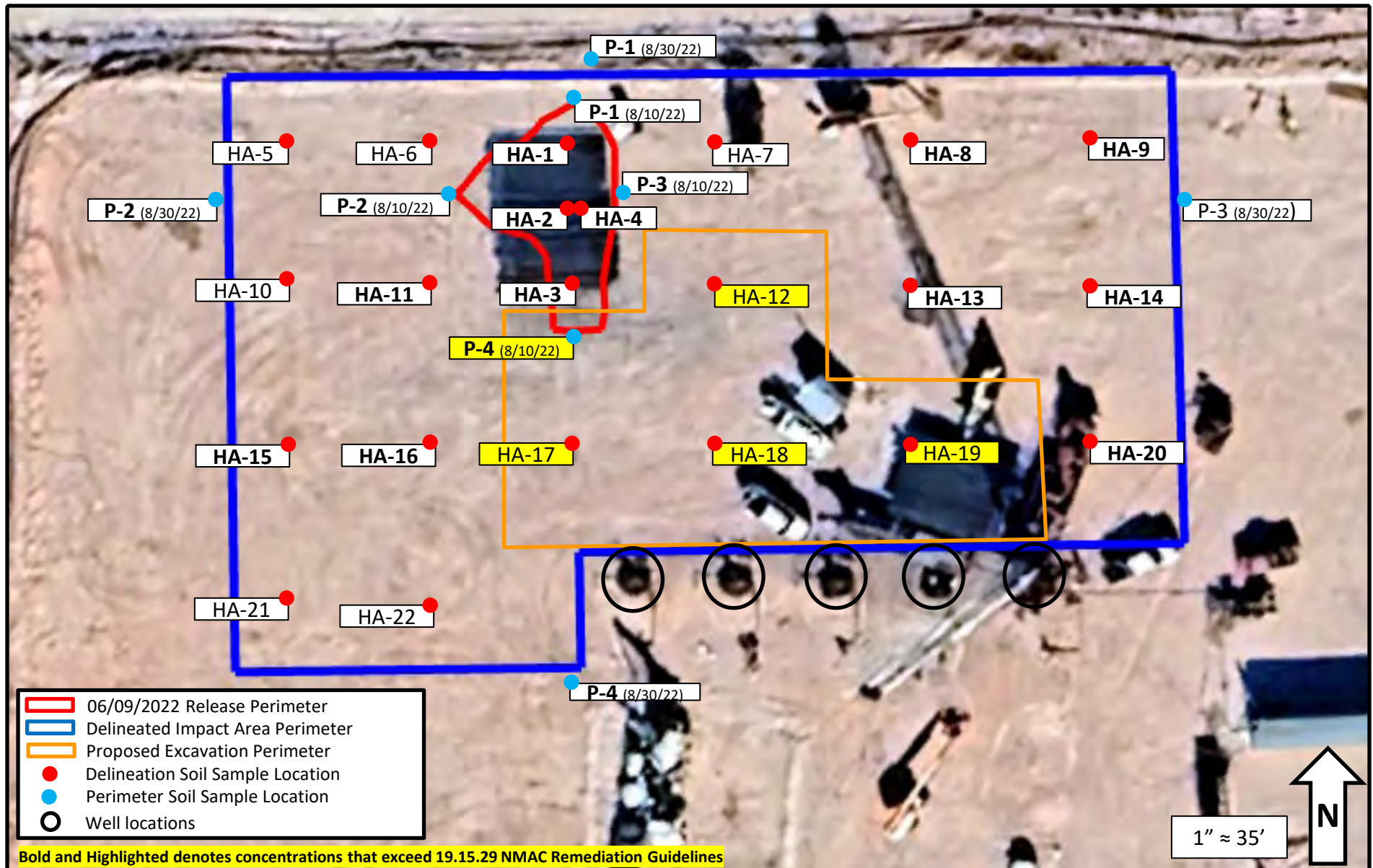
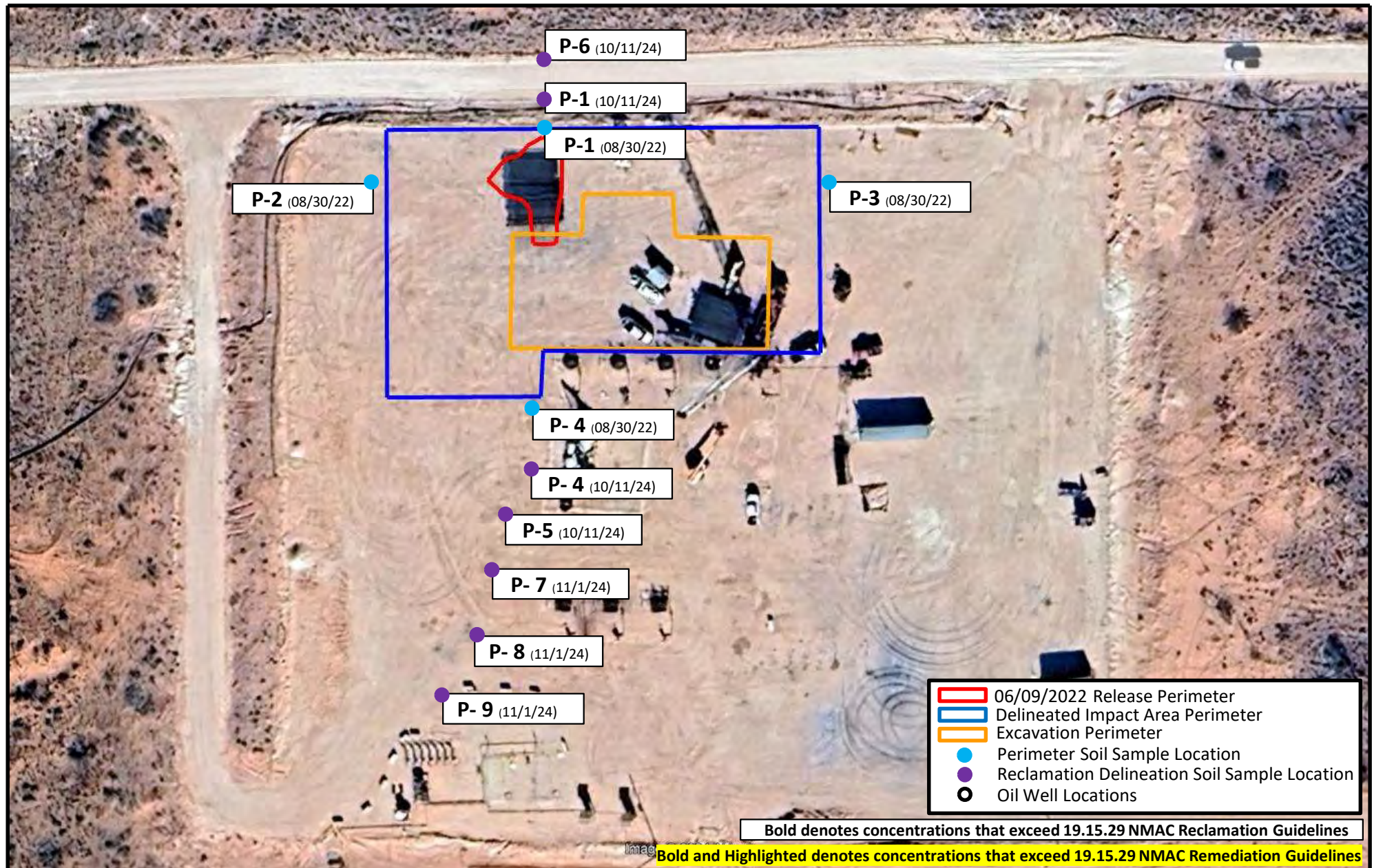


Figure 2 - Delineation Soil Sample Locations and Site Map - 08/10/22, 08/30/22, & 09/01/22



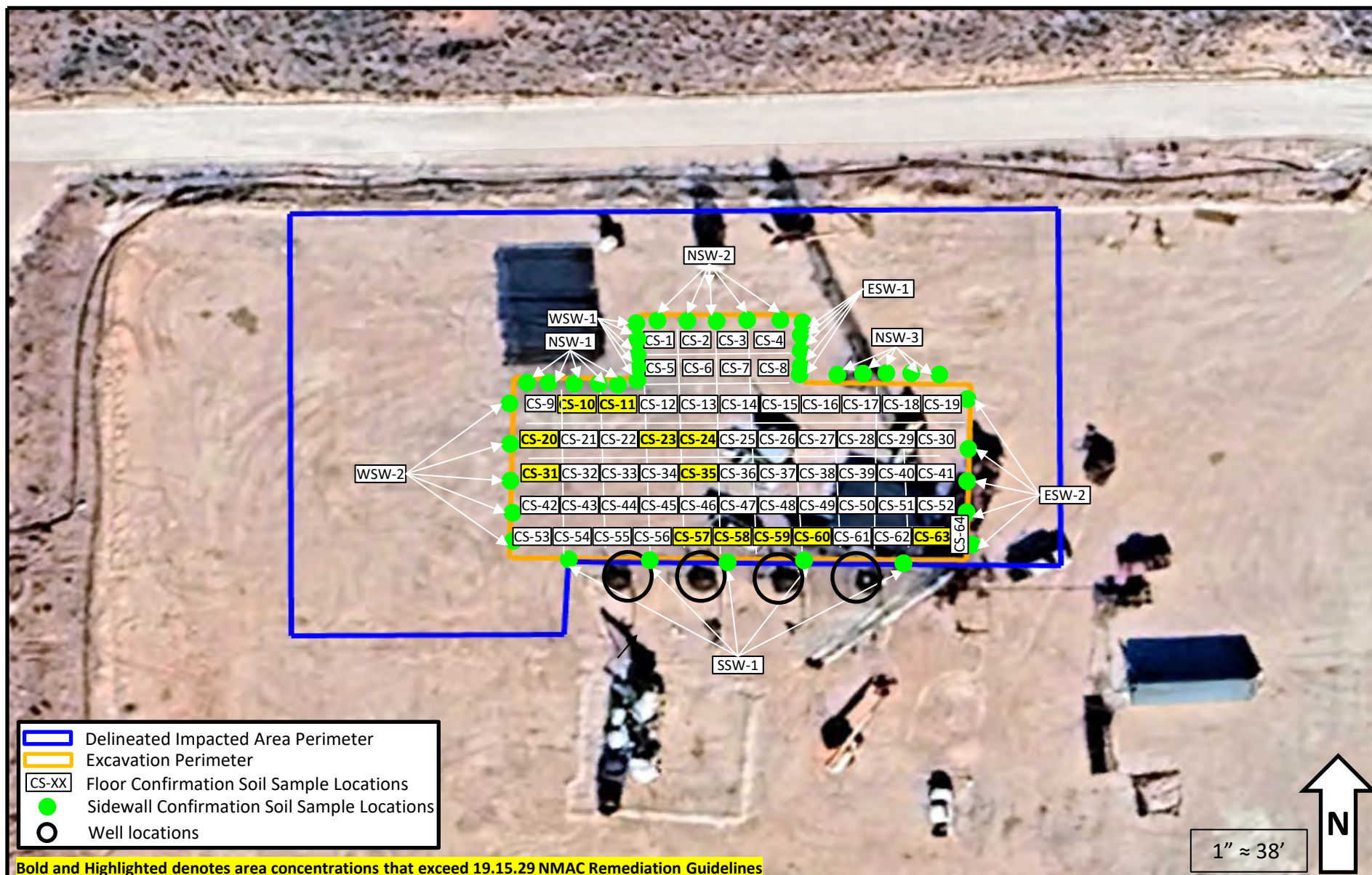


Figure 4 - Confirmation Soil Sample Locations and Site Map (06/26/2024)



Figure 5 - Confirmation Soil Sample Locations and Site Map (07/09/2024)

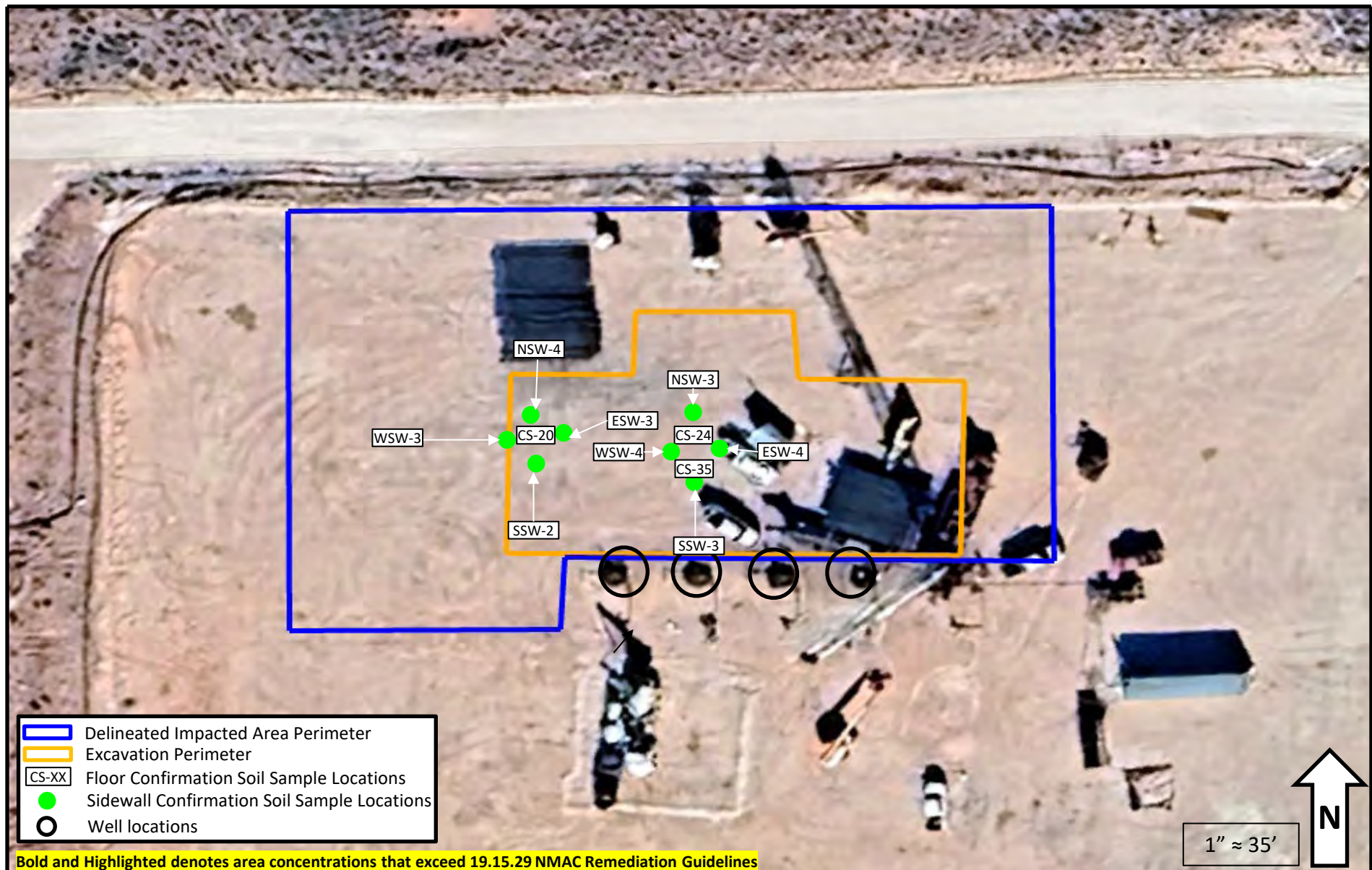


Figure 6 - Confirmation Soil Sample Locations and Site Map (07/23/2024)

Figure 8 - SOIL BORING LOG								Page 1 of 1	
PROJECT: Cotton Draw Unit 604				DRILLING COMPANY: Hungry Horse LLC					
PROJECT NUMBER: 1264				DRILLER: Dean					
CLIENT: Devon Energy				DRILLING METHOD: Air Rotary					
SOIL BORING 1				BORE HOLE DIAMETER: 2.375 in.					
TOTAL DEPTH: 59 ft.				DATE DRILLED: 2/14/2024					
FIELD PERSONNEL: Kyle Kincaid									
DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	Material Description	DEPTH (FT)	
0							Sand, Dark Reddish Brown, No Odor, Dry	0	
5							Sand, Dark Reddish Brown, No Odor, Dry	5	
10							Sand, Dark Reddish Brown, No Odor, Dry	10	
15							Sand, Very Pale Brown, No Odor, Dry	15	
20							Sand, Very Pale Brown, No Odor, Dry	20	
25							Sand, Very Pale Brown, No Odor, Dry	25	
30							Sand, Dark Reddish Brown, No Odor, Dry	30	
35							Sand with Limestone Cobbles, Dark Reddish Brown, No Odor, Dry	35	
40							Sand with Limestone Pebbles, Light Reddish Brown, No Odor, Dry	40	
45							Sand with Limestone Pebbles, Light Reddish Brown, No Odor, Dry	45	
50							Sand with Limestone Pebbles, Dark Reddish Brown, No Odor, Dry	50	
55							Sand with Limestone Pebbles, Dark Reddish Brown, No Odor, Dry	55	
59							Terminus of Boring 59 ft. - No Groundwater Present	59	
60								60	

Table 1 - Summary of Delineation Soil Analytical Results

Cotton Draw Unit 604
32.1945389, -103.753072
Eddy County, New Mexico

			Gasoline Range Organics (GRO) C6-C10 (mg/Kg)	Diesel Range Organics (DRO) C10-C28 (mg/Kg)	Motor Oil Range Organics (MRO) C28-C36 (mg/Kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)
19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines ¹ :						100	10				50	600
Sample ID	Sample Date	Sample Depth (ft)										
HA-1	8/10/2022	0 - 0.5	<49.9	150	<49.9	150	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	4,620
		0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	11.8
HA-2	8/10/2022	0 - 0.5	<50	<50	<50	<50	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	60.4
		0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	2,220
HA-3	8/10/2022	0 - 0.5	<50	393	139	532	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	33.9
		0.5 - 1	<50	<50	<50	<50	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	109
HA-4	8/31/2022	1.5 - 2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	748
		2.5 - 3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	40.4
		3.5 - 4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	69
HA-5	9/1/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	132
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	14.8
HA-6	9/1/2022	0 - 0.5	<50	<50	<50	<50	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	211
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	14
HA-7	9/1/2022	0 - 0.5	<49.9	51.1	<49.9	51.1	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	487
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	57.9
HA-8	9/1/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,420
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	435
HA-9	9/1/2022	0 - 0.5	<50	<50	<50	<50	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	753
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	16.2
HA-10	9/1/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	506
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	13.8
HA-11	9/1/2022	0 - 0.5	<49.9	179	<49.9	179	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	8,070
		0.5 - 1	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	109
HA-12	9/1/2022	0 - 0.5	<49.8	1,410	<49.8	1,410	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	9,760
		0.5 - 1	<50	74.1	<50	74.1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	119
HA-13	9/1/2022	0 - 0.5	<50	69.7	<50	69.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	4,170
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	271
HA-14	9/1/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,950
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	56
HA-15	9/1/2022	0 - 0.5	<50	144	<50	144	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,070
		0.5 - 1	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	93

Bold and Highlighted exceeds 19.15.29 NMAC Remediation Guidelines

Bold exceeds 19.15.29.13 (D) NMAC Reclamation Guidelines

TPH - Total Petroleum Hydrocarbons

ft - feet

mg/kg - milligram per kilogram

* = Soil sample location present in native soils

Table 1 - Summary of Delineation Soil Analytical Results
Cotton Draw Unit 604
32.1945389, -103.753072
Eddy County, New Mexico

			Gasoline Range Organics (GRO) C6-C10 (mg/Kg)	Diesel Range Organics (DRO) C10-C28 (mg/Kg)	Motor Oil Range Organics (MRO) C28-C36 (mg/Kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)
19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines ¹ :						100	10				50	600
HA-16	9/1/2022	0 - 0.5	<50	165	<50	165	<0.00201	<0.00201	<0.00201	0.0106	0.0106	7,190
		0.5 - 1	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	181
HA-17	9/1/2022	0 - 0.5	<49.9	812	<49.9	812	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	12,200
		0.5 - 1	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	617
		1.5 - 2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	103
HA-18	9/1/2022	0 - 0.5	<49.9	1,700	<49.9	1,700	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	10,900
		0.5 - 1	<50	79.1	<50	79.1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	292
HA-19	9/1/2022	0 - 0.5	<50	739	133	872	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	11,200
		0.5 - 1	<50	115	<50	115	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	788
		1.5 - 2	<50	<50	<50	<50	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	23
HA-20	9/1/2022	0 - 0.5	<50	390	101	491	<0.00202	<0.00202	<0.00202	0.00941	0.00941	3,400
		0.5 - 1	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	155
HA-21	9/1/2022	0 - 0.5	<50	55	<50	55	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	145
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	57.4
HA-22	9/1/2022	0 - 0.5	<49.9	71.5	<49.9	71.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	343
		0.5 - 1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	334
P-1*	8/10/2022	0-0.5	<50	254	75.3	329	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	9,090
P-2	8/10/2022	0-0.5	<50	954	266	1,220	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,210
P-3	8/10/2022	0-0.5	<49.9	125	79.7	205	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	738
P-4	8/10/2022	0 - 0.5	<49.9	1,810	286	2,100	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	6,060
P-1	8/30/2022	0 - 0.5	<50	<50	<50	<50	<0.00200	<0.00200	<0.0200	<0.00401	<0.00401	807
P-2	8/30/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	528
P-3	8/30/2022	0 - 0.5	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	181
P-4	8/30/2022	0 - 0.5	<50	147	<50	147	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,380
P-1	10/11/2024	0 - 0.5	<50	98.5	<50	98.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	152
P-4	10/11/2024	0 - 0.5	<49.9	297	<49.9	297	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	76.9
P-5	10/11/2024	0 - 0.5	<49.8	241	<49.8	241	<0.00199	<0.00199	0.0161	<0.00398	0.0181	69.5
P-6	10/11/2024	0 - 0.5	<49.7	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	498
P-7	11/1/2024	0 - 0.5	<50	196	<50	196	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
P-8	11/1/2024	0 - 0.5	<50	125	<50	125	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
P-9	11/1/2024	0 - 0.5	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Bold and Highlighted exceeds 19.15.29 NMAC Remediation Guidelines

Bold exceeds 19.15.29.13 (D) NMAC Reclamation Guidelines

TPH - Total Petroleum Hydrocarbons

ft - feet

mg/kg - milligram per kilogram

* = Soil sample location present in native soils

Table 2 - Summary of Confirmation Soil Analytical Results Cotton Draw Unit 604 32.1945389°, -103.753072° Eddy County, New Mexico												
			Gasoline Range Organics (GRO) C6-C10 (mg/Kg)	Diesel Range Organics (DRO) C10-C28 (mg/Kg)	Motor Oil Range Organics (MRO) C28-C36 (mg/Kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)
19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines ¹ :						100	10				50	600
Sample ID	Sample Date	Sample Depth (ft)										
CS-1	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	240
CS-2	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	546
CS-3	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	305
CS-4	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	548
CS-5	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	530
CS-6	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	814
CS-7	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	936
CS-8	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	924
CS-9	6/26/2024	0.5 - 1	<49.9	480	<49.9	480	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	413
CS-10	6/26/2024	0.5 - 1	<49.9	1,380	<49.9	1,380	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	443
CS-11	6/26/2024	0.5 - 1	<50.0	1,530	<50.0	1,530	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,230
CS-12	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	741
CS-13	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	1,220
CS-14	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,680
CS-15	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	771
CS-16	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	359
CS-17	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	89.2
CS-18	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	626
CS-19	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	190
CS-20	6/26/2024	0.5 - 1	<49.9	1,270	<49.9	1,270	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	795
CS-21	6/26/2024	0.5 - 1	<50.0	911	<50.0	911	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	650
CS-22	6/26/2024	0.5 - 1	<49.5	908	<49.5	908	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	745

Bold and Highlighted exceeds 19.15.29 NMAC Remediation Guidelines

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19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines ¹ :						100	10				50	600
CS-23	6/26/2024	0.5 - 1	<49.6	1,430	<49.6	1,430	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	1,430
CS-24	6/26/2024	0.5 - 1	<49.6	1,880	<49.6	1,880	<0.00201	<0.00201	<0.00201	0.00454	0.00454	980
CS-25	6/26/2024	0.5 - 1	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	529
CS-26	6/26/2024	0.5 - 1	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	717
CS-27	6/26/2024	0.5 - 1	<49.7	<49.7	<49.7	<49.7	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	310
CS-28	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	125
CS-29	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	137
CS-30	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,080
CS-31	6/26/2024	0.5 - 1	<49.8	1,060	<49.8	1,060	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	812
CS-32	6/26/2024	0.5 - 1	<49.9	123	<49.9	123	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	623
CS-33	6/26/2024	0.5 - 1	<49.8	678	<49.8	678	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	581
CS-34	6/26/2024	0.5 - 1	<49.8	197	<49.8	197	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,100
CS-35	6/26/2024	0.5 - 1	<49.7	1,980	<49.7	1,980	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	589
CS-36	6/26/2024	0.5 - 1	<49.7	682	<49.7	682	<0.00199	<0.00199	0.00225	0.00690	0.00915	1,140
CS-37	6/26/2024	0.5 - 1	<49.8	557	<49.8	557	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	768
CS-38	6/26/2024	0.5 - 1	<50.0	128	<50.0	128	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	660
CS-39	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	98.9
CS-40	6/26/2024	0.5 - 1	<49.7	289	<49.7	289	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,300
CS-41	6/26/2024	0.5 - 1	<50.0	170	<50.0	170	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,080
CS-42	6/26/2024	0.5 - 1	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,830
CS-43	6/26/2024	0.5 - 1	<49.8	97.8	<49.8	97.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	897
CS-44	6/26/2024	0.5 - 1	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	555

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19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines:						100	10				50	600
CS-45	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	1,200
CS-46	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,020
CS-47	6/26/2024	0.5 - 1	<49.5	<49.5	<49.5	<49.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	890
CS-48	6/26/2024	0.5 - 1	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	697
CS-49	6/26/2024	0.5 - 1	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	333
CS-50	6/26/2024	0.5 - 1	<49.7	139	<49.7	139	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	381
CS-51	6/26/2024	0.5 - 1	<49.7	75.1	<49.7	75.1	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	735
CS-52	6/26/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	932
CS-53	6/26/2024	0.5 - 1	<49.9	332	74.0	406	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	2,310
CS-54	6/26/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	2,910
CS-55	6/26/2024	0.5 - 1	<49.8	97.2	<49.8	97.2	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	2,130
CS-56	6/26/2024	0.5 - 1	<49.7	158	<49.7	158	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,860
CS-57	6/26/2024	0.5 - 1	<49.8	969	353	1,320	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	2,900
CS-58	6/26/2024	0.5 - 1	<49.9	1,680	102	1,780	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	4,160
CS-59	6/26/2024	0.5 - 1	<50.0	1,060	<50.0	1,060	<0.00198	<0.00198	<0.00198	0.0123	0.0123	2,370
CS-60	6/26/2024	0.5 - 1	88.6	1,470	<49.7	1,560	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,640
CS-61	6/26/2024	0.5 - 1	<49.7	461	<49.7	461	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,040
CS-62	6/26/2024	0.5 - 1	<49.8	519	<49.8	519	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	843
CS-63	6/26/2024	0.5 - 1	<50.0	1,060	<50.0	1,060	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	2,790
CS-64	6/26/2024	0.5 - 1	<49.8	543	<49.8	543	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	3,410

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19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines:						100	10				50	600
NSW-1	6/26/2024	0.25	<50.0	589	<50.0	589	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	2,830
NSW-2	6/26/2024	0.25	<49.6	75.4	<49.6	75.4	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	666
NSW-3	6/26/2024	0.25	<50.0	58.1	<50.0	58.1	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	741
ESW-1	6/26/2024	0.25	<49.7	58.0	<49.7	58.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	2,520
ESW-2	6/26/2024	0.25	<49.6	231	<49.6	231	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,350
SSW-1	6/26/2024	0.25	<49.6	516	207	723	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	4,870
WSW-1	6/26/2024	0.25	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	2,470
WSW-2	6/26/2024	0.25	<49.8	355	<49.8	355	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	843

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19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines:						100	10				50	600
Sample ID	Sample Date	Sample Depth (ft)										
CS-10	7/9/2024	1 - 1.5	<50.3	194	<50.3	194	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-10	7/9/2024	2.5 - 3	<49.9	143	<49.9	143	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-11	7/9/2024	1 - 1.5	<49.9	221	<49.9	221	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-11	7/9/2024	1.5 - 2	<49.8	52.5	<49.8	52.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	1 - 1.5	<49.9	4,900	<49.9	4,900	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	1.5 - 2	<49.6	4,670	<49.6	4,670	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	2.5 - 3	<50.3	5,900	<50.3	5,900	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	3.5 - 4	<50.1	3,280	<50.1	3,280	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	4.5 - 5	<50.0	2,700	<50.0	2,700	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	5.5 - 6	<49.7	3,320	<49.7	3,320	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	7/9/2024	6.5 - 7	<49.8	391	<49.8	391	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-23	7/9/2024	1 - 1.5	<50.5	569	<50.5	569	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-23	7/9/2024	1.5 - 2R	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-24	7/9/2024	1 - 1.5	<49.7	2,860	<49.7	2,860	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-24	7/9/2024	1.5 - 2	<49.6	2,560	<49.6	2,560	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-24	7/9/2024	2.5 - 3R	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-31	7/9/2024	1 - 1.5	<49.7	185	<49.7	185	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-35	7/9/2024	1 - 1.5	<49.9	2,510	<49.9	2,510	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-35	7/9/2024	1.5 - 2	<50.5	9,110	<50.5	9,110	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-35	7/9/2024	2.5 - 3	<50.0	3,980	<50.0	3,980	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-35	7/9/2024	3.5 - 4	<50.0	5,660	<50.0	5,660	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-57	7/9/2024	1 - 1.5	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-58	7/9/2024	0.5 - 1	<50.0	<50.0	<50.0	<50.0	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-59	7/9/2024	0.5 - 1	<49.8	86.7	<49.8	86.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-60	7/9/2024	0.5 - 1	<49.9	109	<49.9	109	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-63	7/9/2024	0.5 - 1	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

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mg/kg - milligram per kilogram

* = Soil sample location present in native soils

Table 4 - Summary of Confirmation Soil Analytical Results Cotton Draw Unit 604 32.1945389°, -103.753072° Eddy County, New Mexico												
			Gasoline Range Organics (GRO) C6-C10 (mg/Kg)	Diesel Range Organics (DRO) C10-C28 (mg/Kg)	Motor Oil Range Organics (MRO) C28-C36 (mg/Kg)	Total TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)
19.15.29 NMAC Remediation Guidelines:			1,000			2,500	10				50	10,000
19.15.29.13(D) NMAC Reclamation Guidelines ¹ :						100	10				50	600
Sample ID	Sample Date	Sample Depth (ft)										
CS-20	7/23/2024	7 - 7.5	<50.0	<50.0	<50.0	<50.0	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-24	7/23/2024	2.5 - 3	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-31	7/23/2024	6.5 - 7	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
NSW-4	7/23/2024	3.5	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
NSW-5	7/23/2024	1.5	<49.7	<49.7	<49.7	<49.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
ESW-3	7/23/2024	3.5	<50.0	119	<50.0	119	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
ESW-4	7/23/2024	3.5	<49.7	<49.7	<49.7	<49.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
WSW-3	7/23/2024	3.5	<49.7	<49.7	<49.7	<49.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
WSW-4	7/23/2024	3.5	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SSW-2	7/23/2024	3.5	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SSW-3	7/23/2024	3.5	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Bold and Highlighted exceeds 19.15.29 NMAC Remediation Guidelines

Bold exceeds 19.15.29.13 (D) NMAC Reclamation Guidelines

TPH - Total Petroleum Hydrocarbons

ft - feet

mg/kg - milligram per kilogram

* = Soil sample location present in native soils

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 1: View of the impacted areas sign facing south. 8/30/22



PHOTO 2: View of the impacted area facing east. 8/30/22

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 3: View of the impacted area facing west. 8/30/22



PHOTO 4: View of the impacted area facing west. 8/30/22

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 5: View of the excavated area facing south. 06/26/2024



PHOTO 6: View of the excavated area facing south. 06/26/2024

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 7: View of the excavated area facing southeast. 07/09/2024



PHOTO 8: View of the excavated area facing southwest. 07/09/2024

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 9: View of the excavated area facing east. 07/23/2024



PHOTO 10: View of the impacted area facing north. 07/23/2024

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 11: View of the remediated area facing north. 08/02/2024



PHOTO 12: View of the impacted area facing southeast. 08/02/2024

Devon Energy – Cotton Draw Unit 604
32.1945389°, -103.753072°
Eddy County, New Mexico



PHOTO 13: View of the remediated area facing north. 08/02/2024



PHOTO 14: View of the remediated area facing east. 08/02/2024

Groundwater Research

Depth to Groundwater and Water Bodies Map

NMOSE Average Depth to Water

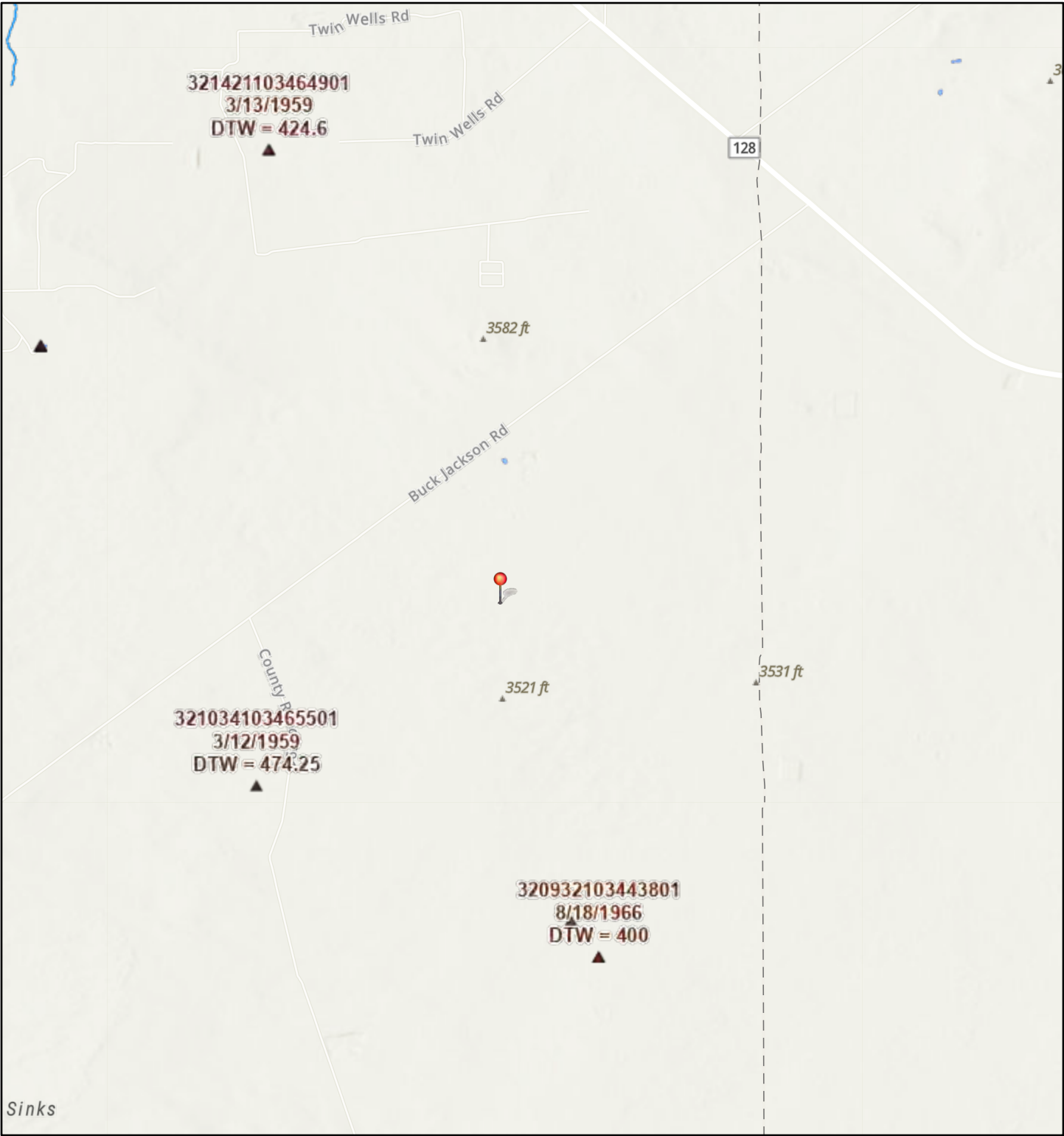
Depth to Groundwater Radius Map

USGS National Water Information System

Karst Potential Map

New Mexico NFHL Data

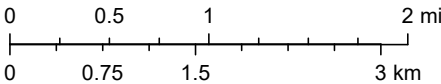
Water Bodies



8/6/2024, 2:02:29 PM

1:72,224

- Override 1
- USGS Historical GW Wells
- OSW Water Bodys
- OSE Streams



Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, Esri, NASA, NGA, USGS, FEMA, USGS, NM OSE



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
C 04388 POD1		C	ED	SW	NE	NW	23	24S	31E	617546.3	3564006.4		1325	910	868	42
C 04633 POD1		CUB	ED	NE	NW	NW	35	24S	31E	617394.3	3561170.0		1517			

Average Depth to Water: 868 feet

Minimum Depth: 868 feet

Maximum Depth: 868 feet

Record Count: 2

Basin/County Search:

County: ED

UTM Filters (in meters):

Easting: 617533.7

Northing: 3562680.68

Radius: 001600

* UTM location was derived from PLSS - see Help

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

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
22333	C 04388 POD1	SW	NE	NW	23	24S	31E	617546.3	3564006.4	

* UTM location was derived from PLSS - see Help

Driller License:	1058	Driller Company:	KEY'S DRILLING & PUMP SERVICE
Driller Name:	KEY, GARYR.S AICHARDDENAS		
Drill Start Date:	2019-12-18	Drill Finish Date:	2020-02-22
Log File Date:	2020-02-27	PCW Rcv Date:	Source: Artesian
Pump Type:	Pipe Discharge Size:	Estimated Yield: 60	
Casing Size:	4.50	Depth Well:	910
		Depth Water:	868

Water Bearing Stratifications:

Top	Bottom	Description
866	868	Limestone/Dolomite/Chalk

Casing Perforations:

Top	Bottom
850	910

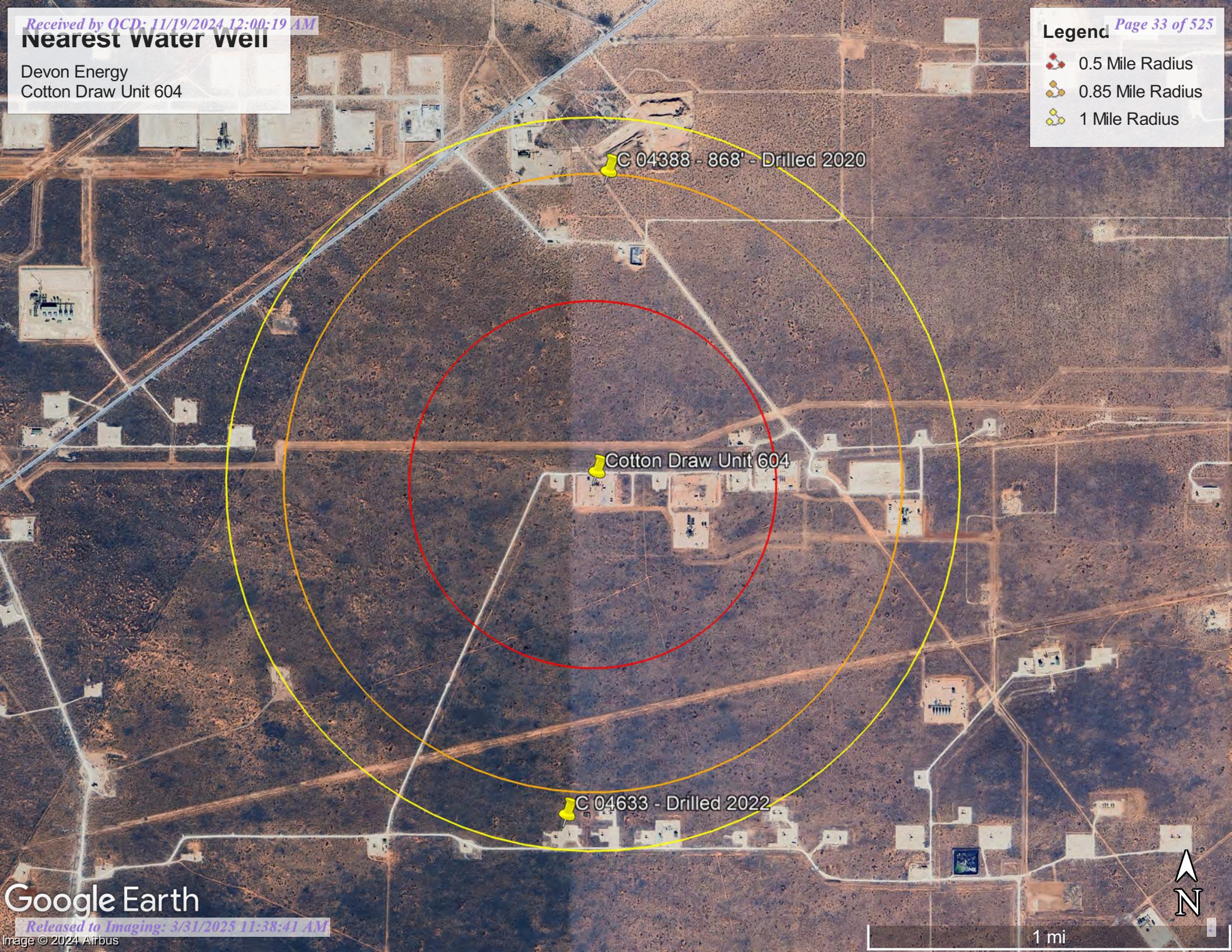
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Nearest Water Well

Devon Energy
Cotton Draw Unit 604

Legend Page 33 of 525

- 0.5 Mile Radius
- 0.85 Mile Radius
- 1 Mile Radius





National Water Information System: Mapper



Site Information



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National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
New Mexico

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Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321421103464901

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321421103464901 24S.31E.04.433422

Eddy County, New Mexico
Latitude 32°14'23.7", Longitude 103°46'47.8" NAD83
Land-surface elevation 3,419.00 feet above NGVD29
The depth of the well is 627 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-03-13			D	62610	2994.40	NGVD29	1	Z			A
1959-03-13			D	62611	2996.11	NAVD88	1	Z			A
1959-03-13			D	72019	424.60		1	Z			A
2013-01-17	00:30 UTC	m	62610		2981.53	NGVD29	P	S	USGS	S	A
2013-01-17	00:30 UTC	m	62611		2983.24	NAVD88	P	S	USGS	S	A
2013-01-17	00:30 UTC	m	72019	437.47			P	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined

Section	Code	Description
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for New Mexico: Water Levels
URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



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Page Last Modified: 2024-08-06 16:57:24 EDT
0.25 0.23 nadww02



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USGS Water Resources

Data Category:Groundwater

Geographic Area:New Mexico

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Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321034103465501

Minimum number of levels = 1
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USGS 321034103465501 24S.31E.33.231113

Eddy County, New Mexico
Latitude 32°10'38.2", Longitude 103°46'53.0" NAD83
Land-surface elevation 3,461.00 feet above NGVD29
The depth of the well is 740 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data											
Tab-separated data											
Graph of data											
Reselect period											

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-03-12			D	62610	2986.75	NGVD29	1	Z			A
1959-03-12			D	62611	2988.49	NAVD88	1	Z			A
1959-03-12			D	72019	474.25		1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Geographic Area:New Mexico

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Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 320932103443801

Minimum number of levels = 1
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USGS 320932103443801 25S.31E.02.23441

Eddy County, New Mexico
Latitude 32°09'37.4", Longitude 103°44'29.6" NAD83
Land-surface elevation 3,460.00 feet above NGVD29
The depth of the well is 1,016 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1966-08-18			D	62610	3060.00	NGVD29	1	Z			A
1966-08-18			D	62611	3061.71	NAVD88	1	Z			A
1966-08-18			D	72019	400.00		1	Z			A
1976-01-28			D	62610	3069.73	NGVD29	1	Z			A
1976-01-28			D	62611	3071.44	NAVD88	1	Z			A
1976-01-28			D	72019	390.27		1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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0.27 0.23 nadww01

Karst Potential

Devon Energy - Cotton Draw Unit 604 Site

Legend

-  Cotton Draw Unit 604
-  High Karst
-  Low Karst
-  Medium Karst

Cotton Draw Unit 604

Google Earth



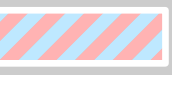
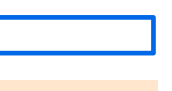
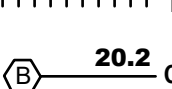
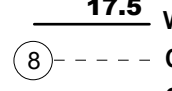
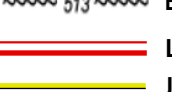
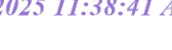
1 mi



103°44'58.32"W 32°7'3.67"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP
FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, AE9
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		8 Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-6627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

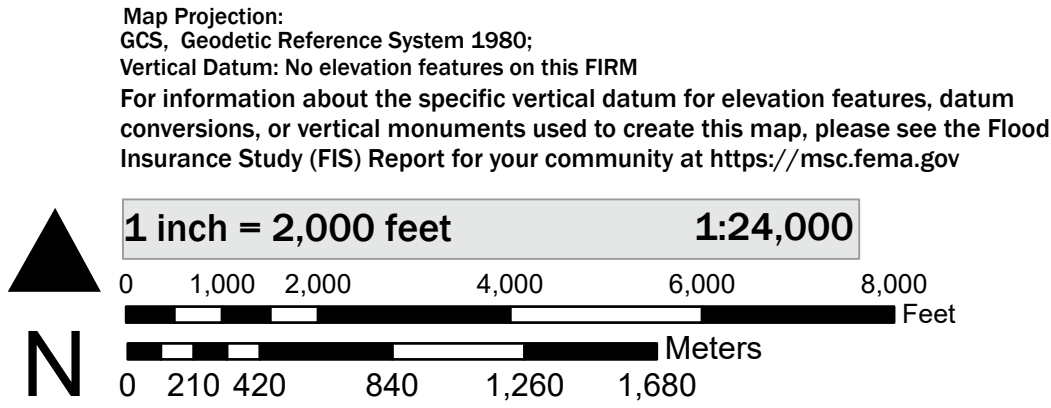
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 8/6/2024 4:41 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

SCALE



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

PANEL 1650 of 1925

Panel Contains:		
COMMUNITY	NUMBER	PANEL
EDDY COUNTY	350120	1650

MAP NUMBER
35015C1650D
EFFECTIVE DATE
June 04, 2010



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-17971-1

Laboratory Sample Delivery Group: Eddy Co., NM
Client Project/Site: Cotton Draw Unit 604

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

Authorized for release by:

8/16/2022 10:29:51 AM

Brianna Teel, Project Manager
(432)704-5440

Brianna.Teel@et.eurofinsus.com

LINKS

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results through



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www.eurofinsus.com/Env

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-17971-1
SDG: Eddy Co.,NM

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- 13
- 14

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,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.
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/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Job ID: 880-17971-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-17971-1

Receipt

The samples were received on 8/10/2022 3:47 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 5.8°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-31966/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: HA-3 (0-0.5) (880-17971-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31966 and analytical batch 880-32042 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-1 (0-0.5)

Lab Sample ID: 880-17971-1

Date Collected: 08/10/22 12:00

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 04:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 04:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 04:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 04:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 04:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 04:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	08/11/22 13:38	08/12/22 04:04	1
1,4-Difluorobenzene (Surr)	100		70 - 130	08/11/22 13:38	08/12/22 04:04	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	150		49.9		mg/Kg			08/15/22 09:17	1

Method: 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 *1	49.9		mg/Kg		08/11/22 09:22	08/12/22 11:43	1
Diesel Range Organics (Over C10-C28)	150		49.9		mg/Kg		08/11/22 09:22	08/12/22 11:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/11/22 09:22	08/12/22 11:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	08/11/22 09:22	08/12/22 11:43	1
o-Terphenyl	127		70 - 130	08/11/22 09:22	08/12/22 11:43	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4620		49.8		mg/Kg			08/15/22 21:39	10

Client Sample ID: HA-1 (0.5-1)

Lab Sample ID: 880-17971-2

Date Collected: 08/10/22 12:02

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0.5 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/11/22 13:38	08/12/22 04:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/11/22 13:38	08/12/22 04:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/11/22 13:38	08/12/22 04:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/11/22 13:38	08/12/22 04:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/11/22 13:38	08/12/22 04:24	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/11/22 13:38	08/12/22 04:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/11/22 13:38	08/12/22 04:24	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-1 (0.5-1)

Lab Sample ID: 880-17971-2

Date Collected: 08/10/22 12:02

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0.5 - 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	08/11/22 13:38	08/12/22 04:24	1

Method: 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			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/15/22 09:17	1

Method: 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 *1	49.9		mg/Kg		08/11/22 09:22	08/12/22 15:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/11/22 09:22	08/12/22 15:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/11/22 09:22	08/12/22 15:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				08/11/22 09:22	08/12/22 15:42	1
o-Terphenyl	101		70 - 130				08/11/22 09:22	08/12/22 15:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11.8		4.98		mg/Kg			08/15/22 22:06	1

Client Sample ID: HA-2 (0-0.5)

Lab Sample ID: 880-17971-4

Date Collected: 08/10/22 12:10

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 04:45	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 04:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 04:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/11/22 13:38	08/12/22 04:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 04:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/11/22 13:38	08/12/22 04:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	08/11/22 13:38	08/12/22 04:45	1
1,4-Difluorobenzene (Surr)	99		70 - 130	08/11/22 13:38	08/12/22 04:45	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/15/22 09:17	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-2 (0-0.5)

Lab Sample ID: 880-17971-4

Date Collected: 08/10/22 12:10

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0 - 0.5

Method: 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 *1	50.0		mg/Kg		08/11/22 09:22	08/12/22 16:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 16:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 16:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				08/11/22 09:22	08/12/22 16:50	1
o-Terphenyl	109		70 - 130				08/11/22 09:22	08/12/22 16:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.4		4.99		mg/Kg			08/15/22 22:25	1

Client Sample ID: HA-2 (0.5-1)

Lab Sample ID: 880-17971-5

Date Collected: 08/10/22 12:12

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0.5 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		08/11/22 13:38	08/12/22 05:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				08/11/22 13:38	08/12/22 05:05	1
1,4-Difluorobenzene (Surr)	94		70 - 130				08/11/22 13:38	08/12/22 05:05	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/15/22 09:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		08/11/22 09:22	08/12/22 17:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/11/22 09:22	08/12/22 17:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/11/22 09:22	08/12/22 17:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				08/11/22 09:22	08/12/22 17:12	1
o-Terphenyl	122		70 - 130				08/11/22 09:22	08/12/22 17:12	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-2 (0.5-1)

Lab Sample ID: 880-17971-5

Date Collected: 08/10/22 12:12

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0.5 - 1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2200		25.0		mg/Kg			08/15/22 22:34	5

Client Sample ID: HA-3 (0-0.5)

Lab Sample ID: 880-17971-7

Date Collected: 08/10/22 12:20

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				08/11/22 13:38	08/12/22 05:26	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/11/22 13:38	08/12/22 05:26	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	532		50.0		mg/Kg			08/15/22 09:17	1

Method: 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 *1	50.0		mg/Kg		08/11/22 09:22	08/12/22 17:34	1
Diesel Range Organics (Over C10-C28)	393		50.0		mg/Kg		08/11/22 09:22	08/12/22 17:34	1
Oil Range Organics (Over C28-C36)	139		50.0		mg/Kg		08/11/22 09:22	08/12/22 17:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				08/11/22 09:22	08/12/22 17:34	1
o-Terphenyl	131	S1+	70 - 130				08/11/22 09:22	08/12/22 17:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.9		5.01		mg/Kg			08/15/22 23:11	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-3 (0.5-1)

Lab Sample ID: 880-17971-8

Date Collected: 08/10/22 12:22

Matrix: Solid

Date Received: 08/10/22 15:47

Sample Depth: 0.5 - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 05:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 05:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 05:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/11/22 13:38	08/12/22 05:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 05:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/11/22 13:38	08/12/22 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	08/11/22 13:38	08/12/22 05:46	1
1,4-Difluorobenzene (Surr)	96		70 - 130	08/11/22 13:38	08/12/22 05:46	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/15/22 09:17	1

Method: 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 *1	50.0		mg/Kg		08/11/22 09:22	08/12/22 17:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 17:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	08/11/22 09:22	08/12/22 17:55	1
o-Terphenyl	117		70 - 130	08/11/22 09:22	08/12/22 17:55	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		5.01		mg/Kg			08/15/22 23:20	1

Eurofins Midland

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-17971-1	HA-1 (0-0.5)	97	100
880-17971-1 MS	HA-1 (0-0.5)	101	99
880-17971-1 MSD	HA-1 (0-0.5)	99	99
880-17971-2	HA-1 (0.5-1)	93	96
880-17971-4	HA-2 (0-0.5)	95	99
880-17971-5	HA-2 (0.5-1)	95	94
880-17971-7	HA-3 (0-0.5)	93	97
880-17971-8	HA-3 (0.5-1)	95	96
LCS 880-32010/1-A	Lab Control Sample	101	98
LCSD 880-32010/2-A	Lab Control Sample Dup	99	100
MB 880-31861/5-A	Method Blank	93	104
MB 880-32010/5-A	Method Blank	93	101
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-17971-1	HA-1 (0-0.5)	95	127
880-17971-1 MS	HA-1 (0-0.5)	96	110
880-17971-1 MSD	HA-1 (0-0.5)	86	106
880-17971-2	HA-1 (0.5-1)	83	101
880-17971-4	HA-2 (0-0.5)	85	109
880-17971-5	HA-2 (0.5-1)	97	122
880-17971-7	HA-3 (0-0.5)	98	131 S1+
880-17971-8	HA-3 (0.5-1)	91	117
LCS 880-31966/2-A	Lab Control Sample	116	137 S1+
LCSD 880-31966/3-A	Lab Control Sample Dup	100	123
MB 880-31966/1-A	Method Blank	84	115
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31861/5-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/09/22 15:47	08/11/22 15:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/09/22 15:47	08/11/22 15:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	08/09/22 15:47	08/11/22 15:56	1

Lab Sample ID: MB 880-32010/5-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 03:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/11/22 13:38	08/12/22 03:35	1
1,4-Difluorobenzene (Surr)	101		70 - 130	08/11/22 13:38	08/12/22 03:35	1

Lab Sample ID: LCS 880-32010/1-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09744		mg/Kg		97	70 - 130
Toluene	0.100	0.1021		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2158		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-32010/2-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1031		mg/Kg		103	70 - 130	6	35

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

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

Lab Sample ID: LCSD 880-32010/2-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1017		mg/Kg		102	70 - 130	0	35
Ethylbenzene	0.100	0.1052		mg/Kg		105	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	1	35
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-17971-1 MS

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: HA-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.101	0.09791		mg/Kg		97	70 - 130
Toluene	<0.00199	U	0.101	0.09258		mg/Kg		92	70 - 130
Ethylbenzene	<0.00199	U	0.101	0.08611		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1721		mg/Kg		85	70 - 130
o-Xylene	<0.00199	U	0.101	0.08436		mg/Kg		84	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-17971-1 MSD

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: HA-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 32010

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	0.09717		mg/Kg		97	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.09134		mg/Kg		91	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.08551		mg/Kg		85	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1703		mg/Kg		85	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.08356		mg/Kg		83	70 - 130	1	35

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

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

Lab Sample ID: MB 880-31966/1-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31966

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 10:39	1

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

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

Lab Sample ID: MB 880-31966/1-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31966

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		08/11/22 09:22	08/12/22 10:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 10:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				08/11/22 09:22	08/12/22 10:39	1
o-Terphenyl	115		70 - 130				08/11/22 09:22	08/12/22 10:39	1

Lab Sample ID: LCS 880-31966/2-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1194		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1180		mg/Kg		118	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	116		70 - 130				
o-Terphenyl	137	S1+	70 - 130				

Lab Sample ID: LCSD 880-31966/3-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	895.6	*1	mg/Kg		90	70 - 130	29	20
Diesel Range Organics (Over C10-C28)	1000	1034		mg/Kg		103	70 - 130	13	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: 880-17971-1 MS

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: HA-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	1123		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	150		999	1035		mg/Kg		89	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	96		70 - 130						
o-Terphenyl	110		70 - 130						

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

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

Lab Sample ID: 880-17971-1 MSD

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: HA-1 (0-0.5)

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	1108		mg/Kg		109	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	150		999	949.1		mg/Kg		80	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	86		70 - 130								
o-Terphenyl	106		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31947/1-A

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/15/22 21:11	1

Lab Sample ID: LCS 880-31947/2-A

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.0		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-31947/3-A

Matrix: Solid

Analysis Batch: 32174

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	251	240.2		mg/Kg		96	90 - 110	2	20

Lab Sample ID: 880-17971-1 MS

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: HA-1 (0-0.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4620		2500	7145		mg/Kg		101	90 - 110

Lab Sample ID: 880-17971-1 MSD

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: HA-1 (0-0.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4620		2510	7288		mg/Kg		107	90 - 110	2	20

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

GC VOA

Prep Batch: 31861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31861/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 32007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	8021B	32010
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	8021B	32010
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	8021B	32010
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	8021B	32010
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	8021B	32010
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	8021B	32010
MB 880-31861/5-A	Method Blank	Total/NA	Solid	8021B	31861
MB 880-32010/5-A	Method Blank	Total/NA	Solid	8021B	32010
LCS 880-32010/1-A	Lab Control Sample	Total/NA	Solid	8021B	32010
LCSD 880-32010/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	32010
880-17971-1 MS	HA-1 (0-0.5)	Total/NA	Solid	8021B	32010
880-17971-1 MSD	HA-1 (0-0.5)	Total/NA	Solid	8021B	32010

Prep Batch: 32010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	5035	
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	5035	
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	5035	
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	5035	
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	5035	
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	5035	
MB 880-32010/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-32010/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-32010/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17971-1 MS	HA-1 (0-0.5)	Total/NA	Solid	5035	
880-17971-1 MSD	HA-1 (0-0.5)	Total/NA	Solid	5035	

Analysis Batch: 32080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	Total BTEX	
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	Total BTEX	
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	8015NM Prep	
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	8015NM Prep	
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	8015NM Prep	
MB 880-31966/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

GC Semi VOA (Continued)

Prep Batch: 31966 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-31966/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31966/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-17971-1 MS	HA-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17971-1 MSD	HA-1 (0-0.5)	Total/NA	Solid	8015NM Prep	

Analysis Batch: 32042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	8015B NM	31966
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	8015B NM	31966
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	8015B NM	31966
MB 880-31966/1-A	Method Blank	Total/NA	Solid	8015B NM	31966
LCS 880-31966/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31966
LCSD 880-31966/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31966
880-17971-1 MS	HA-1 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17971-1 MSD	HA-1 (0-0.5)	Total/NA	Solid	8015B NM	31966

Analysis Batch: 32136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Total/NA	Solid	8015 NM	
880-17971-2	HA-1 (0.5-1)	Total/NA	Solid	8015 NM	
880-17971-4	HA-2 (0-0.5)	Total/NA	Solid	8015 NM	
880-17971-5	HA-2 (0.5-1)	Total/NA	Solid	8015 NM	
880-17971-7	HA-3 (0-0.5)	Total/NA	Solid	8015 NM	
880-17971-8	HA-3 (0.5-1)	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Soluble	Solid	DI Leach	
880-17971-2	HA-1 (0.5-1)	Soluble	Solid	DI Leach	
880-17971-4	HA-2 (0-0.5)	Soluble	Solid	DI Leach	
880-17971-5	HA-2 (0.5-1)	Soluble	Solid	DI Leach	
880-17971-7	HA-3 (0-0.5)	Soluble	Solid	DI Leach	
880-17971-8	HA-3 (0.5-1)	Soluble	Solid	DI Leach	
MB 880-31947/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31947/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31947/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17971-1 MS	HA-1 (0-0.5)	Soluble	Solid	DI Leach	
880-17971-1 MSD	HA-1 (0-0.5)	Soluble	Solid	DI Leach	

Analysis Batch: 32174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-1	HA-1 (0-0.5)	Soluble	Solid	300.0	31947
880-17971-2	HA-1 (0.5-1)	Soluble	Solid	300.0	31947
880-17971-4	HA-2 (0-0.5)	Soluble	Solid	300.0	31947
880-17971-5	HA-2 (0.5-1)	Soluble	Solid	300.0	31947
880-17971-7	HA-3 (0-0.5)	Soluble	Solid	300.0	31947

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

HPLC/IC (Continued)

Analysis Batch: 32174 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17971-8	HA-3 (0.5-1)	Soluble	Solid	300.0	31947
MB 880-31947/1-A	Method Blank	Soluble	Solid	300.0	31947
LCS 880-31947/2-A	Lab Control Sample	Soluble	Solid	300.0	31947
LCSD 880-31947/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31947
880-17971-1 MS	HA-1 (0-0.5)	Soluble	Solid	300.0	31947
880-17971-1 MSD	HA-1 (0-0.5)	Soluble	Solid	300.0	31947

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-1 (0-0.5)

Lab Sample ID: 880-17971-1

Date Collected: 08/10/22 12:00

Matrix: Solid

Date Received: 08/10/22 15:47

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 04:04	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 11:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		10			32174	08/15/22 21:39	CH	EET MID

Client Sample ID: HA-1 (0.5-1)

Lab Sample ID: 880-17971-2

Date Collected: 08/10/22 12:02

Matrix: Solid

Date Received: 08/10/22 15:47

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 04:24	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 15:42	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/15/22 22:06	CH	EET MID

Client Sample ID: HA-2 (0-0.5)

Lab Sample ID: 880-17971-4

Date Collected: 08/10/22 12:10

Matrix: Solid

Date Received: 08/10/22 15:47

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 04:45	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 16:50	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/15/22 22:25	CH	EET MID

Client Sample ID: HA-2 (0.5-1)

Lab Sample ID: 880-17971-5

Date Collected: 08/10/22 12:12

Matrix: Solid

Date Received: 08/10/22 15:47

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 05:05	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Client Sample ID: HA-2 (0.5-1)
Date Collected: 08/10/22 12:12
Date Received: 08/10/22 15:47

Lab Sample ID: 880-17971-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 17:12	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		5			32174	08/15/22 22:34	CH	EET MID

Client Sample ID: HA-3 (0-0.5)
Date Collected: 08/10/22 12:20
Date Received: 08/10/22 15:47

Lab Sample ID: 880-17971-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 05:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 17:34	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/15/22 23:11	CH	EET MID

Client Sample ID: HA-3 (0.5-1)
Date Collected: 08/10/22 12:22
Date Received: 08/10/22 15:47

Lab Sample ID: 880-17971-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 05:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32080	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32136	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 17:55	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/15/22 23:20	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: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,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	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,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	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17971-1
SDG: Eddy Co.,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-17971-1	HA-1 (0-0.5)	Solid	08/10/22 12:00	08/10/22 15:47	0 - 0.5
880-17971-2	HA-1 (0.5-1)	Solid	08/10/22 12:02	08/10/22 15:47	0.5 - 1
880-17971-4	HA-2 (0-0.5)	Solid	08/10/22 12:10	08/10/22 15:47	0 - 0.5
880-17971-5	HA-2 (0.5-1)	Solid	08/10/22 12:12	08/10/22 15:47	0.5 - 1
880-17971-7	HA-3 (0-0.5)	Solid	08/10/22 12:20	08/10/22 15:47	0 - 0.5
880-17971-8	HA-3 (0.5-1)	Solid	08/10/22 12:22	08/10/22 15:47	0.5 - 1

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 365-0900
Tampa FL (813) 620-2000 Tallahassee FL (904) 756-0747 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800

Work Order No: 17971

Project Manager	Kris Williams	Bill To (if different)	Dawn Energy
Company Name	Earth Systems	Company Name	
Address	4115 South CR 1297	Address	
City, State ZIP	Odessa, TX 79765	City, State ZIP	
Phone	(432) 638-7333	Email	

Project Name	Cotton Draw Unit 604	Turn Around	1 hr
Project Number	1264	Routine	☒
Project Location	Edley Co. NM	Rush	☐
Sampler's Name	Marion Jones	Due Date	
PO #			

SAMPLE RECEIPT	Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C)	5.065	Thermometer ID				
Received Initials	Yes	No	Correction Factor			
Cooler Custody Seals	Yes	No	Total Containers			
Sample Custody Seals	Yes	No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
HA-1(0.0-0.5)	S	8/10/12	12:00	0-0.5	1	Chloride (300)	HNO3 HN
HA-1(0.5-1)			12:02	0.5-1		TPH(8015M)	H2SO4 H2
HA-1(1.5-2)			12:04	1.5-2		BTEX (8021B)	HCL HL
HA-2(0.0-0.5)			12:10	0-0.5		HOLD	None NO
HA-2(0.5-1)			12:12	0.5-1			NaOH Na
HA-2(1.5-2)			12:14	1.5-2			MeOH Me
HA-3(0.0-0.5)			12:20	0-0.5			Zn Acetate+ NaOH Zn
HA-3(0.5-1)			12:22	0.5-1			
HA-3(1.5-2)			12:24	1.5-2			



880-17971 Chain of Custody

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

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	TCLP / SPLP 6010		8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 Hg																											

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to 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
Marion Jones	Marion Jones	8/10/12			1547

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-17971-1

SDG Number: Eddy Co.,NM

Login Number: 17971

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-17972-1

Laboratory Sample Delivery Group: Eddy Co., NM
Client Project/Site: Cotton Draw Unit 604

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

A rectangular box containing a handwritten signature in blue ink that reads "Brianna Teel".

Authorized for release by:
8/16/2022 9:04:34 AM

Brianna Teel, Project Manager
(432)704-5440

Brianna.Teel@et.eurofinsus.com

LINKS

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results through



Have a Question?



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www.eurofinsus.com/Env

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-17972-1
SDG: Eddy Co.,NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,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.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Job ID: 880-17972-1

Laboratory: Eurofins Midland

Narrative	
	Job Narrative 880-17972-1

Receipt

The samples were received on 8/10/2022 3:57 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-31966/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-31966 and analytical batch 880-32042 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-1 (0-0.5)

Lab Sample ID: 880-17972-1

Date Collected: 08/10/22 12:33

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 06:07	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 06:07	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 06:07	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/11/22 13:38	08/12/22 06:07	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/11/22 13:38	08/12/22 06:07	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/11/22 13:38	08/12/22 06:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	08/11/22 13:38	08/12/22 06:07	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/11/22 13:38	08/12/22 06:07	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	329		50.0		mg/Kg			08/15/22 09:17	1

Method: 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 *1	50.0		mg/Kg		08/11/22 09:22	08/12/22 18:17	1
Diesel Range Organics (Over C10-C28)	254		50.0		mg/Kg		08/11/22 09:22	08/12/22 18:17	1
Oil Range Organics (Over C28-C36)	75.3		50.0		mg/Kg		08/11/22 09:22	08/12/22 18:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	08/11/22 09:22	08/12/22 18:17	1
o-Terphenyl	123		70 - 130	08/11/22 09:22	08/12/22 18:17	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9090		50.0		mg/Kg			08/15/22 23:38	10

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-17972-2

Date Collected: 08/10/22 12:32

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 06:27	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 06:27	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 06:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/11/22 13:38	08/12/22 06:27	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/11/22 13:38	08/12/22 06:27	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/11/22 13:38	08/12/22 06:27	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-17972-2

Date Collected: 08/10/22 12:32

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	08/11/22 13:38	08/12/22 06:27	1
1,4-Difluorobenzene (Surr)	98		70 - 130	08/11/22 13:38	08/12/22 06:27	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1220		50.0		mg/Kg			08/15/22 09:17	1

Method: 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 *1	50.0		mg/Kg		08/11/22 09:22	08/12/22 18:38	1
Diesel Range Organics (Over C10-C28)	954		50.0		mg/Kg		08/11/22 09:22	08/12/22 18:38	1
Oil Range Organics (Over C28-C36)	266		50.0		mg/Kg		08/11/22 09:22	08/12/22 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	08/11/22 09:22	08/12/22 18:38	1
o-Terphenyl	126		70 - 130	08/11/22 09:22	08/12/22 18:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1210		5.01		mg/Kg			08/15/22 23:48	1

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-17972-3

Date Collected: 08/10/22 12:34

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 06:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 06:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 06:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 06:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 06:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 06:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	08/11/22 13:38	08/12/22 06:48	1
1,4-Difluorobenzene (Surr)	95		70 - 130	08/11/22 13:38	08/12/22 06:48	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			08/12/22 10:15	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-17972-3

Date Collected: 08/10/22 12:34

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	205		49.9		mg/Kg			08/15/22 09:17	1

Method: 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 *1	49.9		mg/Kg		08/11/22 09:22	08/12/22 19:00	1
Diesel Range Organics (Over C10-C28)	125		49.9		mg/Kg		08/11/22 09:22	08/12/22 19:00	1
Oil Range Organics (Over C28-C36)	79.7		49.9		mg/Kg		08/11/22 09:22	08/12/22 19:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				08/11/22 09:22	08/12/22 19:00	1
o-Terphenyl	121		70 - 130				08/11/22 09:22	08/12/22 19:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	738		5.01		mg/Kg			08/16/22 00:16	1

Client Sample ID: P-4 (0-0.5)

Lab Sample ID: 880-17972-4

Date Collected: 08/10/22 12:36

Matrix: Solid

Date Received: 08/10/22 15:57

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/11/22 13:38	08/12/22 07:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				08/11/22 13:38	08/12/22 07:08	1
1,4-Difluorobenzene (Surr)	96		70 - 130				08/11/22 13:38	08/12/22 07:08	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/12/22 10:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2100		49.9		mg/Kg			08/15/22 09:17	1

Method: 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 *1	49.9		mg/Kg		08/11/22 09:22	08/12/22 19:22	1
Diesel Range Organics (Over C10-C28)	1810		49.9		mg/Kg		08/11/22 09:22	08/12/22 19:22	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-4 (0-0.5)
Date Collected: 08/10/22 12:36
Date Received: 08/10/22 15:57
Sample Depth: 0 - 0.5

Lab Sample ID: 880-17972-4
Matrix: Solid

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Oil Range Organics (Over C28-C36)	286		49.9		mg/Kg		08/11/22 09:22	08/12/22 19:22	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	88		70 - 130				08/11/22 09:22	08/12/22 19:22	1	
o-Terphenyl	117		70 - 130				08/11/22 09:22	08/12/22 19:22	1	

Method: 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	6060		50.2		mg/Kg			08/16/22 00:25	10	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-17971-A-1-G MS	Matrix Spike	101	99
880-17971-A-1-H MSD	Matrix Spike Duplicate	99	99
880-17972-1	P-1 (0-0.5)	94	98
880-17972-2	P-2 (0-0.5)	97	98
880-17972-3	P-3 (0-0.5)	95	95
880-17972-4	P-4 (0-0.5)	91	96
LCS 880-32010/1-A	Lab Control Sample	101	98
LCSD 880-32010/2-A	Lab Control Sample Dup	99	100
MB 880-31861/5-A	Method Blank	93	104
MB 880-32010/5-A	Method Blank	93	101
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-17971-A-1-E MS	Matrix Spike	96	110
880-17971-A-1-F MSD	Matrix Spike Duplicate	86	106
880-17972-1	P-1 (0-0.5)	95	123
880-17972-2	P-2 (0-0.5)	99	126
880-17972-3	P-3 (0-0.5)	93	121
880-17972-4	P-4 (0-0.5)	88	117
LCS 880-31966/2-A	Lab Control Sample	116	137 S1+
LCSD 880-31966/3-A	Lab Control Sample Dup	100	123
MB 880-31966/1-A	Method Blank	84	115
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31861/5-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31861

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/09/22 15:47	08/11/22 15:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/09/22 15:47	08/11/22 15:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/09/22 15:47	08/11/22 15:56	1
1,4-Difluorobenzene (Surr)	104		70 - 130	08/09/22 15:47	08/11/22 15:56	1

Lab Sample ID: MB 880-32010/5-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 32010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/11/22 13:38	08/12/22 03:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/11/22 13:38	08/12/22 03:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	08/11/22 13:38	08/12/22 03:35	1
1,4-Difluorobenzene (Surr)	101		70 - 130	08/11/22 13:38	08/12/22 03:35	1

Lab Sample ID: LCS 880-32010/1-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09744		mg/Kg		97	70 - 130
Toluene	0.100	0.1021		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2158		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-32010/2-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1031		mg/Kg		103	70 - 130	6	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

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

Lab Sample ID: LCSD 880-32010/2-A

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD
							Limits		Limit
Toluene	0.100	0.1017		mg/Kg		102	70 - 130	0	35
Ethylbenzene	0.100	0.1052		mg/Kg		105	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	1	35
o-Xylene	0.100	0.1051		mg/Kg		105	70 - 130	2	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-17971-A-1-G MS

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec	
									Limits	
Benzene	<0.00199	U	0.101	0.09791		mg/Kg		97	70 - 130	
Toluene	<0.00199	U	0.101	0.09258		mg/Kg		92	70 - 130	
Ethylbenzene	<0.00199	U	0.101	0.08611		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1721		mg/Kg		85	70 - 130	
o-Xylene	<0.00199	U	0.101	0.08436		mg/Kg		84	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-17971-A-1-H MSD

Matrix: Solid

Analysis Batch: 32007

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 32010

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD
									Limits		Limit
Benzene	<0.00199	U	0.100	0.09717		mg/Kg		97	70 - 130	1	35
Toluene	<0.00199	U	0.100	0.09134		mg/Kg		91	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.08551		mg/Kg		85	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1703		mg/Kg		85	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.08356		mg/Kg		83	70 - 130	1	35

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

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

Lab Sample ID: MB 880-31966/1-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31966

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 10:39	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

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

Lab Sample ID: MB 880-31966/1-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 31966

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		08/11/22 09:22	08/12/22 10:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/11/22 09:22	08/12/22 10:39	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				08/11/22 09:22	08/12/22 10:39	1
o-Terphenyl	115		70 - 130				08/11/22 09:22	08/12/22 10:39	1

Lab Sample ID: LCS 880-31966/2-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1194		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1180		mg/Kg		118	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	116		70 - 130				
o-Terphenyl	137	S1+	70 - 130				

Lab Sample ID: LCSD 880-31966/3-A

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	895.6	*1	mg/Kg		90	70 - 130	29	20
Diesel Range Organics (Over C10-C28)	1000	1034		mg/Kg		103	70 - 130	13	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: 880-17971-A-1-E MS

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	1123		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	150		999	1035		mg/Kg		89	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	96		70 - 130						
o-Terphenyl	110		70 - 130						

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

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

Lab Sample ID: 880-17971-A-1-F MSD

Matrix: Solid

Analysis Batch: 32042

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 31966

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	1108		mg/Kg		109	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	150		999	949.1		mg/Kg		80	70 - 130	9	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	86		70 - 130								
o-Terphenyl	106		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-31947/1-A

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			08/15/22 21:11	1

Lab Sample ID: LCS 880-31947/2-A

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.0		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-31947/3-A

Matrix: Solid

Analysis Batch: 32174

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	251	240.2		mg/Kg		96	90 - 110	2	20

Lab Sample ID: 880-17972-2 MS

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: P-2 (0-0.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1210		250	1429	4	mg/Kg		89	90 - 110

Lab Sample ID: 880-17972-2 MSD

Matrix: Solid

Analysis Batch: 32174

Client Sample ID: P-2 (0-0.5)

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1210		250	1469	4	mg/Kg		105	90 - 110	3	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

GC VOA

Prep Batch: 31861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31861/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 32007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	8021B	32010
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	8021B	32010
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	8021B	32010
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	8021B	32010
MB 880-31861/5-A	Method Blank	Total/NA	Solid	8021B	31861
MB 880-32010/5-A	Method Blank	Total/NA	Solid	8021B	32010
LCS 880-32010/1-A	Lab Control Sample	Total/NA	Solid	8021B	32010
LCSD 880-32010/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	32010
880-17971-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	32010
880-17971-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	32010

Prep Batch: 32010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	5035	
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	5035	
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	5035	
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	5035	
MB 880-32010/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-32010/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-32010/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-17971-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-17971-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 32081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	Total BTEX	
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 31966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	8015NM Prep	
MB 880-31966/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-31966/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-31966/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-17971-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-17971-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 32042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	8015B NM	31966

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

GC Semi VOA (Continued)

Analysis Batch: 32042 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	8015B NM	31966
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	8015B NM	31966
MB 880-31966/1-A	Method Blank	Total/NA	Solid	8015B NM	31966
LCS 880-31966/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	31966
LCSD 880-31966/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	31966
880-17971-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	31966
880-17971-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	31966

Analysis Batch: 32138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Total/NA	Solid	8015 NM	
880-17972-2	P-2 (0-0.5)	Total/NA	Solid	8015 NM	
880-17972-3	P-3 (0-0.5)	Total/NA	Solid	8015 NM	
880-17972-4	P-4 (0-0.5)	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 31947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Soluble	Solid	DI Leach	
880-17972-2	P-2 (0-0.5)	Soluble	Solid	DI Leach	
880-17972-3	P-3 (0-0.5)	Soluble	Solid	DI Leach	
880-17972-4	P-4 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-31947/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-31947/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-31947/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-17972-2 MS	P-2 (0-0.5)	Soluble	Solid	DI Leach	
880-17972-2 MSD	P-2 (0-0.5)	Soluble	Solid	DI Leach	

Analysis Batch: 32174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17972-1	P-1 (0-0.5)	Soluble	Solid	300.0	31947
880-17972-2	P-2 (0-0.5)	Soluble	Solid	300.0	31947
880-17972-3	P-3 (0-0.5)	Soluble	Solid	300.0	31947
880-17972-4	P-4 (0-0.5)	Soluble	Solid	300.0	31947
MB 880-31947/1-A	Method Blank	Soluble	Solid	300.0	31947
LCS 880-31947/2-A	Lab Control Sample	Soluble	Solid	300.0	31947
LCSD 880-31947/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	31947
880-17972-2 MS	P-2 (0-0.5)	Soluble	Solid	300.0	31947
880-17972-2 MSD	P-2 (0-0.5)	Soluble	Solid	300.0	31947

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-1 (0-0.5)

Lab Sample ID: 880-17972-1

Date Collected: 08/10/22 12:33

Matrix: Solid

Date Received: 08/10/22 15:57

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 06:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32081	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32138	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 18:17	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		10			32174	08/15/22 23:38	CH	EET MID

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-17972-2

Date Collected: 08/10/22 12:32

Matrix: Solid

Date Received: 08/10/22 15:57

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 06:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32081	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32138	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 18:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/15/22 23:48	CH	EET MID

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-17972-3

Date Collected: 08/10/22 12:34

Matrix: Solid

Date Received: 08/10/22 15:57

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 06:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32081	08/12/22 10:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			32138	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 19:00	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		1			32174	08/16/22 00:16	CH	EET MID

Client Sample ID: P-4 (0-0.5)

Lab Sample ID: 880-17972-4

Date Collected: 08/10/22 12:36

Matrix: Solid

Date Received: 08/10/22 15:57

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	32010	08/11/22 13:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	32007	08/12/22 07:08	SM	EET MID
Total/NA	Analysis	Total BTEX		1			32081	08/12/22 10:15	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Client Sample ID: P-4 (0-0.5)
Date Collected: 08/10/22 12:36
Date Received: 08/10/22 15:57

Lab Sample ID: 880-17972-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			32138	08/15/22 09:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	31966	08/11/22 09:22	DM	EET MID
Total/NA	Analysis	8015B NM		1			32042	08/12/22 19:22	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	31947	08/11/22 08:43	AJ	EET MID
Soluble	Analysis	300.0		10			32174	08/16/22 00:25	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: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,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	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,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	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-17972-1
SDG: Eddy Co.,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-17972-1	P-1 (0-0.5)	Solid	08/10/22 12:33	08/10/22 15:57	0 - 0.5
880-17972-2	P-2 (0-0.5)	Solid	08/10/22 12:32	08/10/22 15:57	0 - 0.5
880-17972-3	P-3 (0-0.5)	Solid	08/10/22 12:34	08/10/22 15:57	0 - 0.5
880-17972-4	P-4 (0-0.5)	Solid	08/10/22 12:36	08/10/22 15:57	0 - 0.5

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 302-0300 San Antonio, TX (210) 509-3334
Midland TX (432) 704-5440, El Paso, TX (915) 985-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (505) 868-3149 Phoenix, AZ (480) 355-0200
Tampa FL (813) 620-2000 Tallahassee FL (850) 756-0177 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800

Atlanta GA (770) 449-8800

Work Order No:

1797

www.xenco.com Page 1 of 1

Project Manager	Kris Williams	Bill to (if different)	<i>Danora Energy</i>
Company Name	Earth Systems	Company Name	
Address	4115 South CR 1297	Address	
City, State ZIP	Odessa, TX 79765	City, State ZIP	
Phone	(432) 638-7333	Email	

Work Order Comments									
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund ☐									
State of Project:									
Reporting Level ☐ Level ☐ PST/UST ☐ TRF ☐ Level ☐									
Deliverables EDD ☐ ADAPT ☐ Other: _____									

Project Name:	Cotton Dress Unit 604			Tum Around			
Project Number:	1264		Routine	☒			
Project Location	Eddy Co., NM			Rush ☐			
Sampler's Name	Mason Jones			Due Date			
PO #:							
SAMPLE RECEIPT		Temp Blank	Yes	No	Wet Ice	Yes	No
Temperature (°C)		5.4/5.5			Thermometer ID		
Received Intact:		(Yes) No					
Cooler Custody Seals.	Yes	No	44		Correction Factor		
Sample Custody Seals.	Yes	No	64		Total Containers		

[illegible][illegible]

000-11912 Chain of Custody



Total 200.7 / 6010		200.8 / 6020:	
Circle Method(s) and Metal(s) to be analyzed			
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
TCLP / SPLP 6010	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, 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>Maxim Gorn</i>	<i>John</i>	2/16/22			
		1557			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-17972-1

SDG Number: Eddy Co.,NM

Login Number: 17972

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-18728-1

Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Cotton Draw Unit 604

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

A rectangular box containing a handwritten signature in blue ink that reads "Brianna Teel".

Authorized for release by:
9/10/2022 10:29:14 AM

Brianna Teel, Project Manager
(432)704-5440

Brianna.Teel@et.eurofinsus.com

LINKS

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results through



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www.eurofinsus.com/Env

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-18728-1
SDG: Eddy County

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Job ID: 880-18728-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-18728-1
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Receipt

The samples were received on 8/31/2022 12:19 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.7°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34099 and analytical batch 880-34054 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-1 (0-0.5)

Lab Sample ID: 880-18728-1

Date Collected: 08/30/22 12:00

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 07:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 07:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 07:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/09/22 12:09	09/10/22 07:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 07:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/09/22 12:09	09/10/22 07:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	09/09/22 12:09	09/10/22 07:29	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/09/22 12:09	09/10/22 07:29	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:41	1

Method: 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		09/01/22 15:50	09/03/22 01:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/03/22 01:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/03/22 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130	09/01/22 15:50	09/03/22 01:19	1
o-Terphenyl	113		70 - 130	09/01/22 15:50	09/03/22 01:19	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	807		4.97		mg/Kg			09/08/22 22:52	1

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-18728-2

Date Collected: 08/30/22 14:00

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:09	09/10/22 07:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:09	09/10/22 07:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:09	09/10/22 07:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/09/22 12:09	09/10/22 07:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/09/22 12:09	09/10/22 07:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/09/22 12:09	09/10/22 07:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	09/09/22 12:09	09/10/22 07:49	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-18728-2

Date Collected: 08/30/22 14:00

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	119		70 - 130	09/09/22 12:09	09/10/22 07:49	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:41	1

Method: 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		09/01/22 15:50	09/03/22 01:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/01/22 15:50	09/03/22 01:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/01/22 15:50	09/03/22 01:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				09/01/22 15:50	09/03/22 01:41	1
o-Terphenyl	97		70 - 130				09/01/22 15:50	09/03/22 01:41	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	528		4.99		mg/Kg			09/08/22 22:57	1

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-18728-3

Date Collected: 08/30/22 14:15

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 08:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 08:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 08:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/09/22 12:09	09/10/22 08:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 08:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/09/22 12:09	09/10/22 08:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/09/22 12:09	09/10/22 08:10	1
1,4-Difluorobenzene (Surr)	119		70 - 130	09/09/22 12:09	09/10/22 08:10	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:41	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-18728-3

Date Collected: 08/30/22 14:15

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

Method: 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		09/01/22 15:50	09/03/22 02:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/01/22 15:50	09/03/22 02:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/01/22 15:50	09/03/22 02:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130				09/01/22 15:50	09/03/22 02:03	1
o-Terphenyl	114		70 - 130				09/01/22 15:50	09/03/22 02:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		4.99		mg/Kg			09/08/22 23:11	1

Client Sample ID: P-4 (0-0.5)

Lab Sample ID: 880-18728-4

Date Collected: 08/30/22 14:30

Matrix: Solid

Date Received: 08/31/22 12:19

Sample Depth: 0 - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/09/22 12:09	09/10/22 08:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130				09/09/22 12:09	09/10/22 08:30	1
1,4-Difluorobenzene (Surr)	112		70 - 130				09/09/22 12:09	09/10/22 08:30	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	147		50.0		mg/Kg			09/06/22 10:41	1

Method: 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		09/01/22 15:50	09/03/22 02:24	1
Diesel Range Organics (Over C10-C28)	147		50.0		mg/Kg		09/01/22 15:50	09/03/22 02:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/03/22 02:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130				09/01/22 15:50	09/03/22 02:24	1
o-Terphenyl	109		70 - 130				09/01/22 15:50	09/03/22 02:24	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-4 (0-0.5)
Date Collected: 08/30/22 14:30
Date Received: 08/31/22 12:19
Sample Depth: 0 - 0.5

Lab Sample ID: 880-18728-4
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1380		25.1		mg/Kg			09/08/22 23:16	5

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

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-18720-A-1-C MS	Matrix Spike	155 S1+	112
880-18720-A-1-D MSD	Matrix Spike Duplicate	35 S1-	127
880-18728-1	P-1 (0-0.5)	78	114
880-18728-2	P-2 (0-0.5)	78	119
880-18728-3	P-3 (0-0.5)	73	119
880-18728-4	P-4 (0-0.5)	73	112
LCS 880-34099/1-A	Lab Control Sample	80	105
LCSD 880-34099/2-A	Lab Control Sample Dup	83	102
MB 880-33941/5-A	Method Blank	81	115
MB 880-34099/5-A	Method Blank	84	117
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-18728-1	P-1 (0-0.5)	128	113
880-18728-2	P-2 (0-0.5)	109	97
880-18728-3	P-3 (0-0.5)	127	114
880-18728-4	P-4 (0-0.5)	126	109
890-2861-A-1-C MS	Matrix Spike	119	92
890-2861-A-1-D MSD	Matrix Spike Duplicate	121	97
LCS 880-33565/2-A	Lab Control Sample	152 S1+	123
LCSD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130
MB 880-33565/1-A	Method Blank	124	117
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33941/5-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/22 15:57	09/09/22 12:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	09/07/22 15:57	09/09/22 12:49	1
1,4-Difluorobenzene (Surr)	115		70 - 130	09/07/22 15:57	09/09/22 12:49	1

Lab Sample ID: MB 880-34099/5-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 00:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 00:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 00:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/09/22 12:09	09/10/22 00:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/09/22 12:09	09/10/22 00:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/09/22 12:09	09/10/22 00:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	09/09/22 12:09	09/10/22 00:25	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/09/22 12:09	09/10/22 00:25	1

Lab Sample ID: LCS 880-34099/1-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1202		mg/Kg		120	70 - 130
Toluene	0.100	0.09651		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09610		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	0.200	0.1685		mg/Kg		84	70 - 130
o-Xylene	0.100	0.08489		mg/Kg		85	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-34099/2-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1062		mg/Kg		106	70 - 130	12	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

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

Lab Sample ID: LCSD 880-34099/2-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1017		mg/Kg		102	70 - 130	5	35
Ethylbenzene	0.100	0.09364		mg/Kg		94	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1702		mg/Kg		85	70 - 130	1	35
o-Xylene	0.100	0.08770		mg/Kg		88	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-18720-A-1-C MS

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1	0.100	0.01180	F1	mg/Kg		12	70 - 130
Toluene	<0.00198	U F1	0.100	0.04278	F1	mg/Kg		43	70 - 130
Ethylbenzene	<0.00198	U F1	0.100	0.1762	F1	mg/Kg		175	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.2310		mg/Kg		115	70 - 130
o-Xylene	<0.00198	U F1	0.100	0.05941	F1	mg/Kg		59	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	155	S1+	70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-18720-A-1-D MSD

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34099

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	35	S1-	70 - 130
1,4-Difluorobenzene (Surr)	127		70 - 130

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

Lab Sample ID: MB 880-33565/1-A

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33565

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/02/22 19:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/02/22 19:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/01/22 15:50	09/02/22 19:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	09/01/22 15:50	09/02/22 19:12	1
o-Terphenyl	117		70 - 130	09/01/22 15:50	09/02/22 19:12	1

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

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

Lab Sample ID: LCS 880-33565/2-A

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33565

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	846.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	1000	876.5		mg/Kg		88	70 - 130
		LCS	LCS				
		%Recovery	Qualifier				
Surrogate			Limits				
1-Chlorooctane		152	S1+				
o-Terphenyl		123					

Lab Sample ID: LCSD 880-33565/3-A

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33565

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	858.2		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	909.9		mg/Kg		91	70 - 130	4	20
		LCSD	LCSD						
		%Recovery	Qualifier						
Surrogate			Limits						
1-Chlorooctane		156	S1+						
o-Terphenyl		130							

Lab Sample ID: 890-2861-A-1-C MS

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33565

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	989.5		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1046		mg/Kg		105	70 - 130
		MS	MS						
		%Recovery	Qualifier						
Surrogate			Limits						
1-Chlorooctane		119							
o-Terphenyl		92							

Lab Sample ID: 890-2861-A-1-D MSD

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33565

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1037		mg/Kg		104	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1069		mg/Kg		107	70 - 130	2	20
		MSD	MSD								
		%Recovery	Qualifier								
Surrogate			Limits								
1-Chlorooctane		121									

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

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

Lab Sample ID: 890-2861-A-1-D MSD

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33565

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33562/1-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00		mg/Kg			09/08/22 21:14	1	

Lab Sample ID: LCS 880-33562/2-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	252.9		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-33562/3-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	252.9		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-2871-A-5-B MS

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	15.2		250	280.2		mg/Kg		106	90 - 110		

Lab Sample ID: 890-2871-A-5-C MSD

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	15.2		250	279.8		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

GC VOA

Prep Batch: 33941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-33941/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 34054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	8021B	34099
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	8021B	34099
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	8021B	34099
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	8021B	34099
MB 880-33941/5-A	Method Blank	Total/NA	Solid	8021B	33941
MB 880-34099/5-A	Method Blank	Total/NA	Solid	8021B	34099
LCS 880-34099/1-A	Lab Control Sample	Total/NA	Solid	8021B	34099
LCSD 880-34099/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34099
880-18720-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34099
880-18720-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34099

Prep Batch: 34099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	5035	
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	5035	
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	5035	
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	5035	
MB 880-34099/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34099/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34099/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18720-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-18720-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	Total BTEX	
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	Total BTEX	
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	Total BTEX	
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	8015NM Prep	
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	8015NM Prep	
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	8015B NM	33565

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 33582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	8015B NM	33565
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	8015B NM	33565
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	8015B NM	33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Total/NA	Solid	8015 NM	
880-18728-2	P-2 (0-0.5)	Total/NA	Solid	8015 NM	
880-18728-3	P-3 (0-0.5)	Total/NA	Solid	8015 NM	
880-18728-4	P-4 (0-0.5)	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Soluble	Solid	DI Leach	
880-18728-2	P-2 (0-0.5)	Soluble	Solid	DI Leach	
880-18728-3	P-3 (0-0.5)	Soluble	Solid	DI Leach	
880-18728-4	P-4 (0-0.5)	Soluble	Solid	DI Leach	
MB 880-33562/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2871-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2871-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18728-1	P-1 (0-0.5)	Soluble	Solid	300.0	33562
880-18728-2	P-2 (0-0.5)	Soluble	Solid	300.0	33562
880-18728-3	P-3 (0-0.5)	Soluble	Solid	300.0	33562
880-18728-4	P-4 (0-0.5)	Soluble	Solid	300.0	33562
MB 880-33562/1-A	Method Blank	Soluble	Solid	300.0	33562
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	300.0	33562
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33562
890-2871-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	33562
890-2871-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33562

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-1 (0-0.5)

Lab Sample ID: 880-18728-1

Date Collected: 08/30/22 12:00

Matrix: Solid

Date Received: 08/31/22 12:19

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	34099	09/09/22 12:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/10/22 07:29	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34147	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33835	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/03/22 01:19	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 22:52	CH	EET MID

Client Sample ID: P-2 (0-0.5)

Lab Sample ID: 880-18728-2

Date Collected: 08/30/22 14:00

Matrix: Solid

Date Received: 08/31/22 12:19

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	34099	09/09/22 12:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/10/22 07:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34147	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33835	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/03/22 01:41	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 22:57	CH	EET MID

Client Sample ID: P-3 (0-0.5)

Lab Sample ID: 880-18728-3

Date Collected: 08/30/22 14:15

Matrix: Solid

Date Received: 08/31/22 12:19

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	34099	09/09/22 12:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/10/22 08:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34147	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33835	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/03/22 02:03	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 23:11	CH	EET MID

Client Sample ID: P-4 (0-0.5)

Lab Sample ID: 880-18728-4

Date Collected: 08/30/22 14:30

Matrix: Solid

Date Received: 08/31/22 12:19

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	34099	09/09/22 12:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/10/22 08:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34147	09/10/22 11:01	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Client Sample ID: P-4 (0-0.5)
Date Collected: 08/30/22 14:30
Date Received: 08/31/22 12:19

Lab Sample ID: 880-18728-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			33835	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/03/22 02:24	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33926	09/08/22 23:16	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: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

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

Protocol References:

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18728-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18728-1	P-1 (0-0.5)	Solid	08/30/22 12:00	08/31/22 12:19	0 - 0.5
880-18728-2	P-2 (0-0.5)	Solid	08/30/22 14:00	08/31/22 12:19	0 - 0.5
880-18728-3	P-3 (0-0.5)	Solid	08/30/22 14:15	08/31/22 12:19	0 - 0.5
880-18728-4	P-4 (0-0.5)	Solid	08/30/22 14:30	08/31/22 12:19	0 - 0.5

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



Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 302-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (505) 988-3189 Phoenix, AZ (480) 355-0200
Tampa FL (813) 820-2000 Tallahassee, FL (850) 756-0747 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800

Work Order No:

18729

Project Manager	Kris Williams	Bill to: (if different)	Daron Energy
Company Name:	Earth Systems	Company Name	Dale Woodruff
Address	4115 South CR 1297	Address	
City, State ZIP	Odessa, TX 79765	City, State ZIP	
Phone	(432) 636-7333	Email	

Work Order Comments

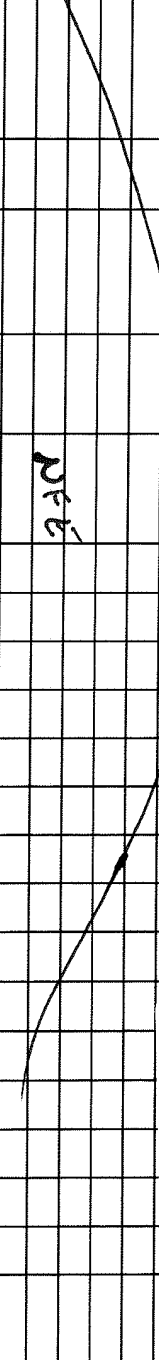
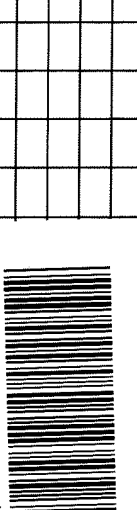
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRCD ☐ Superfund ☐

State of Project:

Reporting Level ☐ Level ☐ PST/UST ☐ TRF ☐ Level ☐

Deliverables EDD ☐ ADAPT ☐ Other:

Project Name:	Cotton Draw Unit 604		Turn Around																							
Project Number:	1264		Routine	☒																						
Project Location	Eddy County		Rush	☐																						
Sampler's Name:	Wesley Jones		Due Date																							
PO #:																										
SAMPLE RECEIPT				Temp Blank	Yes	No	Wet Ice	Yes	No																	
Temperature (°C)	3.5/3.7		Thermometer ID	48																						
Received In tact:	Yes		No																							
Cooler Custody Seals	Yes		No	N/A																						
Sampler Custody Seals:	Yes	No	N/A	Total Containers:	400																					
Number of Containers/Preservative																										
Hydride (300)																										
A (3015 m)																										
EX (30213)																										
ANALYSIS REQUEST																										
<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																										
Preservative Codes																										
<table border="1"> <tr> <td>HNO3</td> <td>HN</td> </tr> <tr> <td>H2SO4</td> <td>H2</td> </tr> <tr> <td>HCL</td> <td>HL</td> </tr> <tr> <td>None</td> <td>NO</td> </tr> <tr> <td>NaOH</td> <td>Na</td> </tr> <tr> <td>MeOH</td> <td>Me</td> </tr> <tr> <td>Zn Acetate+</td> <td>NaOH Zn</td> </tr> </table>													HNO3	HN	H2SO4	H2	HCL	HL	None	NO	NaOH	Na	MeOH	Me	Zn Acetate+	NaOH Zn
HNO3	HN																									
H2SO4	H2																									
HCL	HL																									
None	NO																									
NaOH	Na																									
MeOH	Me																									
Zn Acetate+	NaOH Zn																									
TAT starts the day received by the lab if received by 4 30pm																										

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number Code	Ch	TP	BT	Sample Comments	
P-1 (0-0.5)	S	8/20/22	12:00	0-0.5	2	X	X	X		
P-2 (0-0.5)			14:00			X	X	X		
P-3 (0-0.5)			14:15			X	X	X		
P-4 (0-0.5)			14:30			X	X	X		
										
										

880-18728 Chain of Custody



Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010	200.8 / 6020:
8RCRA 13PPM Texas '11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	14331 / 245.1 / 7470 / 7471

notice, signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenico. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenico 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 Xenico. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenico, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 <i>Warren Jones</i>	<i>[Signature]</i>	2/6/22	2		
3			4		
5			6		

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-18728-1

SDG Number: Eddy County

Login Number: 18728

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-18729-1

Laboratory Sample Delivery Group: Eddy County
Client Project/Site: Cotton Draw Unit 604

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

Authorized for release by:
9/9/2022 10:08:01 AM

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

LINKS

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results through



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www.eurofinsus.com/Env

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-18729-1
SDG: Eddy County

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Job ID: 880-18729-1

Laboratory: Eurofins Midland

Narrative	Job Narrative 880-18729-1
-----------	------------------------------

Receipt

The samples were received on 8/31/2022 12:19 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.7°C

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: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Client Sample ID: HA-4 (1.5-2)
Date Collected: 08/31/22 11:40
Date Received: 08/31/22 12:19
Sample Depth: 1.5 - 2

Lab Sample ID: 880-18729-1
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	748		5.01		mg/Kg			09/08/22 23:21	1

Client Sample ID: HA-4 (2.5-3)
Date Collected: 08/31/22 11:42
Date Received: 08/31/22 12:19
Sample Depth: 2.5 - 3

Lab Sample ID: 880-18729-2
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.4		5.01		mg/Kg			09/08/22 23:26	1

Client Sample ID: HA-4 (3.5-4)
Date Collected: 08/31/22 11:44
Date Received: 08/31/22 12:19
Sample Depth: 3.5 - 4

Lab Sample ID: 880-18729-3
Matrix: Solid

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.0		4.98		mg/Kg			09/08/22 23:30	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33562/1-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/08/22 21:14	1

Lab Sample ID: LCS 880-33562/2-A

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.9		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-33562/3-A

Matrix: Solid

Analysis Batch: 33926

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	0	20

Lab Sample ID: 890-2871-A-5-B MS

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	15.2		250	280.2		mg/Kg		106	90 - 110

Lab Sample ID: 890-2871-A-5-C MSD

Matrix: Solid

Analysis Batch: 33926

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	15.2		250	279.8		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

HPLC/IC

Leach Batch: 33562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18729-1	HA-4 (1.5-2)	Soluble	Solid	DI Leach	
880-18729-2	HA-4 (2.5-3)	Soluble	Solid	DI Leach	
880-18729-3	HA-4 (3.5-4)	Soluble	Solid	DI Leach	
MB 880-33562/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2871-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2871-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18729-1	HA-4 (1.5-2)	Soluble	Solid	300.0	33562
880-18729-2	HA-4 (2.5-3)	Soluble	Solid	300.0	33562
880-18729-3	HA-4 (3.5-4)	Soluble	Solid	300.0	33562
MB 880-33562/1-A	Method Blank	Soluble	Solid	300.0	33562
LCS 880-33562/2-A	Lab Control Sample	Soluble	Solid	300.0	33562
LCSD 880-33562/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33562
890-2871-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	33562
890-2871-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33562

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Client Sample ID: HA-4 (1.5-2)
Date Collected: 08/31/22 11:40
Date Received: 08/31/22 12:19

Lab Sample ID: 880-18729-1
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			4.99 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 23:21	CH	EET MID

Client Sample ID: HA-4 (2.5-3)
Date Collected: 08/31/22 11:42
Date Received: 08/31/22 12:19

Lab Sample ID: 880-18729-2
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			4.99 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 23:26	CH	EET MID

Client Sample ID: HA-4 (3.5-4)
Date Collected: 08/31/22 11:44
Date Received: 08/31/22 12:19

Lab Sample ID: 880-18729-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	33562	09/01/22 15:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33926	09/08/22 23:30	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: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

- 1
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Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

Laboratory References:

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

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Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18729-1
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18729-1	HA-4 (1.5-2)	Solid	08/31/22 11:40	08/31/22 12:19	1.5 - 2
880-18729-2	HA-4 (2.5-3)	Solid	08/31/22 11:42	08/31/22 12:19	2.5 - 3
880-18729-3	HA-4 (3.5-4)	Solid	08/31/22 11:44	08/31/22 12:19	3.5 - 4

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902-0300 San Antonio TX (210) 509-3334
Midland TX (432) 704-5440 El Paso TX (915) 585-3443 Lubbock TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199 Phoenix AZ (480) 355-0900
Tampa FL (813) 620-2000 Tallahassee FL (904) 756-0747 Delray Beach FL (561) 689-6701
Atlanta GA (770) 449-8800

Work Order No:

18729

www.xenco.com Page 1 of 1

Project Manager	Kris Williams	Bill to: (if different)	Dewen Energy
Company Name	Earth Systems	Company Name	Dewen Energy
Address	4115 South CR 1297	Address	Dewen Energy
City, State ZIP	Odessa, TX 79765	City, State ZIP	
Phone	(432) 638-7333	Email	

Work Order Comments	
Program: UST/ST ☐ PRF ☐ Brownfield ☐ RR ☐ Superfund ☐	
State of Project	
Reporting Level ☐ Level ☐ PST/US ☐ TRF ☐ Level ☐	Deliverables EDD ☐ ADAPT ☐ Other ☐

Project Name:	Cotton Draw Unit 604	Turn Around	
Project Number:	1264	Routine	☒
Project Location	Edley County	Rush	☐
Sampler's Name	Mason Towne	Due Date	
PO #:			
SAMPLE RECEIPT	Temp Blank: Yes ☒ No ☐	Wet Ice: ☒ No ☐	
Temperature (°C)	3.5/3.7	Temperature ID	126
Received intact:	Yes ☒ No ☐	Correction Factor	10.0
Cooler Custody Seals	Yes ☒ No ☐	Total Containers	
Sample Custody Seals:	Yes ☒ No ☐		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers/Preservative Code	ANALYSIS REQUEST	Preservative Codes
HA-4 (1.5-2)	S	8/6/22	11:40	1.5-2	1	X	HNO3 HN
HA-4 (2.5-3)	J		11:42	2.5-3	1	X	H2SO4 H2
HA-4 (3.5-4)	J		11:44	3.5-4	1	X	HCL HL
							None NO
							NaOH Na
							MeOH Me
							Zn Acetate+ NaOH Zn
							TAI starts the day received by the lab if received by 4 30pm



880-18729 Chain of Custody

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 246.1 / 7470 / 7471 Hg

Notes: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to 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
Mason Towne	[Signature]	8/8/22			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-18729-1

SDG Number: Eddy County

Login Number: 18729

List Number: 1

Creator: Teel, Brianna

List Source: Eurofins Midland

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



Environment Testing America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-18789-1
Laboratory Sample Delivery Group: 1264
Client Project/Site: Cotton Draw Unit 604

For:
Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

Authorized for release by:
9/10/2022 10:29:26 AM

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

LINKS

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results through



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www.eurofinsus.com/Env

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-18789-1
SDG: 1264

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Job ID: 880-18789-1

Laboratory: Eurofins Midland

Narrative

**Job Narrative
880-18789-1**

Receipt

The samples were received on 9/2/2022 10:16 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 5.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33941 and analytical batch 880-34054 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33588/2-A) and (LCSD 880-33588/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: HA-14 (880-18789-46). 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-10 (880-18789-26) and HA-11 (880-18789-31). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-33678 and analytical batch 880-33678 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33623/2-A) and (LCSD 880-33623/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33623 and analytical batch 880-33680 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33622 and analytical batch 880-33965 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-5

Lab Sample ID: 880-18789-1

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 13:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 13:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 13:18	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403		mg/Kg		09/07/22 15:57	09/09/22 13:18	1
o-Xylene	<0.00202	U F1	0.00202		mg/Kg		09/07/22 15:57	09/09/22 13:18	1
Xylenes, Total	<0.00403	U F1	0.00403		mg/Kg		09/07/22 15:57	09/09/22 13:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	09/07/22 15:57	09/09/22 13:18	1
1,4-Difluorobenzene (Surr)	108		70 - 130	09/07/22 15:57	09/09/22 13:18	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 02:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 02:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 02:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130	09/02/22 11:00	09/04/22 02:08	1
o-Terphenyl	119		70 - 130	09/02/22 11:00	09/04/22 02:08	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	132		5.02		mg/Kg			09/09/22 06:56	1

Client Sample ID: HA-5

Lab Sample ID: 880-18789-2

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.8		4.97		mg/Kg			09/09/22 07:24	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-6

Lab Sample ID: 880-18789-6

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 13:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				09/07/22 15:57	09/09/22 13:39	1
1,4-Difluorobenzene (Surr)	111		70 - 130				09/07/22 15:57	09/09/22 13:39	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	50.0		mg/Kg		09/02/22 11:00	09/04/22 02:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/04/22 02:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/04/22 02:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				09/02/22 11:00	09/04/22 02:29	1
o-Terphenyl	117		70 - 130				09/02/22 11:00	09/04/22 02:29	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	211		5.00		mg/Kg			09/09/22 07:33	1

Client Sample ID: HA-6

Lab Sample ID: 880-18789-7

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.0		5.02		mg/Kg			09/09/22 07:42	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-7

Lab Sample ID: 880-18789-11

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/07/22 15:57	09/09/22 13:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/07/22 15:57	09/09/22 13:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/07/22 15:57	09/09/22 13:59	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/07/22 15:57	09/09/22 13:59	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/07/22 15:57	09/09/22 13:59	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/07/22 15:57	09/09/22 13:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/07/22 15:57	09/09/22 13:59	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/07/22 15:57	09/09/22 13:59	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.1		49.9		mg/Kg			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 02:50	1
Diesel Range Organics (Over C10-C28)	51.1		49.9		mg/Kg		09/02/22 11:00	09/04/22 02:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	09/02/22 11:00	09/04/22 02:50	1
o-Terphenyl	120		70 - 130	09/02/22 11:00	09/04/22 02:50	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	487		4.95		mg/Kg			09/09/22 07:52	1

Client Sample ID: HA-7

Lab Sample ID: 880-18789-12

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.9		4.97		mg/Kg			09/09/22 08:19	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-8

Lab Sample ID: 880-18789-16

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 14:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 14:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 14:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/07/22 15:57	09/09/22 14:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 14:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/07/22 15:57	09/09/22 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	09/07/22 15:57	09/09/22 14:19	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/07/22 15:57	09/09/22 14:19	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	09/02/22 11:00	09/04/22 03:11	1
o-Terphenyl	116		70 - 130	09/02/22 11:00	09/04/22 03:11	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3420		24.9		mg/Kg			09/09/22 08:29	5

Client Sample ID: HA-8

Lab Sample ID: 880-18789-17

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	435		4.98		mg/Kg			09/09/22 08:38	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-9

Lab Sample ID: 880-18789-21

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 14:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 14:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 14:40	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/07/22 15:57	09/09/22 14:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 14:40	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/07/22 15:57	09/09/22 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	09/07/22 15:57	09/09/22 14:40	1
1,4-Difluorobenzene (Surr)	119		70 - 130	09/07/22 15:57	09/09/22 14:40	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	50.0		mg/Kg		09/02/22 11:00	09/04/22 03:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/04/22 03:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/04/22 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	09/02/22 11:00	09/04/22 03:32	1
o-Terphenyl	115		70 - 130	09/02/22 11:00	09/04/22 03:32	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	753		4.98		mg/Kg			09/09/22 08:47	1

Client Sample ID: HA-9

Lab Sample ID: 880-18789-22

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.2		5.00		mg/Kg			09/09/22 08:56	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-10

Lab Sample ID: 880-18789-26

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 15:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 15:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 15:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 15:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 15:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	09/07/22 15:57	09/09/22 15:00	1
1,4-Difluorobenzene (Surr)	123		70 - 130	09/07/22 15:57	09/09/22 15:00	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 03:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130	09/02/22 11:00	09/04/22 03:54	1
o-Terphenyl	129		70 - 130	09/02/22 11:00	09/04/22 03:54	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	506		5.02		mg/Kg			09/09/22 09:05	1

Client Sample ID: HA-10

Lab Sample ID: 880-18789-27

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.8		5.01		mg/Kg			09/09/22 09:33	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-11

Lab Sample ID: 880-18789-31

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 15:21	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 15:21	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 15:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 15:21	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 15:21	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/07/22 15:57	09/09/22 15:21	1
1,4-Difluorobenzene (Surr)	104		70 - 130	09/07/22 15:57	09/09/22 15:21	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	179		49.9		mg/Kg			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 04:15	1
Diesel Range Organics (Over C10-C28)	179		49.9		mg/Kg		09/02/22 11:00	09/04/22 04:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 04:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130	09/02/22 11:00	09/04/22 04:15	1
o-Terphenyl	128		70 - 130	09/02/22 11:00	09/04/22 04:15	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8070		101		mg/Kg			09/09/22 17:32	20

Client Sample ID: HA-11

Lab Sample ID: 880-18789-32

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		4.98		mg/Kg			09/09/22 10:10	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-12

Lab Sample ID: 880-18789-36

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 15:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 15:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 15:41	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/07/22 15:57	09/09/22 15:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 15:41	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/07/22 15:57	09/09/22 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	09/07/22 15:57	09/09/22 15:41	1
1,4-Difluorobenzene (Surr)	106		70 - 130	09/07/22 15:57	09/09/22 15:41	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1410		49.8		mg/Kg			09/06/22 10:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		09/02/22 11:00	09/04/22 04:36	1
Diesel Range Organics (Over C10-C28)	1410		49.8		mg/Kg		09/02/22 11:00	09/04/22 04:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/22 11:00	09/04/22 04:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130	09/02/22 11:00	09/04/22 04:36	1
o-Terphenyl	103		70 - 130	09/02/22 11:00	09/04/22 04:36	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9760		49.5		mg/Kg			09/09/22 10:19	10

Client Sample ID: HA-12

Lab Sample ID: 880-18789-37

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		4.95		mg/Kg			09/09/22 10:28	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-13

Lab Sample ID: 880-18789-41

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 16:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 16:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 16:01	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/07/22 15:57	09/09/22 16:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 16:01	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/07/22 15:57	09/09/22 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	09/07/22 15:57	09/09/22 16:01	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/07/22 15:57	09/09/22 16:01	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	69.7		50.0		mg/Kg			09/06/22 10:47	1

Method: 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 *1	50.0		mg/Kg		09/02/22 11:00	09/04/22 04:57	1
Diesel Range Organics (Over C10-C28)	69.7		50.0		mg/Kg		09/02/22 11:00	09/04/22 04:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/04/22 04:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	09/02/22 11:00	09/04/22 04:57	1
o-Terphenyl	111		70 - 130	09/02/22 11:00	09/04/22 04:57	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4170		25.0		mg/Kg			09/09/22 10:38	5

Client Sample ID: HA-13

Lab Sample ID: 880-18789-42

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	271		5.01		mg/Kg			09/09/22 10:47	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-14

Lab Sample ID: 880-18789-46

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 16:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 16:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 16:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 16:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 16:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 16:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	09/07/22 15:57	09/09/22 16:22	1
1,4-Difluorobenzene (Surr)	131	S1+	70 - 130	09/07/22 15:57	09/09/22 16:22	1

Method: 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			09/10/22 11:01	1

Method: 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			09/06/22 10:47	1

Method: 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 *1	49.9		mg/Kg		09/02/22 11:00	09/04/22 05:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 05:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/04/22 05:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	143	S1+	70 - 130	09/02/22 11:00	09/04/22 05:18	1
o-Terphenyl	133	S1+	70 - 130	09/02/22 11:00	09/04/22 05:18	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3950		25.2		mg/Kg			09/09/22 10:56	5

Client Sample ID: HA-14

Lab Sample ID: 880-18789-47

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.0		5.03		mg/Kg			09/09/22 11:05	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-15

Lab Sample ID: 880-18789-51

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 18:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	09/07/22 15:57	09/09/22 18:12	1
1,4-Difluorobenzene (Surr)	105		70 - 130	09/07/22 15:57	09/09/22 18:12	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	144		50.0		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 15:13	1
Diesel Range Organics (Over C10-C28)	144		50.0		mg/Kg		09/02/22 11:00	09/03/22 15:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/02/22 11:00	09/03/22 15:13	1
o-Terphenyl	106		70 - 130	09/02/22 11:00	09/03/22 15:13	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2070	F1	25.0		mg/Kg			09/08/22 12:45	5

Client Sample ID: HA-15

Lab Sample ID: 880-18789-52

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.0		5.01		mg/Kg			09/08/22 13:13	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-16

Lab Sample ID: 880-18789-56

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 18:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 18:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 18:33	1
m-Xylene & p-Xylene	0.0106		0.00402		mg/Kg		09/07/22 15:57	09/09/22 18:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/07/22 15:57	09/09/22 18:33	1
Xylenes, Total	0.0106		0.00402		mg/Kg		09/07/22 15:57	09/09/22 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	09/07/22 15:57	09/09/22 18:33	1
1,4-Difluorobenzene (Surr)	149	S1+	70 - 130	09/07/22 15:57	09/09/22 18:33	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0106		0.00402		mg/Kg			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	165		50.0		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 15:34	1
Diesel Range Organics (Over C10-C28)	165		50.0		mg/Kg		09/02/22 11:00	09/03/22 15:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 15:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130				09/02/22 11:00	09/03/22 15:34	1
o-Terphenyl	111		70 - 130				09/02/22 11:00	09/03/22 15:34	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7190		49.7		mg/Kg			09/08/22 13:22	10

Client Sample ID: HA-16

Lab Sample ID: 880-18789-57

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.02		mg/Kg			09/08/22 13:31	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-17

Lab Sample ID: 880-18789-61

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 18:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 18:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	09/07/22 15:57	09/09/22 18:53	1
1,4-Difluorobenzene (Surr)	109		70 - 130	09/07/22 15:57	09/09/22 18:53	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	812		49.9		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 15:56	1
Diesel Range Organics (Over C10-C28)	812		49.9		mg/Kg		09/02/22 11:00	09/03/22 15:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/03/22 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/02/22 11:00	09/03/22 15:56	1
o-Terphenyl	90		70 - 130	09/02/22 11:00	09/03/22 15:56	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12200		99.6		mg/Kg			09/08/22 13:40	20

Client Sample ID: HA-17

Lab Sample ID: 880-18789-62

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	617		4.97		mg/Kg			09/08/22 14:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-18

Lab Sample ID: 880-18789-66

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 19:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 19:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 19:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 19:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 19:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 19:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67	S1-	70 - 130	09/07/22 15:57	09/09/22 19:14	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/07/22 15:57	09/09/22 19:14	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1700		49.9		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 16:38	1
Diesel Range Organics (Over C10-C28)	1700		49.9		mg/Kg		09/02/22 11:00	09/03/22 16:38	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/03/22 16:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	09/02/22 11:00	09/03/22 16:38	1
o-Terphenyl	95		70 - 130	09/02/22 11:00	09/03/22 16:38	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10900		99.8		mg/Kg			09/08/22 14:17	20

Client Sample ID: HA-18

Lab Sample ID: 880-18789-67

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	292		5.03		mg/Kg			09/08/22 14:26	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-19

Lab Sample ID: 880-18789-71

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 19:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 19:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 19:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/07/22 15:57	09/09/22 19:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 19:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/07/22 15:57	09/09/22 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	09/07/22 15:57	09/09/22 19:34	1
1,4-Difluorobenzene (Surr)	116		70 - 130	09/07/22 15:57	09/09/22 19:34	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	872		50.0		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 17:00	1
Diesel Range Organics (Over C10-C28)	739		50.0		mg/Kg		09/02/22 11:00	09/03/22 17:00	1
Oil Range Organics (Over C28-C36)	133		50.0		mg/Kg		09/02/22 11:00	09/03/22 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130				09/02/22 11:00	09/03/22 17:00	1
o-Terphenyl	102		70 - 130				09/02/22 11:00	09/03/22 17:00	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11200		100		mg/Kg			09/08/22 14:36	20

Client Sample ID: HA-19

Lab Sample ID: 880-18789-72

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	788		4.99		mg/Kg			09/08/22 14:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-20

Lab Sample ID: 880-18789-76

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 19:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 19:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/07/22 15:57	09/09/22 19:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/07/22 15:57	09/09/22 19:54	1
o-Xylene	0.00941		0.00202		mg/Kg		09/07/22 15:57	09/09/22 19:54	1
Xylenes, Total	0.00941		0.00404		mg/Kg		09/07/22 15:57	09/09/22 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	09/07/22 15:57	09/09/22 19:54	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/07/22 15:57	09/09/22 19:54	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00941		0.00404		mg/Kg			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	491		50.0		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 17:21	1
Diesel Range Organics (Over C10-C28)	390		50.0		mg/Kg		09/02/22 11:00	09/03/22 17:21	1
Oil Range Organics (Over C28-C36)	101		50.0		mg/Kg		09/02/22 11:00	09/03/22 17:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				09/02/22 11:00	09/03/22 17:21	1
o-Terphenyl	117		70 - 130				09/02/22 11:00	09/03/22 17:21	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3400	F1	24.9		mg/Kg			09/08/22 14:54	5

Client Sample ID: HA-20

Lab Sample ID: 880-18789-77

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	155		4.95		mg/Kg			09/08/22 15:22	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-21

Lab Sample ID: 880-18789-81

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 20:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 20:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 20:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 20:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 20:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/07/22 15:57	09/09/22 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/07/22 15:57	09/09/22 20:15	1
1,4-Difluorobenzene (Surr)	110		70 - 130	09/07/22 15:57	09/09/22 20:15	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.0		50.0		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 17:42	1
Diesel Range Organics (Over C10-C28)	55.0		50.0		mg/Kg		09/02/22 11:00	09/03/22 17:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 17:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	09/02/22 11:00	09/03/22 17:42	1
o-Terphenyl	121		70 - 130	09/02/22 11:00	09/03/22 17:42	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	145		5.00		mg/Kg			09/08/22 16:00	1

Client Sample ID: HA-21

Lab Sample ID: 880-18789-82

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.4		4.99		mg/Kg			09/08/22 17:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-22

Lab Sample ID: 880-18789-86

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0-0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 20:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 20:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 20:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 20:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/07/22 15:57	09/09/22 20:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/07/22 15:57	09/09/22 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	09/07/22 15:57	09/09/22 20:35	1
1,4-Difluorobenzene (Surr)	116		70 - 130	09/07/22 15:57	09/09/22 20:35	1

Method: 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			09/10/22 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.5		49.9		mg/Kg			09/06/22 10:47	1

Method: 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		09/02/22 11:00	09/03/22 18:03	1
Diesel Range Organics (Over C10-C28)	71.5		49.9		mg/Kg		09/02/22 11:00	09/03/22 18:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/22 11:00	09/03/22 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/02/22 11:00	09/03/22 18:03	1
o-Terphenyl	107		70 - 130	09/02/22 11:00	09/03/22 18:03	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	343		4.96		mg/Kg			09/08/22 18:11	1

Client Sample ID: HA-22

Lab Sample ID: 880-18789-87

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	334		5.04		mg/Kg			09/08/22 18:20	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-18789-1	HA-5	87	108
880-18789-1 MS	HA-5	87	98
880-18789-1 MSD	HA-5	94	108
880-18789-6	HA-6	85	111
880-18789-11	HA-7	86	104
880-18789-16	HA-8	82	106
880-18789-21	HA-9	91	119
880-18789-26	HA-10	79	123
880-18789-31	HA-11	86	104
880-18789-36	HA-12	76	106
880-18789-41	HA-13	87	107
880-18789-46	HA-14	77	131 S1+
880-18789-51	HA-15	79	105
880-18789-56	HA-16	86	149 S1+
880-18789-61	HA-17	72	109
880-18789-66	HA-18	67 S1-	113
880-18789-71	HA-19	74	116
880-18789-76	HA-20	88	102
880-18789-81	HA-21	73	110
880-18789-86	HA-22	73	116
LCS 880-33941/1-A	Lab Control Sample	86	99
LCSD 880-33941/2-A	Lab Control Sample Dup	87	106
MB 880-33941/5-A	Method Blank	81	115
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-18783-A-21-C MS	Matrix Spike	100	89
880-18783-A-21-D MSD	Matrix Spike Duplicate	118	90
880-18787-A-1-E MS	Matrix Spike	82	72
880-18787-A-1-F MSD	Matrix Spike Duplicate	102	87
880-18789-1	HA-5	125	119
880-18789-6	HA-6	119	117
880-18789-11	HA-7	127	120
880-18789-16	HA-8	122	116
880-18789-21	HA-9	122	115
880-18789-26	HA-10	138 S1+	129
880-18789-31	HA-11	138 S1+	128
880-18789-36	HA-12	127	103
880-18789-41	HA-13	120	111
880-18789-46	HA-14	143 S1+	133 S1+
880-18789-51	HA-15	107	106
880-18789-56	HA-16	112	111

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-18789-61	HA-17	105	90
880-18789-66	HA-18	113	95
880-18789-71	HA-19	114	102
880-18789-76	HA-20	115	117
880-18789-81	HA-21	121	121
880-18789-86	HA-22	108	107
LCS 880-33588/2-A	Lab Control Sample	166 S1+	137 S1+
LCS 880-33623/2-A	Lab Control Sample	141 S1+	141 S1+
LCSD 880-33588/3-A	Lab Control Sample Dup	142 S1+	127
LCSD 880-33623/3-A	Lab Control Sample Dup	132 S1+	134 S1+
MB 880-33588/1-A	Method Blank	124	122
MB 880-33623/1-A	Method Blank	128	130
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33941/5-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/07/22 15:57	09/09/22 12:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/07/22 15:57	09/09/22 12:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	09/07/22 15:57	09/09/22 12:49	1
1,4-Difluorobenzene (Surr)	115		70 - 130	09/07/22 15:57	09/09/22 12:49	1

Lab Sample ID: LCS 880-33941/1-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1093		mg/Kg		109	70 - 130
Toluene	0.100	0.1017		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1004		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.1817		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09328		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-33941/2-A

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33941

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1152		mg/Kg		115	70 - 130	5	35
Toluene	0.100	0.1039		mg/Kg		104	70 - 130	2	35
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1819		mg/Kg		91	70 - 130	0	35
o-Xylene	0.100	0.09396		mg/Kg		94	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-18789-1 MS

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: HA-5

Prep Type: Total/NA

Prep Batch: 33941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.09602		mg/Kg		96	70 - 130
Toluene	<0.00202	U	0.0998	0.09609		mg/Kg		96	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Lab Sample ID: 880-18789-1 MS

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: HA-5

Prep Type: Total/NA

Prep Batch: 33941

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0998	0.09039		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1651		mg/Kg		83	70 - 130
o-Xylene	<0.00202	U F1	0.0998	0.08440		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-18789-1 MSD

Matrix: Solid

Analysis Batch: 34054

Client Sample ID: HA-5

Prep Type: Total/NA

Prep Batch: 33941

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.09204		mg/Kg		92	70 - 130	4	35
Toluene	<0.00202	U	0.100	0.08143		mg/Kg		81	70 - 130	17	35
Ethylbenzene	<0.00202	U	0.100	0.07149		mg/Kg		71	70 - 130	23	35
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1291	F1	mg/Kg		64	70 - 130	24	35
o-Xylene	<0.00202	U F1	0.100	0.06855	F1	mg/Kg		68	70 - 130	21	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

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

Lab Sample ID: MB 880-33588/1-A

Matrix: Solid

Analysis Batch: 33678

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/02/22 07:58	09/03/22 20:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 07:58	09/03/22 20:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 07:58	09/03/22 20:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	09/02/22 07:58	09/03/22 20:31	1
o-Terphenyl	122		70 - 130	09/02/22 07:58	09/03/22 20:31	1

Lab Sample ID: LCS 880-33588/2-A

Matrix: Solid

Analysis Batch: 33678

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	866.6		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	969.2		mg/Kg		97	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Lab Sample ID: LCS 880-33588/2-A
Matrix: Solid
Analysis Batch: 33678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33588

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	166	S1+	70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: LCSD 880-33588/3-A
Matrix: Solid
Analysis Batch: 33678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33588

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1085	*1	mg/Kg		109	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	1000	902.0		mg/Kg		90	70 - 130	7	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	142	S1+	70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: 880-18783-A-21-C MS
Matrix: Solid
Analysis Batch: 33678

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33588

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	999	842.6		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1014		mg/Kg		102	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-18783-A-21-D MSD
Matrix: Solid
Analysis Batch: 33678

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33588

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	998	812.4		mg/Kg		81	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1029		mg/Kg		103	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	90		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Lab Sample ID: MB 880-33623/1-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 10:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 10:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/22 11:00	09/03/22 10:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				09/02/22 11:00	09/03/22 10:54	1
o-Terphenyl	130		70 - 130				09/02/22 11:00	09/03/22 10:54	1

Lab Sample ID: LCS 880-33623/2-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 33623

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	800.8		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	1000	880.7		mg/Kg		88	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	141	S1+	70 - 130				
o-Terphenyl	141	S1+	70 - 130				

Lab Sample ID: LCSD 880-33623/3-A

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33623

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	805.5		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	818.0		mg/Kg		82	70 - 130	7	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	132	S1+	70 - 130						
o-Terphenyl	134	S1+	70 - 130						

Lab Sample ID: 880-18787-A-1-E MS

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	999	566.5	F1	mg/Kg		54	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F2	999	771.3		mg/Kg		73	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Lab Sample ID: 880-18787-A-1-E MS

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33623

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	72		70 - 130

Lab Sample ID: 880-18787-A-1-F MSD

Matrix: Solid

Analysis Batch: 33680

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33623

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1 F2	998	696.1	F1 F2	mg/Kg		67	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	<49.9	U F2	998	960.3	F2	mg/Kg		92	70 - 130	22	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	102		70 - 130								
o-Terphenyl	87		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33621/1-A

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00		mg/Kg			09/09/22 06:29	1	

Lab Sample ID: LCS 880-33621/2-A

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	258.6		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-33621/3-A

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	247.6		mg/Kg		99	90 - 110	4	20	

Lab Sample ID: 880-18789-1 MS

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: HA-5

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	132		251	364.9		mg/Kg		93	90 - 110	

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-18789-1 MSD

Matrix: Solid

Analysis Batch: 33927

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	132		251	371.7		mg/Kg		96	90 - 110	2	20

Lab Sample ID: 880-18789-26 MS

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: HA-10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	506		251	770.9		mg/Kg		106	90 - 110		

Lab Sample ID: 880-18789-26 MSD

Matrix: Solid

Analysis Batch: 33927

Client Sample ID: HA-10

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	506		251	732.4		mg/Kg		90	90 - 110	5	20

Lab Sample ID: MB 880-33622/1-A

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/08/22 12:18	1

Lab Sample ID: LCS 880-33622/2-A

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	253.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-33622/3-A

Matrix: Solid

Analysis Batch: 33965

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	247.9		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 880-18789-51 MS

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: HA-15

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2070	F1	1250	3556	F1	mg/Kg		119	90 - 110		

Lab Sample ID: 880-18789-51 MSD

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: HA-15

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2070	F1	1250	3622	F1	mg/Kg		124	90 - 110	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-18789-76 MS

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: HA-20

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	3400	F1	1250	4900	F1	mg/Kg		121	90 - 110

Lab Sample ID: 880-18789-76 MSD

Matrix: Solid

Analysis Batch: 33965

Client Sample ID: HA-20

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3400	F1	1250	4678		mg/Kg		103	90 - 110	5	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

GC VOA

Prep Batch: 33941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	5035	
880-18789-6	HA-6	Total/NA	Solid	5035	
880-18789-11	HA-7	Total/NA	Solid	5035	
880-18789-16	HA-8	Total/NA	Solid	5035	
880-18789-21	HA-9	Total/NA	Solid	5035	
880-18789-26	HA-10	Total/NA	Solid	5035	
880-18789-31	HA-11	Total/NA	Solid	5035	
880-18789-36	HA-12	Total/NA	Solid	5035	
880-18789-41	HA-13	Total/NA	Solid	5035	
880-18789-46	HA-14	Total/NA	Solid	5035	
880-18789-51	HA-15	Total/NA	Solid	5035	
880-18789-56	HA-16	Total/NA	Solid	5035	
880-18789-61	HA-17	Total/NA	Solid	5035	
880-18789-66	HA-18	Total/NA	Solid	5035	
880-18789-71	HA-19	Total/NA	Solid	5035	
880-18789-76	HA-20	Total/NA	Solid	5035	
880-18789-81	HA-21	Total/NA	Solid	5035	
880-18789-86	HA-22	Total/NA	Solid	5035	
MB 880-33941/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33941/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33941/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18789-1 MS	HA-5	Total/NA	Solid	5035	
880-18789-1 MSD	HA-5	Total/NA	Solid	5035	

Analysis Batch: 34054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	8021B	33941
880-18789-6	HA-6	Total/NA	Solid	8021B	33941
880-18789-11	HA-7	Total/NA	Solid	8021B	33941
880-18789-16	HA-8	Total/NA	Solid	8021B	33941
880-18789-21	HA-9	Total/NA	Solid	8021B	33941
880-18789-26	HA-10	Total/NA	Solid	8021B	33941
880-18789-31	HA-11	Total/NA	Solid	8021B	33941
880-18789-36	HA-12	Total/NA	Solid	8021B	33941
880-18789-41	HA-13	Total/NA	Solid	8021B	33941
880-18789-46	HA-14	Total/NA	Solid	8021B	33941
880-18789-51	HA-15	Total/NA	Solid	8021B	33941
880-18789-56	HA-16	Total/NA	Solid	8021B	33941
880-18789-61	HA-17	Total/NA	Solid	8021B	33941
880-18789-66	HA-18	Total/NA	Solid	8021B	33941
880-18789-71	HA-19	Total/NA	Solid	8021B	33941
880-18789-76	HA-20	Total/NA	Solid	8021B	33941
880-18789-81	HA-21	Total/NA	Solid	8021B	33941
880-18789-86	HA-22	Total/NA	Solid	8021B	33941
MB 880-33941/5-A	Method Blank	Total/NA	Solid	8021B	33941
LCS 880-33941/1-A	Lab Control Sample	Total/NA	Solid	8021B	33941
LCSD 880-33941/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33941
880-18789-1 MS	HA-5	Total/NA	Solid	8021B	33941
880-18789-1 MSD	HA-5	Total/NA	Solid	8021B	33941

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

GC VOA

Analysis Batch: 34145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	Total BTEX	
880-18789-6	HA-6	Total/NA	Solid	Total BTEX	
880-18789-11	HA-7	Total/NA	Solid	Total BTEX	
880-18789-16	HA-8	Total/NA	Solid	Total BTEX	
880-18789-21	HA-9	Total/NA	Solid	Total BTEX	
880-18789-26	HA-10	Total/NA	Solid	Total BTEX	
880-18789-31	HA-11	Total/NA	Solid	Total BTEX	
880-18789-36	HA-12	Total/NA	Solid	Total BTEX	
880-18789-41	HA-13	Total/NA	Solid	Total BTEX	
880-18789-46	HA-14	Total/NA	Solid	Total BTEX	
880-18789-51	HA-15	Total/NA	Solid	Total BTEX	
880-18789-56	HA-16	Total/NA	Solid	Total BTEX	
880-18789-61	HA-17	Total/NA	Solid	Total BTEX	
880-18789-66	HA-18	Total/NA	Solid	Total BTEX	
880-18789-71	HA-19	Total/NA	Solid	Total BTEX	
880-18789-76	HA-20	Total/NA	Solid	Total BTEX	
880-18789-81	HA-21	Total/NA	Solid	Total BTEX	
880-18789-86	HA-22	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	8015NM Prep	
880-18789-6	HA-6	Total/NA	Solid	8015NM Prep	
880-18789-11	HA-7	Total/NA	Solid	8015NM Prep	
880-18789-16	HA-8	Total/NA	Solid	8015NM Prep	
880-18789-21	HA-9	Total/NA	Solid	8015NM Prep	
880-18789-26	HA-10	Total/NA	Solid	8015NM Prep	
880-18789-31	HA-11	Total/NA	Solid	8015NM Prep	
880-18789-36	HA-12	Total/NA	Solid	8015NM Prep	
880-18789-41	HA-13	Total/NA	Solid	8015NM Prep	
880-18789-46	HA-14	Total/NA	Solid	8015NM Prep	
MB 880-33588/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33588/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCS 880-33588/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18783-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18783-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 33623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-51	HA-15	Total/NA	Solid	8015NM Prep	
880-18789-56	HA-16	Total/NA	Solid	8015NM Prep	
880-18789-61	HA-17	Total/NA	Solid	8015NM Prep	
880-18789-66	HA-18	Total/NA	Solid	8015NM Prep	
880-18789-71	HA-19	Total/NA	Solid	8015NM Prep	
880-18789-76	HA-20	Total/NA	Solid	8015NM Prep	
880-18789-81	HA-21	Total/NA	Solid	8015NM Prep	
880-18789-86	HA-22	Total/NA	Solid	8015NM Prep	
MB 880-33623/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33623/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

GC Semi VOA (Continued)

Prep Batch: 33623 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-33623/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18787-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18787-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	8015B NM	33588
880-18789-6	HA-6	Total/NA	Solid	8015B NM	33588
880-18789-11	HA-7	Total/NA	Solid	8015B NM	33588
880-18789-16	HA-8	Total/NA	Solid	8015B NM	33588
880-18789-21	HA-9	Total/NA	Solid	8015B NM	33588
880-18789-26	HA-10	Total/NA	Solid	8015B NM	33588
880-18789-31	HA-11	Total/NA	Solid	8015B NM	33588
880-18789-36	HA-12	Total/NA	Solid	8015B NM	33588
880-18789-41	HA-13	Total/NA	Solid	8015B NM	33588
880-18789-46	HA-14	Total/NA	Solid	8015B NM	33588
MB 880-33588/1-A	Method Blank	Total/NA	Solid	8015B NM	33588
LCS 880-33588/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33588
LCSD 880-33588/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33588
880-18783-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33588
880-18783-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33588

Analysis Batch: 33680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-51	HA-15	Total/NA	Solid	8015B NM	33623
880-18789-56	HA-16	Total/NA	Solid	8015B NM	33623
880-18789-61	HA-17	Total/NA	Solid	8015B NM	33623
880-18789-66	HA-18	Total/NA	Solid	8015B NM	33623
880-18789-71	HA-19	Total/NA	Solid	8015B NM	33623
880-18789-76	HA-20	Total/NA	Solid	8015B NM	33623
880-18789-81	HA-21	Total/NA	Solid	8015B NM	33623
880-18789-86	HA-22	Total/NA	Solid	8015B NM	33623
MB 880-33623/1-A	Method Blank	Total/NA	Solid	8015B NM	33623
LCS 880-33623/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33623
LCSD 880-33623/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33623
880-18787-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	33623
880-18787-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33623

Analysis Batch: 33838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Total/NA	Solid	8015 NM	
880-18789-6	HA-6	Total/NA	Solid	8015 NM	
880-18789-11	HA-7	Total/NA	Solid	8015 NM	
880-18789-16	HA-8	Total/NA	Solid	8015 NM	
880-18789-21	HA-9	Total/NA	Solid	8015 NM	
880-18789-26	HA-10	Total/NA	Solid	8015 NM	
880-18789-31	HA-11	Total/NA	Solid	8015 NM	
880-18789-36	HA-12	Total/NA	Solid	8015 NM	
880-18789-41	HA-13	Total/NA	Solid	8015 NM	
880-18789-46	HA-14	Total/NA	Solid	8015 NM	
880-18789-51	HA-15	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

GC Semi VOA (Continued)

Analysis Batch: 33838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-56	HA-16	Total/NA	Solid	8015 NM	
880-18789-61	HA-17	Total/NA	Solid	8015 NM	
880-18789-66	HA-18	Total/NA	Solid	8015 NM	
880-18789-71	HA-19	Total/NA	Solid	8015 NM	
880-18789-76	HA-20	Total/NA	Solid	8015 NM	
880-18789-81	HA-21	Total/NA	Solid	8015 NM	
880-18789-86	HA-22	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Soluble	Solid	DI Leach	
880-18789-2	HA-5	Soluble	Solid	DI Leach	
880-18789-6	HA-6	Soluble	Solid	DI Leach	
880-18789-7	HA-6	Soluble	Solid	DI Leach	
880-18789-11	HA-7	Soluble	Solid	DI Leach	
880-18789-12	HA-7	Soluble	Solid	DI Leach	
880-18789-16	HA-8	Soluble	Solid	DI Leach	
880-18789-17	HA-8	Soluble	Solid	DI Leach	
880-18789-21	HA-9	Soluble	Solid	DI Leach	
880-18789-22	HA-9	Soluble	Solid	DI Leach	
880-18789-26	HA-10	Soluble	Solid	DI Leach	
880-18789-27	HA-10	Soluble	Solid	DI Leach	
880-18789-31	HA-11	Soluble	Solid	DI Leach	
880-18789-32	HA-11	Soluble	Solid	DI Leach	
880-18789-36	HA-12	Soluble	Solid	DI Leach	
880-18789-37	HA-12	Soluble	Solid	DI Leach	
880-18789-41	HA-13	Soluble	Solid	DI Leach	
880-18789-42	HA-13	Soluble	Solid	DI Leach	
880-18789-46	HA-14	Soluble	Solid	DI Leach	
880-18789-47	HA-14	Soluble	Solid	DI Leach	
MB 880-33621/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33621/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33621/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18789-1 MS	HA-5	Soluble	Solid	DI Leach	
880-18789-1 MSD	HA-5	Soluble	Solid	DI Leach	
880-18789-26 MS	HA-10	Soluble	Solid	DI Leach	
880-18789-26 MSD	HA-10	Soluble	Solid	DI Leach	

Leach Batch: 33622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-51	HA-15	Soluble	Solid	DI Leach	
880-18789-52	HA-15	Soluble	Solid	DI Leach	
880-18789-56	HA-16	Soluble	Solid	DI Leach	
880-18789-57	HA-16	Soluble	Solid	DI Leach	
880-18789-61	HA-17	Soluble	Solid	DI Leach	
880-18789-62	HA-17	Soluble	Solid	DI Leach	
880-18789-66	HA-18	Soluble	Solid	DI Leach	
880-18789-67	HA-18	Soluble	Solid	DI Leach	
880-18789-71	HA-19	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

HPLC/IC (Continued)

Leach Batch: 33622 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-72	HA-19	Soluble	Solid	DI Leach	
880-18789-76	HA-20	Soluble	Solid	DI Leach	
880-18789-77	HA-20	Soluble	Solid	DI Leach	
880-18789-81	HA-21	Soluble	Solid	DI Leach	
880-18789-82	HA-21	Soluble	Solid	DI Leach	
880-18789-86	HA-22	Soluble	Solid	DI Leach	
880-18789-87	HA-22	Soluble	Solid	DI Leach	
MB 880-33622/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33622/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33622/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18789-51 MS	HA-15	Soluble	Solid	DI Leach	
880-18789-51 MSD	HA-15	Soluble	Solid	DI Leach	
880-18789-76 MS	HA-20	Soluble	Solid	DI Leach	
880-18789-76 MSD	HA-20	Soluble	Solid	DI Leach	

Analysis Batch: 33927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-1	HA-5	Soluble	Solid	300.0	33621
880-18789-2	HA-5	Soluble	Solid	300.0	33621
880-18789-6	HA-6	Soluble	Solid	300.0	33621
880-18789-7	HA-6	Soluble	Solid	300.0	33621
880-18789-11	HA-7	Soluble	Solid	300.0	33621
880-18789-12	HA-7	Soluble	Solid	300.0	33621
880-18789-16	HA-8	Soluble	Solid	300.0	33621
880-18789-17	HA-8	Soluble	Solid	300.0	33621
880-18789-21	HA-9	Soluble	Solid	300.0	33621
880-18789-22	HA-9	Soluble	Solid	300.0	33621
880-18789-26	HA-10	Soluble	Solid	300.0	33621
880-18789-27	HA-10	Soluble	Solid	300.0	33621
880-18789-31	HA-11	Soluble	Solid	300.0	33621
880-18789-32	HA-11	Soluble	Solid	300.0	33621
880-18789-36	HA-12	Soluble	Solid	300.0	33621
880-18789-37	HA-12	Soluble	Solid	300.0	33621
880-18789-41	HA-13	Soluble	Solid	300.0	33621
880-18789-42	HA-13	Soluble	Solid	300.0	33621
880-18789-46	HA-14	Soluble	Solid	300.0	33621
880-18789-47	HA-14	Soluble	Solid	300.0	33621
MB 880-33621/1-A	Method Blank	Soluble	Solid	300.0	33621
LCS 880-33621/2-A	Lab Control Sample	Soluble	Solid	300.0	33621
LCSD 880-33621/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33621
880-18789-1 MS	HA-5	Soluble	Solid	300.0	33621
880-18789-1 MSD	HA-5	Soluble	Solid	300.0	33621
880-18789-26 MS	HA-10	Soluble	Solid	300.0	33621
880-18789-26 MSD	HA-10	Soluble	Solid	300.0	33621

Analysis Batch: 33965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-51	HA-15	Soluble	Solid	300.0	33622
880-18789-52	HA-15	Soluble	Solid	300.0	33622
880-18789-56	HA-16	Soluble	Solid	300.0	33622
880-18789-57	HA-16	Soluble	Solid	300.0	33622

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

HPLC/IC (Continued)

Analysis Batch: 33965 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-61	HA-17	Soluble	Solid	300.0	33622
880-18789-62	HA-17	Soluble	Solid	300.0	33622
880-18789-66	HA-18	Soluble	Solid	300.0	33622
880-18789-67	HA-18	Soluble	Solid	300.0	33622
880-18789-71	HA-19	Soluble	Solid	300.0	33622
880-18789-72	HA-19	Soluble	Solid	300.0	33622
880-18789-76	HA-20	Soluble	Solid	300.0	33622
880-18789-77	HA-20	Soluble	Solid	300.0	33622
880-18789-81	HA-21	Soluble	Solid	300.0	33622
880-18789-82	HA-21	Soluble	Solid	300.0	33622
880-18789-86	HA-22	Soluble	Solid	300.0	33622
880-18789-87	HA-22	Soluble	Solid	300.0	33622
MB 880-33622/1-A	Method Blank	Soluble	Solid	300.0	33622
LCS 880-33622/2-A	Lab Control Sample	Soluble	Solid	300.0	33622
LCSD 880-33622/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33622
880-18789-51 MS	HA-15	Soluble	Solid	300.0	33622
880-18789-51 MSD	HA-15	Soluble	Solid	300.0	33622
880-18789-76 MS	HA-20	Soluble	Solid	300.0	33622
880-18789-76 MSD	HA-20	Soluble	Solid	300.0	33622

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-5
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-1
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			4.96 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 13:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 02:08	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 06:56	CH	EET MID

Client Sample ID: HA-5
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 07:24	CH	EET MID

Client Sample ID: HA-6
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 13:39	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 02:29	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 07:33	CH	EET MID

Client Sample ID: HA-6
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 07:42	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-7

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 13:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 02:50	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 07:52	CH	EET MID

Client Sample ID: HA-7

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 08:19	CH	EET MID

Client Sample ID: HA-8

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 14:19	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 03:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33927	09/09/22 08:29	CH	EET MID

Client Sample ID: HA-8

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-17

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			5.02 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 08:38	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-9

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 14:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 03:32	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 08:47	CH	EET MID

Client Sample ID: HA-9

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 08:56	CH	EET MID

Client Sample ID: HA-10

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 15:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 03:54	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 09:05	CH	EET MID

Client Sample ID: HA-10

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 09:33	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-11

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-31

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 15:21	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 04:15	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	33927	09/09/22 17:32	CH	EET MID

Client Sample ID: HA-11

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-32

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 10:10	CH	EET MID

Client Sample ID: HA-12

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-36

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 15:41	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 04:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	33927	09/09/22 10:19	CH	EET MID

Client Sample ID: HA-12

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-37

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 10:28	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-13
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-41
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 16:01	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 04:57	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33927	09/09/22 10:38	CH	EET MID

Client Sample ID: HA-13
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-42
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			4.99 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 10:47	CH	EET MID

Client Sample ID: HA-14
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-46
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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 16:22	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33588	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33678	09/04/22 05:18	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33927	09/09/22 10:56	CH	EET MID

Client Sample ID: HA-14
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-47
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			4.97 g	50 mL	33621	09/02/22 10:53	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33927	09/09/22 11:05	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-15
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-51
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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 18:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 15:13	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33965	09/08/22 12:45	CH	EET MID

Client Sample ID: HA-15
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-52
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			4.99 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 13:13	CH	EET MID

Client Sample ID: HA-16
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-56
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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 18:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 15:34	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	33965	09/08/22 13:22	CH	EET MID

Client Sample ID: HA-16
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-57
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	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 13:31	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-17

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-61

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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 18:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 15:56	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	33965	09/08/22 13:40	CH	EET MID

Client Sample ID: HA-17

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-62

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 14:08	CH	EET MID

Client Sample ID: HA-18

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-66

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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 19:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 16:38	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	33965	09/08/22 14:17	CH	EET MID

Client Sample ID: HA-18

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-67

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			4.97 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 14:26	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-19

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-71

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 19:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 17:00	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	33965	09/08/22 14:36	CH	EET MID

Client Sample ID: HA-19

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-72

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 14:45	CH	EET MID

Client Sample ID: HA-20

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-76

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 19:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 17:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33965	09/08/22 14:54	CH	EET MID

Client Sample ID: HA-20

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-77

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	33622	09/02/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 15:22	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Client Sample ID: HA-21

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-81

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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 20:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 17:42	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33622	09/02/22 10:56	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 16:00	CH	EET MID

Client Sample ID: HA-21

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-82

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	33622	09/02/22 10:56	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 17:37	CH	EET MID

Client Sample ID: HA-22

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-86

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	33941	09/07/22 15:57	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34054	09/09/22 20:35	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34145	09/10/22 11:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33838	09/06/22 10:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33623	09/02/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33680	09/03/22 18:03	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	33622	09/02/22 10:56	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 18:11	CH	EET MID

Client Sample ID: HA-22

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-87

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	33622	09/02/22 10:56	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33965	09/08/22 18:20	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: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

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

Protocol References:

- ASTM = ASTM International
- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-1
SDG: 1264

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18789-1	HA-5	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-2	HA-5	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-6	HA-6	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-7	HA-6	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-11	HA-7	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-12	HA-7	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-16	HA-8	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-17	HA-8	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-21	HA-9	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-22	HA-9	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-26	HA-10	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-27	HA-10	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-31	HA-11	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-32	HA-11	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-36	HA-12	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-37	HA-12	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-41	HA-13	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-42	HA-13	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-46	HA-14	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-47	HA-14	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-51	HA-15	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-52	HA-15	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-56	HA-16	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-57	HA-16	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-61	HA-17	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-62	HA-17	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-66	HA-18	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-67	HA-18	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-71	HA-19	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-72	HA-19	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-76	HA-20	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-77	HA-20	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-81	HA-21	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-82	HA-21	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-86	HA-22	Solid	09/01/22 00:00	09/02/22 10:16	0-0.5
880-18789-87	HA-22	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1



Environment Testing
Xenco

Houston TX (261) 240-4200 Dallas TX (214) 902-0300
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Chain of Custody

Work Order No:

1975

www.xenco.com Page _____ of _____

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments	
Program	USTR/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level	I ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other ☐

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Chloride	TPH 80	BTEX	HOLD	Sample Comments								
HA-5	S	9/1/2022		0 - 0 5	Grab	1	X	X	X										
HA-5	S	9/1/2022		0 5 - 1	Grab	1	X												
HA-5	S	9/1/2022		1 5 - 2	Grab	1				X									
HA-5	S	9/1/2022		2 5 - 3	Grab	1				X									
HA-5	S	9/1/2022		3 5 - 4	Grab	1				X									
HA-6	S	9/1/2022		0 - 0 5	Grab	1	X	X	X										
HA-6	S	9/1/2022		0 5 - 1	Grab	1	X												
HA-6	S	9/1/2022		1 5 - 2	Grab	1				X									
HA-6	S	9/1/2022		2 5 - 3	Grab	1				X									
HA-6	S	9/1/2022		3 5 - 4	Grab	1				X									



880-18789 Chain of Custody



880-18789 Chain of Custody

[illegible]

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 		9/2/22	2		
3 		10:10	4		
5			6		



Environment Testing
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Chain of Custody

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Hobbs, NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 19010

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Project Manager:	Mason Jones	Bill to, (if different)	Devon Energy - Date
Company Name:	Earth Systems R&R	Company Name:	
Address	4115 S CR 1297	Address:	
City State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone:	432-310-4945	Email	MJones@earthsys.net

Work Order Comments			
Program	UST/PST ☐	PRP ☐	Brownfields ☐ RRC ☐ Superfund ☐
State of Project			
Reporting Level	☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐		
Deliverables	EDD ☐ ADAPT ☐ Other ☐		

Project Name						Cotton Draw Unit 604	Turn Around		ANALYSIS REQUEST								Preservative Codes						
Project Number						1264	☐ Routine ☒ Rush			Pres. Code									None NO	DI Water- H ₂ O			
Project Location							Due Date	3 day										Cool Cool	MeOH Me				
Sampler's Name						Ellis Pierce	TAT starts the day received by the lab, if received by 4 30pm											HCL HC	HNO ₃ HN				
PO #:																		H ₂ SO ₄ H ₂	NaOH Na				
SAMPLE RECEIPT						Temp Blank.	Yes No	Yes No	Wet Ice	Yes No											H ₃ PO ₄ HP		
Samples Received Intact:						Yes No	Thermometer ID:											NaHSO ₄ NABIS					
Cooler Custody Seals						Yes No	N/A	Correction Factor											Na ₂ S ₂ O ₃ NaSO ₃				
Sample Custody Seals						Yes No	N/A	Temperature Reading											Zn Acetate+NaOH Zn				
Total Containers							Corrected Temperature											NaOH+Ascorbic Acid SANC					
Sample Identification				Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont											Sample Comments			
HA-7				S	9/1/2022		0 - 0.5	Grab	1	X	Chlorides	300											
HA-7				S	9/1/2022		0.5 - 1	Grab	1	X	TPH 8015												
HA-7				S	9/1/2022		1.5 - 2	Grab	1	X	BTEX	8021B											
HA-7				S	9/1/2022		2.5 - 3	Grab	1	X	HOLD												
HA-7				S	9/1/2022		3.5 - 4	Grab	1	X													
HA-8				S	9/1/2022		0 - 0.5	Grab	1	X	X												
HA-8				S	9/1/2022		0.5 - 1	Grab	1	X													
HA-8				S	9/1/2022		1.5 - 2	Grab	1														
HA-8				S	9/1/2022		2.5 - 3	Grab	1														
HA-8				S	9/1/2022		3.5 - 4	Grab	1		X												

Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP	6010	8RCRA	SP	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U					Hg	1631 / 245	1 / 7470	1 / 7471					

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Chain of Custody

Work Order No:

1873

Project Manager	Mason Jones	Bill to, (if different)	Devon Energy	Date
Company Name:	Earth Systems R&R	Company Name:		
Address	4115 S CR 1297	Address		
City, State ZIP	Odessa, Texas 79765	City, State ZIP		
Phone:	432-310-4945	Email	Mjones@earthsys.net	

Work Order Comments	
Program State of Project	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
Reporting Level II	☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD	☐ ADAPT ☐ Other

[illegible]

Total	200.7 / 6010	200.8 / 6020:	
Circle Method(s) and Metal(s)	to be analyzed		
	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn		
	TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg	1631 / 245 1 / 7470 1 / 471	
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		10.16			



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Chain of Custody

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Work Order No: 18789

www.xenco.com Page 4 of 9

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Dale
Company Name:	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas 79765	City State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments	
Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other	

Project Name	Cotton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Pres. Code		ANALYSIS REQUEST												Preservative Codes				
Project Number	1264	Due Date	3 day															None NO DI Water H ₂ O				
Project Location																		Cool Cool MeOH Me				
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																HCL HC HNO ₃ HN				
PO #																		H ₂ SO ₄ H ₂ NaOH Na				
SAMPLE RECEIPT		Temp Blank:	Yes No	Wet Ice:	Yes No													H ₃ PO ₄ HP				
Samples Received Intact:		Yes No	Thermometer ID															NaHSO ₄ NABIS				
Cooler Custody Seals		Yes No	Correction Factor															Na ₂ S ₂ O ₃ NaSO ₃				
Sample Custody Seals		Yes No	Temperature Reading															Zn Acetate+NaOH Zn				
Total Containers:			Corrected Temperature															NaOH+Ascorbic Acid SAPC				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides 300	TPH 8015	BTEX 80213	HOLD											Sample Comments
HA-11		S	9/1/2022		0-0.5	Grab	1	X	X	X												
HA-11		S	9/1/2022		0.5-1	Grab	1	X														
HA-11		S	9/1/2022		1.5-2	Grab	1				X											
HA-11		S	9/1/2022		2.5-3	Grab	1				X											
HA-11		S	9/1/2022		3.5-4	Grab	1				X											
HA-12		S	9/1/2022		0-0.5	Grab	1	X	X													
HA-12		S	9/1/2022		0.5-1	Grab	1	X														
HA-12		S	9/1/2022		1.5-2	Grab	1				X											
HA-12		S	9/1/2022		2.5-3	Grab	1				X											
HA-12		S	9/1/2022		3.5-4	Grab	1				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 TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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		9/2/22			2
		10:16			4
					6



Environment Testing
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Work Order No: 18789

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Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	Pass Code	ANALYSIS REQUEST																Preservative Codes							
Project Number	1264	☐ Routine ☒ Rush																		None NO	DI Water H ₂ O						
Project Location		Due Date	3 day																	Cool Cool	MeOH Me						
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																		HCL HC	HNO ₃ HN						
PO #																				H ₂ SO ₄ H ₂	NaOH Na						
SAMPLE RECEIPT				Temp Blank	Yes No	Wet Ice	Yes No																	H ₃ PO ₄ HP			
Samples Received Intact				Yes No	Thermometer ID																	NaHSO ₄ NABIS					
Cooler Custody Seals				Yes No	Correction Factor																	Na ₂ S ₂ O ₃ NaSO ₃					
Sample Custody Seals				Yes No	Temperature Reading																	Zn Acetate+NaOH Zn					
Total Containers				Corrected Temperature																	NaOH+Ascorbic Acid SAPC						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters																Sample Comments			
HA-13		S	9/1/2022		0-0.5	Grab	1	Chlorides	300																		
HA-13		S	9/1/2022		0.5-1	Grab	1	TPH 8015																			
HA-13		S	9/1/2022		1.5-2	Grab	1	BTEX	80213																		
HA-13		S	9/1/2022		2.5-3	Grab	1	HOLD																			
HA-13		S	9/1/2022		3.5-4	Grab	1																				
HA-13		S	9/1/2022		0-0.5	Grab	1																				
HA-14		S	9/1/2022		0.5-1	Grab	1																				
HA-14		S	9/1/2022		1.5-2	Grab	1																				
HA-14		S	9/1/2022		2.5-3	Grab	1																				
HA-14		S	9/1/2022		3.5-4	Grab	1																				

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

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
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		10:16			4
					6



Environment Testing
Xenico

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Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Chain of Custody

Work Order No: 161891

www.xenico.com Page 6 of 9

Project Manager	Mason Jones	Bill to (if different)	Devon Energy	Date
Company Name	Earth Systems R&R	Company Name:		
Address	4115 S CR 1297	Address		
City State ZIP	Odessa, Texas 79765	City State ZIP		
Phone	432-310-4945	Email	MJones@earthsys.net	

Work Order Comments	
Program	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	Pres. Code	ANALYSIS REQUEST																		
Project Number	1264	☐ Routine ☒ Rush																				
Project Location		Due Date	3 day																			
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																				
PO #																						
SAMPLE RECEIPT				Temp Blank	Yes	No	Wet Ice	Yes	No	Parameters												
Samples Received Intact:				Yes	No	Thermometer ID	Chlorides 300															
Cooler Custody Seals				Yes	No	Correction Factor	TPH 8015															
Sample Custody Seals				Yes	No	Temperature Reading	BTX 80215															
Total Containers				Yes	No	Corrected Temperature	HOLD															
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																
HA-15	S	9/1/2022		0-0.5	Grab	1	X	X	X													
HA-15	S	9/1/2022		0.5-1	Grab	1	X															
HA-15	S	9/1/2022		1.5-2	Grab	1				X												
HA-15	S	9/1/2022		2.5-3	Grab	1				X												
HA-15	S	9/1/2022		3.5-4	Grab	1				X												
HA-16	S	9/1/2022		0-0.5	Grab	1	X	X	X													
HA-16	S	9/1/2022		0.5-1	Grab	1	X															
HA-16	S	9/1/2022		1.5-2	Grab	1				X												
HA-16	S	9/1/2022		2.5-3	Grab	1				X												
HA-16	S	9/1/2022		3.5-4	Grab	1	X															

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 2451 / 7470 / 7471

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		9/22/22			10/16
5					6



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Chain of Custody

Work Order No: 18789

www.xenco.com Page 1 of 1

Project Manager	Mason Jones	Bill to: (if different)	Devon Energy	Date
Company Name	Earth Systems R&R	Company Name		
Address	4115 S CR 1297	Address		
City, State ZIP	Odessa, Texas, 79765	City, State ZIP		
Phone	432-310-4945	Email	Mjones@earthsys.net	

Work Order Comments	
Program	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project.	
Reporting Level	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other ☐

Project Name		Cotton Draw Unit 804		Turn Around																																															
Project Number		1264		☐ Routine ☒ Rush																																															
Project Location				Due Date		3 day																																													
Sampler's Name		Ellis Pierce		TAT starts the day received by the lab, if received by 4 30pm																																															
PO #																																																			
SAMPLE RECEIPT				Temp Blank		Yes No		Well Ice		Yes No																																									
Samples Received Intact:				Yes No		Thermometer ID																																													
Cooler Custody Seals				Yes No N/A		Correction Factor																																													
Sample Custody Seals				Yes No N/A		Temperature Reading																																													
Total Containers						Corrected Temperature																																													
Parameters														Pres. Code																																					
300 5 802113																																																			
ANALYSIS REQUEST																																																			
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																																																			
Preservative Codes																																																			
<table border="1"> <tr> <td>None</td><td>NO</td><td>DI Water</td><td>H₂O</td> </tr> <tr> <td>Cool</td><td>Cool</td><td>MeOH</td><td>Me</td> </tr> <tr> <td>HCL</td><td>HC</td><td>HNO₃</td><td>HN</td> </tr> <tr> <td>H₂SO₄</td><td>H₂</td><td>NaOH</td><td>Na</td> </tr> <tr> <td>H₃PO₄</td><td>HP</td><td></td><td></td> </tr> <tr> <td>NaHSO₄</td><td>NABIS</td><td></td><td></td> </tr> <tr> <td>Na₂S₂O₃</td><td>NaSO₃</td><td></td><td></td> </tr> <tr> <td>Zn Acetate</td><td>+NaOH</td><td>Zn</td><td></td> </tr> <tr> <td>NaOH+Ascorbic Acid</td><td>SAPC</td><td></td><td></td> </tr> </table>																None	NO	DI Water	H ₂ O	Cool	Cool	MeOH	Me	HCL	HC	HNO ₃	HN	H ₂ SO ₄	H ₂	NaOH	Na	H ₃ PO ₄	HP			NaHSO ₄	NABIS			Na ₂ S ₂ O ₃	NaSO ₃			Zn Acetate	+NaOH	Zn		NaOH+Ascorbic Acid	SAPC		
None	NO	DI Water	H ₂ O																																																
Cool	Cool	MeOH	Me																																																
HCL	HC	HNO ₃	HN																																																
H ₂ SO ₄	H ₂	NaOH	Na																																																
H ₃ PO ₄	HP																																																		
NaHSO ₄	NABIS																																																		
Na ₂ S ₂ O ₃	NaSO ₃																																																		
Zn Acetate	+NaOH	Zn																																																	
NaOH+Ascorbic Acid	SAPC																																																		

[illegible]

Total 200.7 / 6010 200.8 / 6020:

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

TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

Hg 1631 / 2451 / 7470 / 7471

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		9/2/22			
		10:16			



Environment Testing
Xenoco

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Chain of Custody

Work Order No:

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Page 1 of 1

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name:	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone:	432-310-4645	Email	Mjones@earthsys.net

Work Order Comments	
Program State of Project	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
Reporting Level II	☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD	☐ ADAPT ☐ Other ☐

Project Name		Cotton Draw Unit 604		Turn Around		ANALYSIS REQUEST												Preservative Codes			
Project Number	1264	☐ Routine	☒ Rush	Due Date	3 day	Pres. Code											None NO	DI Water H ₂ O			
Project Location																	Cool Cool	MeOH Me			
Sampler's Name	Ellis Pierce																HCL HC	HNO ₃ HN			
PO #.					TAT starts the day received by the lab if received by 4 30pm												H ₂ SO ₄ H ₂	NaOH Na			
SAMPLE RECEIPT		Temp Blank	Yes No	Yes No	Well Ice	Yes No	Parameters														
Samples Received Intact:		Yes No	Thermometer ID																		
Cooler Custody Seals		Yes No N/A	Correction Factor																		
Sample Custody Seals		Yes No N/A	Temperature Reading																		
Total Containers.			Corrected Temperature																		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont													Sample Comments	
HA-19		S	9/1/2022		0 - 0.5	Grab	1	X	X	X											
HA-19		S	9/1/2022		0.5 - 1	Grab	1	X													
HA-19		S	9/1/2022		1.5 - 2	Grab	1				X										
HA-19		S	9/1/2022		2.5 - 3	Grab	1			X											
HA-19		S	9/1/2022		3.5 - 4	Grab	1				X										
HA-20		S	9/1/2022		0 - 0.5	Grab	1	X	X	X											
HA-20		S	9/1/2022		0.5 - 1	Grab	1	X		X											
HA-20		S	9/1/2022		1.5 - 2	Grab	1	X													
HA-20		S	9/1/2022		2.5 - 3	Grab	1			X											
HA-20		S	9/1/2022		3.5 - 4	Grab	1				X										

(Notice: Signature of this document entails relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xeno.)

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/24/22			
		10.16			



Environmental Testing
Xenco

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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:

10709

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Project Manager	Mason Jones	Bill to, (if different)	Devon Energy - Dale
Company Name:	Earth Systems R&R	Company Name:	
Address:	4115 S CR 1297	Address	
City State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments										
Program State of Project	UST/PST	☐	PRP	☐	Brownfields	☐	RRC	☐	Superfund	☐
Reporting Level	Level II	☐	Level III	☐	PST/UST	☐	TRRP	☐	Level IV	☐
Deliverables	EDD	☐	ADAPT	☐	Other					

Project Name		Cotton Draw Unit 604		Turn Around		ANALYSIS REQUEST										Preservative Codes			
Project Number	1264	☐ Routine	☒ Rush	Due Date	3 day	Pres. Code											None NO	DI Water H ₂ O	
Project Location	Ellis Pierce			TAT starts the day received by the lab if received by 4:30pm													Cool Cool	MeOH Me	
Sampler's Name																	HCL HC	HNO ₃ HN	
PO #:																	H ₂ SO ₄ H ₂	NaOH Na	
SAMPLE RECEIPT				Temp Blank	Yes No	Wet Ice.	Yes No											H ₃ PO ₄ HP	
Samples Received Intact				Yes No	Thermometer ID											NaHSO ₄ NABIS			
Cooler Custody Seals.				Yes No	N/A	Correction Factor											Na ₂ S ₂ O ₃ NaSO ₃		
Sample Custody Seals				Yes No	N/A	Temperature Reading											Zn Acetate+NaOH Zn		
Total Containers				Corrected Temperature												NaOH+Ascorbic Acid SAPC			
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD							Sample Comments	
HA-21		S	9/1/2022		0 - 0.5	Grab	1	X	X	X									
HA-21		S	9/1/2022		0.5 - 1	Grab	1	X											
HA-21		S	9/1/2022		1.5 - 2	Grab	1				X								
HA-21		S	9/1/2022		2.5 - 3	Grab	1				X								
HA-21		S	9/1/2022		3.5 - 4	Grab	1				X								
HA-22		S	9/1/2022		0 - 0.5	Grab	1	X	X	X								Loc: 880	
HA-22		S	9/1/2022		0.5 - 1	Grab	1	X										18789	
HA-22		S	9/1/2022		1.5 - 2	Grab	1			X									
HA-22		S	9/1/2022		2.5 - 3	Grab	1			X									
HA-22		S	9/1/2022		3.5 - 4	Grab	1			X									

Circle Method(s) and Metal(s) to be analyzed	200.7 / 6010	200.8 / 6020:
TC1P / SPLP 6010	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
	8RCRA Sp As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/2/22			
		10:16			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-18789-1

SDG Number: 1264

Login Number: 18789

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-18789-2

Laboratory Sample Delivery Group: 1264
Client Project/Site: Cotton Draw Unit 604

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

Authorized for release by:
9/14/2022 11:54:43 AM

Brianna Teel, Project Manager
(432)704-5440

Brianna.Teel@et.eurofinsus.com

LINKS

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results through



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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-18789-2
SDG: 1264

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Qualifiers

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/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Job ID: 880-18789-2

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-18789-2

Receipt

The samples were received on 9/2/2022 10:16 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 5.8°C

GC Semi VOA

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: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-11

Lab Sample ID: 880-18789-32

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 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			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 11:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 11:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 11:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				09/13/22 08:23	09/13/22 11:49	1
o-Terphenyl	85		70 - 130				09/13/22 08:23	09/13/22 11:49	1

Client Sample ID: HA-12

Lab Sample ID: 880-18789-37

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.1		50.0		mg/Kg			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 12:10	1
Diesel Range Organics (Over C10-C28)	74.1		50.0		mg/Kg		09/13/22 08:23	09/13/22 12:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 12:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				09/13/22 08:23	09/13/22 12:10	1
o-Terphenyl	90		70 - 130				09/13/22 08:23	09/13/22 12:10	1

Client Sample ID: HA-15

Lab Sample ID: 880-18789-52

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Method: 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			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 12:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 12:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 12:31	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-15

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Lab Sample ID: 880-18789-52

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	09/13/22 08:23	09/13/22 12:31	1
o-Terphenyl	83		70 - 130	09/13/22 08:23	09/13/22 12:31	1

Client Sample ID: HA-16

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Lab Sample ID: 880-18789-57

Matrix: Solid

Method: 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			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 12:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 12:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 12:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				09/13/22 08:23	09/13/22 12:52	1
o-Terphenyl	85		70 - 130				09/13/22 08:23	09/13/22 12:52	1

Client Sample ID: HA-17

Date Collected: 09/01/22 00:00

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

Lab Sample ID: 880-18789-62

Matrix: Solid

Method: 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			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 13:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 13:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/13/22 08:23	09/13/22 13:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				09/13/22 08:23	09/13/22 13:13	1
o-Terphenyl	89		70 - 130				09/13/22 08:23	09/13/22 13:13	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-17

Lab Sample ID: 880-18789-63

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 1.5-2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		5.03		mg/Kg			09/13/22 18:26	1

Client Sample ID: HA-18

Lab Sample ID: 880-18789-67

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	79.1		50.0		mg/Kg			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 13:35	1
Diesel Range Organics (Over C10-C28)	79.1		50.0		mg/Kg		09/13/22 08:23	09/13/22 13:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 13:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				09/13/22 08:23	09/13/22 13:35	1
o-Terphenyl	83		70 - 130				09/13/22 08:23	09/13/22 13:35	1

Client Sample ID: HA-19

Lab Sample ID: 880-18789-72

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	115		50.0		mg/Kg			09/14/22 08:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 13:56	1
Diesel Range Organics (Over C10-C28)	115		50.0		mg/Kg		09/13/22 08:23	09/13/22 13:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 13:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				09/13/22 08:23	09/13/22 13:56	1
o-Terphenyl	82		70 - 130				09/13/22 08:23	09/13/22 13:56	1

Client Sample ID: HA-19

Lab Sample ID: 880-18789-73

Date Collected: 09/01/22 00:00

Matrix: Solid

Date Received: 09/02/22 10:16

Sample Depth: 1.5-2

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.0		4.97		mg/Kg			09/13/22 18:41	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-20
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16
Sample Depth: 0.5-1

Lab Sample ID: 880-18789-77
Matrix: Solid

Method: 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			09/14/22 08:52	1	

Method: 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 14:16	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 14:16	1	
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/13/22 08:23	09/13/22 14:16	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	88		70 - 130				09/13/22 08:23	09/13/22 14:16	1	
o-Terphenyl	93		70 - 130				09/13/22 08:23	09/13/22 14:16	1	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Method: 8015B NM - Diesel Range Organics (DRO) (GC)**Matrix: Solid****Prep Type: Total/NA**

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-18789-32	HA-11	80	85
880-18789-37	HA-12	83	90
880-18789-52	HA-15	79	83
880-18789-57	HA-16	79	85
880-18789-62	HA-17	81	89
880-18789-67	HA-18	80	83
880-18789-72	HA-19	78	82
880-18789-77	HA-20	88	93
890-2914-A-1-D MS	Matrix Spike	91	87
890-2914-A-1-E MSD	Matrix Spike Duplicate	95	91
LCS 880-34341/2-A	Lab Control Sample	74	84
LCSD 880-34341/3-A	Lab Control Sample Dup	79	88
MB 880-34341/1-A	Method Blank	102	114

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

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

Lab Sample ID: MB 880-34341/1-A

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34341

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 09:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 09:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/13/22 08:23	09/13/22 09:38	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/13/22 08:23	09/13/22 09:38	1
o-Terphenyl	114		70 - 130				09/13/22 08:23	09/13/22 09:38	1

Lab Sample ID: LCS 880-34341/2-A

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	948.0		mg/Kg		95	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	846.8		mg/Kg		85	70 - 130	
Surrogate	%Recovery	LCS Qualifier	Limits					
1-Chlorooctane	74		70 - 130					
o-Terphenyl	84		70 - 130					

Lab Sample ID: LCSD 880-34341/3-A

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34341

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	893.7		mg/Kg		89	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	800.1		mg/Kg		80	70 - 130	6	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	79		70 - 130						
o-Terphenyl	88		70 - 130						

Lab Sample ID: 890-2914-A-1-D MS

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	827.2		mg/Kg		80	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	738.7		mg/Kg		74	70 - 130	

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

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

Lab Sample ID: 890-2914-A-1-D MS

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34341

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	87		70 - 130

Lab Sample ID: 890-2914-A-1-E MSD

Matrix: Solid

Analysis Batch: 34338

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	867.5		mg/Kg		84	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	783.4		mg/Kg		78	70 - 130	6	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	91		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34307/1-A

Matrix: Solid

Analysis Batch: 34444

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/13/22 17:43	1

Lab Sample ID: LCS 880-34307/2-A

Matrix: Solid

Analysis Batch: 34444

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 880-34307/3-A

Matrix: Solid

Analysis Batch: 34444

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	241.5		mg/Kg		97	90 - 110	2	20

Lab Sample ID: 880-19129-A-5-C MS

Matrix: Solid

Analysis Batch: 34444

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	86.6		250	350.3		mg/Kg		106	90 - 110

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-19129-A-5-D MSD					Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 34444												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	86.6		250	349.4		mg/Kg		105	90 - 110	0	20	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

GC Semi VOA

Analysis Batch: 34338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-32	HA-11	Total/NA	Solid	8015B NM	34341
880-18789-37	HA-12	Total/NA	Solid	8015B NM	34341
880-18789-52	HA-15	Total/NA	Solid	8015B NM	34341
880-18789-57	HA-16	Total/NA	Solid	8015B NM	34341
880-18789-62	HA-17	Total/NA	Solid	8015B NM	34341
880-18789-67	HA-18	Total/NA	Solid	8015B NM	34341
880-18789-72	HA-19	Total/NA	Solid	8015B NM	34341
880-18789-77	HA-20	Total/NA	Solid	8015B NM	34341
MB 880-34341/1-A	Method Blank	Total/NA	Solid	8015B NM	34341
LCS 880-34341/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34341
LCSD 880-34341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34341
890-2914-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	34341
890-2914-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34341

Prep Batch: 34341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-32	HA-11	Total/NA	Solid	8015NM Prep	
880-18789-37	HA-12	Total/NA	Solid	8015NM Prep	
880-18789-52	HA-15	Total/NA	Solid	8015NM Prep	
880-18789-57	HA-16	Total/NA	Solid	8015NM Prep	
880-18789-62	HA-17	Total/NA	Solid	8015NM Prep	
880-18789-67	HA-18	Total/NA	Solid	8015NM Prep	
880-18789-72	HA-19	Total/NA	Solid	8015NM Prep	
880-18789-77	HA-20	Total/NA	Solid	8015NM Prep	
MB 880-34341/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34341/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34341/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2914-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2914-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-32	HA-11	Total/NA	Solid	8015 NM	
880-18789-37	HA-12	Total/NA	Solid	8015 NM	
880-18789-52	HA-15	Total/NA	Solid	8015 NM	
880-18789-57	HA-16	Total/NA	Solid	8015 NM	
880-18789-62	HA-17	Total/NA	Solid	8015 NM	
880-18789-67	HA-18	Total/NA	Solid	8015 NM	
880-18789-72	HA-19	Total/NA	Solid	8015 NM	
880-18789-77	HA-20	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-63	HA-17	Soluble	Solid	DI Leach	
880-18789-73	HA-19	Soluble	Solid	DI Leach	
MB 880-34307/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34307/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34307/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19129-A-5-C MS	Matrix Spike	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

HPLC/IC (Continued)

Leach Batch: 34307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19129-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-63	HA-17	Soluble	Solid	300.0	34307
880-18789-73	HA-19	Soluble	Solid	300.0	34307
MB 880-34307/1-A	Method Blank	Soluble	Solid	300.0	34307
LCS 880-34307/2-A	Lab Control Sample	Soluble	Solid	300.0	34307
LCSD 880-34307/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34307
880-19129-A-5-C MS	Matrix Spike	Soluble	Solid	300.0	34307
880-19129-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34307

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-11**Lab Sample ID: 880-18789-32****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 11:49	SM	EET MID

Client Sample ID: HA-12**Lab Sample ID: 880-18789-37****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 12:10	SM	EET MID

Client Sample ID: HA-15**Lab Sample ID: 880-18789-52****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 12:31	SM	EET MID

Client Sample ID: HA-16**Lab Sample ID: 880-18789-57****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 12:52	SM	EET MID

Client Sample ID: HA-17**Lab Sample ID: 880-18789-62****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 13:13	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Client Sample ID: HA-17**Lab Sample ID: 880-18789-63****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	34307	09/13/22 09:32	KS	EET MID
Soluble	Analysis	300.0		1			34444	09/13/22 18:26	CH	EET MID

Client Sample ID: HA-18**Lab Sample ID: 880-18789-67****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 13:35	SM	EET MID

Client Sample ID: HA-19**Lab Sample ID: 880-18789-72****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 13:56	SM	EET MID

Client Sample ID: HA-19**Lab Sample ID: 880-18789-73****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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	34307	09/13/22 09:32	KS	EET MID
Soluble	Analysis	300.0		1			34444	09/13/22 18:41	CH	EET MID

Client Sample ID: HA-20**Lab Sample ID: 880-18789-77****Date Collected: 09/01/22 00:00****Matrix: Solid****Date Received: 09/02/22 10:16**

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			34446	09/14/22 08:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34341	09/13/22 08:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34338	09/13/22 14:16	SM	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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: Cotton Draw Unit 604

Job ID: 880-18789-2
SDG: 1264

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18789-32	HA-11	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-37	HA-12	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-52	HA-15	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-57	HA-16	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-62	HA-17	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-63	HA-17	Solid	09/01/22 00:00	09/02/22 10:16	1.5-2
880-18789-67	HA-18	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-72	HA-19	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1
880-18789-73	HA-19	Solid	09/01/22 00:00	09/02/22 10:16	1.5-2
880-18789-77	HA-20	Solid	09/01/22 00:00	09/02/22 10:16	0.5-1

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

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-18789-2

SDG Number: 1264

Login Number: 18789

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing
America

ANALYTICAL REPORT

Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Tel: (432)704-5440

Laboratory Job ID: 880-18789-3

Laboratory Sample Delivery Group: 1264
Client Project/Site: Cotton Draw Unit 604
Revision: 1

For:

Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Attn: Kris Williams

Authorized for release by:
9/16/2022 7:57:25 AM

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

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

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

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-18789-3
SDG: 1264

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Job ID: 880-18789-3

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-18789-3

REVISION

The report being provided is a revision of the original report sent on 9/15/2022. The report (revision 1) is being revised due to Needed to correct report to show only TPH results.

Report revision history

Receipt

The samples were received on 9/2/2022 10:16 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 5.8°C

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-34554 and analytical batch 880-34548 was outside the upper control limits.

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

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Client Sample ID: HA-19
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16
Sample Depth: 1.5-2

Lab Sample ID: 880-18789-73
Matrix: Solid

Method: 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			09/15/22 17:29	1	

Method: 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		09/15/22 08:44	09/15/22 11:43	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 11:43	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 11:43	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	107		70 - 130				09/15/22 08:44	09/15/22 11:43	1	
o-Terphenyl	114		70 - 130				09/15/22 08:44	09/15/22 11:43	1	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-18789-73	HA-19	107	114
890-2943-A-29-E MS	Matrix Spike	102	98
890-2943-A-29-F MSD	Matrix Spike Duplicate	102	97
LCS 880-34554/2-A	Lab Control Sample	101	118
LCSD 880-34554/3-A	Lab Control Sample Dup	100	117
MB 880-34554/1-A	Method Blank	133 S1+	150 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

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

Lab Sample ID: MB 880-34554/1-A

Matrix: Solid

Analysis Batch: 34548

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34554

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/15/22 08:44	09/15/22 09:19	1

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

Lab Sample ID: LCS 880-34554/2-A

Matrix: Solid

Analysis Batch: 34548

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34554

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

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

Lab Sample ID: LCSD 880-34554/3-A

Matrix: Solid

Analysis Batch: 34548

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34554

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

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

Lab Sample ID: 890-2943-A-29-E MS

Matrix: Solid

Analysis Batch: 34548

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34554

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

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

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

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

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

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

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

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1078		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	176		999	1034		mg/Kg		86	70 - 130	1	20

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

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

GC Semi VOA

Analysis Batch: 34548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-73	HA-19	Total/NA	Solid	8015B NM	34554
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015B NM	34554
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34554
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34554
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34554
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34554

Prep Batch: 34554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-73	HA-19	Total/NA	Solid	8015NM Prep	
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18789-73	HA-19	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Client Sample ID: HA-19
Date Collected: 09/01/22 00:00
Date Received: 09/02/22 10:16

Lab Sample ID: 880-18789-73
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34617	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 11:43	SM	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: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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

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Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-18789-3
SDG: 1264

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-18789-73	HA-19	Solid	09/01/22 00:00	09/02/22 10:16	1.5-2

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Environment Testing
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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

Work Order No:

181881

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Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Dale
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone	432-310-4945	Email	Mjones@earthsys.net

Work Order Comments	
Program	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes								
Project Number	1264	☐ Routine ☒ Rush																		None NO	DI Water H ₂ O							
Project Location		Due Date	3 Day																	Cool Cool	MeOH Me							
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab, if received by 4 30pm																		HCL HC	HNO ₃ HN							
PO #																				H ₂ SO ₄ H ₂	NaOH Na							
SAMPLE RECEIPT				Temp Blank		Yes	No	Wet Ice	Yes	No																	H ₃ PO ₄ HP	
Samples Received Intact				Thermometer ID																						NaHSO ₄ NABIS		
Cooler Custody Seals				Correction Factor																						Na ₂ S ₂ O ₃ NaSO ₃		
Sample Custody Seals				Temperature Reading		5.6																				Zn Acetate+NaOH Zn		
Total Containers				Corrected Temperature		5.6																				NaOH+Ascorbic Acid SAPC		
Sample Identification				Matrix	Date Sampled	Time Sampled	Depth	Grab Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD													Sample Comments		
				HA-5	S	9/1/2022		0 - 0.5	Grab 1	X	X	X																
				HA-5	S	9/1/2022		0.5 - 1	Grab 1	X																		
				HA-5	S	9/1/2022		1.5 - 2	Grab 1																			
				HA-5	S	9/1/2022		2.5 - 3	Grab 1																			
				HA-5	S	9/1/2022		3.5 - 4	Grab 1																			
				HA-6	S	9/1/2022		0.5 - 1	Grab 1	X	X																	
				HA-6	S	9/1/2022		1.5 - 2	Grab 1																			
				HA-6	S	9/1/2022		2.5 - 3	Grab 1																			
				HA-6	S	9/1/2022		3.5 - 4	Grab 1																			

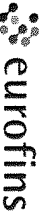


880-18789 Chain of Custody

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/21/22			
		10:16			



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Hobbs, NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 107189

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Project Manager:	Mason Jones	Bill to, (if different):	Devon Energy - Date
Company Name:	Earth Systems R&R	Company Name:	
Address:	4115 S CR 1297	Address:	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone:	432-310-4945	Email:	Mjones@earthsys.net

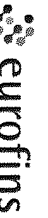
Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables EDO ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Pres. Code	ANALYSIS REQUEST										Preservative Codes					
Project Number:	1264	Due Date	3 day												None NO DI Water- H ₂ O					
Project Location	Ellis Pierce	TAT starts the day received by the lab, if received by 4 30pm													Cool Cool MeOH Me					
Sampler's Name	Ellis Pierce														HCL HC HNO ₃ HN					
PO #:		Temp Blank.	Yes No	Wet Ice	Yes No											H ₂ SO ₄ H ₂ NaOH Na				
SAMPLE RECEIPT		Samples Received Intact:	Yes No	Thermometer ID:												H ₃ PO ₄ HP				
		Cooler Custody Seals	Yes No	Correction Factor												NaHSO ₄ NABIS				
		Sample Custody Seals	Yes No	Temperature Reading												Na ₂ S ₂ O ₃ NaSO ₃				
Total Containers		Corrected Temperature														Zn Acetate+NaOH Zn				
																NaOH+Ascorbic Acid SAPC				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD	Sample Comments									
HA-7	S	9/1/2022		0 - 0.5	Grab	1	X	X	X											
HA-7	S	9/1/2022		0.5 - 1	Grab	1	X													
HA-7	S	9/1/2022		1.5 - 2	Grab	1				X										
HA-7	S	9/1/2022		2.5 - 3	Grab	1				X										
HA-7	S	9/1/2022		3.5 - 4	Grab	1				X										
HA-8	S	9/1/2022		0 - 0.5	Grab	1	X	X												
HA-8	S	9/1/2022		0.5 - 1	Grab	1	X													
HA-8	S	9/1/2022		1.5 - 2	Grab	1				X										
HA-8	S	9/1/2022		2.5 - 3	Grab	1				X										
HA-8	S	9/1/2022		3.5 - 4	Grab	1	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 TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/21/22			2
		10:16			4
					6



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Work Order No: 187891

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Project Manager	Mason Jones	Bill to: (if different)	Devon Energy	Date
Company Name	Earth Systems R&R	Company Name:		
Address	4115 S CR 1297	Address		
City, State ZIP	Odessa, Texas 79765	City, State ZIP		
Phone	432-310-4945	Email	MJones@earthsys.net	

Program UST/PRST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	Deliverables EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Pres. Code	ANALYSIS REQUEST																
Project Number	1264	Due Date	3 day																		
Project Location	Ellis Pierce	TAT starts the day received by the lab, if received by 4:30pm																			
Sampler's Name																					
PO #																					
SAMPLE RECEIPT		Temp Blank	Yes No	Thermometer ID																	
Samples Received Intact:		Yes No	Correction Factor																		
Cooler Custody Seals		Yes No	Temperature Reading																		
Sample Custody Seals		Yes No	Corrected Temperature																		
Total Containers																					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD											Preservative Codes
HA-9	S	9/1/2022		0 - 0.5	Grab	1	X	X	X								None NO	DI Water H ₂ O			
HA-9	S	9/1/2022		0.5 - 1	Grab	1	X										Cool Cool	MeOH Me			
HA-9	S	9/1/2022		1.5 - 2	Grab	1											HCL HC	HNO ₃ HN			
HA-9	S	9/1/2022		2.5 - 3	Grab	1											H ₂ SO ₄ H ₂	NaOH Na			
HA-9	S	9/1/2022		3.5 - 4	Grab	1											H ₃ PO ₄ HP				
HA-10	S	9/1/2022		0 - 0.5	Grab	1	X	X									NaHSO ₄ NABIS				
HA-10	S	9/1/2022		0.5 - 1	Grab	1	X										Na ₂ S ₂ O ₃ NaSO ₃				
HA-10	S	9/1/2022		1.5 - 2	Grab	1											Zn Acetate+NaOH Zn				
HA-10	S	9/1/2022		2.5 - 3	Grab	1											NaOH+Ascorbic Acid SAPC				
HA-10	S	9/1/2022		3.5 - 4	Grab	1															

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 SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/2/22			2
		10.16			4
					6



Environment Testing
Xenco

Chain of Custody

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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

Work Order No: 18789

www.xenco.com Page 4 of 9

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Dale
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas 79765	City State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments	
Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other	

Project Name	Cotton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Pres. Code		ANALYSIS REQUEST													Preservative Codes							
Project Number	1264	Due Date	3 day																None NO	DI Water H ₂ O						
Project Location																			Cool Cool	MeOH Me						
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																		HCL HC	HNO ₃ HN					
PO #																			H ₂ SO ₄ H ₂	NaOH Na						
SAMPLE RECEIPT		Temp Blank	Yes No	Wet Ice	Yes No														H ₃ PO ₄ HP							
Samples Received Intact		Yes No	Thermometer ID																NaHSO ₄ NABIS							
Cooler Custody Seals		Yes No	Correction Factor																Na ₂ S ₂ O ₃ NaSO ₃							
Sample Custody Seals		Yes No	Temperature Reading																Zn Acetate+NaOH Zn							
Total Containers			Corrected Temperature																NaOH+Ascorbic Acid SAPC							
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD														Sample Comments	
HA-11		S	9/1/2022		0 - 0.5	Grab	1	X	X	X																
HA-11		S	9/1/2022		0.5 - 1	Grab	1	X																		
HA-11		S	9/1/2022		1.5 - 2	Grab	1				X															
HA-11		S	9/1/2022		2.5 - 3	Grab	1				X															
HA-11		S	9/1/2022		3.5 - 4	Grab	1				X															
HA-12		S	9/1/2022		0 - 0.5	Grab	1	X	X	X																
HA-12		S	9/1/2022		0.5 - 1	Grab	1	X																		
HA-12		S	9/1/2022		1.5 - 2	Grab	1				X															
HA-12		S	9/1/2022		2.5 - 3	Grab	1				X															
HA-12		S	9/1/2022		3.5 - 4	Grab	1				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 TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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		9/2/22			2
		10:16			4
					6



Environment Testing
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Work Order No:

18789

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Page

5 of 9

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments	
Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project	
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables EDD ☐ ADAPT ☐ Other	

Project Name	Cotton Draw Unit 604	Turn Around	Pass Code	ANALYSIS REQUEST																Preservative Codes							
Project Number	1264	☐ Routine ☒ Rush																		None NO	DI Water H ₂ O						
Project Location		Due Date	3 day																	Cool Cool	MeOH Me						
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																		HCL HC	HNO ₃ HN						
PO #																				H ₂ SO ₄ H ₂	NaOH Na						
SAMPLE RECEIPT				Temp Blank	Yes No	Wet Ice	Yes No																	H ₃ PO ₄ HP			
Samples Received Intact				Yes No	Thermometer ID																	NaHSO ₄ NABIS					
Cooler Custody Seals				Yes No	Correction Factor																	Na ₂ S ₂ O ₃ NaSO ₃					
Sample Custody Seals				Yes No	Temperature Reading																	Zn Acetate+NaOH Zn					
Total Containers				Corrected Temperature																	NaOH+Ascorbic Acid SAPC						
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters																Sample Comments			
HA-13		S	9/1/2022		0-0.5	Grab	1	Chlorides	300																		
HA-13		S	9/1/2022		0.5-1	Grab	1	TPH 8015																			
HA-13		S	9/1/2022		1.5-2	Grab	1	BTEX	80213																		
HA-13		S	9/1/2022		2.5-3	Grab	1	HOLD																			
HA-13		S	9/1/2022		3.5-4	Grab	1																				
HA-13		S	9/1/2022		0-0.5	Grab	1																				
HA-14		S	9/1/2022		0.5-1	Grab	1																				
HA-14		S	9/1/2022		1.5-2	Grab	1																				
HA-14		S	9/1/2022		2.5-3	Grab	1																				
HA-14		S	9/1/2022		3.5-4	Grab	1																				

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/2/22			2
		10:16			4
					6



Environment Testing
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Chain of Custody

Work Order No: 161891

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Project Manager	Mason Jones	Bill to (if different)	Devon Energy	Date
Company Name	Earth Systems R&R	Company Name:		
Address	4115 S CR 1297	Address		
City State ZIP	Odessa, Texas 79765	City State ZIP		
Phone	432-310-4945	Email	Mjones@earthsys.net	

Work Order Comments	
Program	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	Pres. Code	ANALYSIS REQUEST																
Project Number	1264	☐ Routine ☒ Rush																		
Project Location		Due Date	3 day																	
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm																		
PO #																				
SAMPLE RECEIPT				Temp Blank	Yes	No	Wet Ice	Yes	No	Parameters										
Samples Received Intact:				Yes	No	Thermometer ID														
Cooler Custody Seals				Yes	No	Correction Factor														
Sample Custody Seals				Yes	No	Temperature Reading														
Total Containers						Corrected Temperature														
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD							Sample Comments			
HA-15	S	9/1/2022		0-0.5	Grab	1	X	X	X											
HA-15	S	9/1/2022		0.5-1	Grab	1	X													
HA-15	S	9/1/2022		1.5-2	Grab	1				X										
HA-15	S	9/1/2022		2.5-3	Grab	1				X										
HA-15	S	9/1/2022		3.5-4	Grab	1				X										
HA-16	S	9/1/2022		0-0.5	Grab	1	X	X	X											
HA-16	S	9/1/2022		0.5-1	Grab	1	X													
HA-16	S	9/1/2022		1.5-2	Grab	1				X										
HA-16	S	9/1/2022		2.5-3	Grab	1				X										
HA-16	S	9/1/2022		3.5-4	Grab	1	X			X										

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg 1631 / 2451 / 7470 / 7471

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		10:16			4
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Chain of Custody

Work Order No: 1010

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Project Manager	Mason Jones	Bill to: (if different)	Devon Energy	Date
Company Name	Earth Systems R&R	Company Name		
Address	4115 S CR 1297	Address		
City, State ZIP	Odessa, Texas, 79765	City, State ZIP		
Phone	432-310-4945	Email	Mjones@earthsys.net	

Work Order Comments

Program UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project.

Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables EDD ☐ ADAPT ☐ Other: _____

Project Name		Cotton Draw Unit 804		Turn Around	
Project Number		1264		☐ Routine ☒ Rush	
Project Location				Due Date 3 day	
Sampler's Name		Ellis Pierce		TAT starts the day received by the lab, if received by 4 30pm	
PO #					
SAMPLE RECEIPT		Temp Blank	Yes	No	Yes
Samples Received Intact:		Yes	No	Thermometer ID	
Cooler Custody Seals		Yes	No	N/A	Correction Factor
Sample Custody Seals		Yes	No	N/A	Temperature Reading
Total Containers.				Corrected Temperature.	
Parameters					
Pres. Code					
300					
5					
802113					
ANALYSIS REQUEST					
Preservative Codes					
None		NO		DI Water H ₂ O	
Cool		Cool		MeOH Me	
HCL		HC		HNO ₃ HN	
H ₂ SO ₄		H ₂		NaOH Na	
H ₃ PO ₄		HP			
NaHSO ₄		NABIS			
Na ₂ S ₂ O ₅		NaSO ₃			
Zn Acetate+NaOH		Zn			
NaOH+Ascorbic Acid		SAPC			

[illegible]

Total 200.7 / 6010 200.8 / 6020:

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

TCLP/SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

Hg 1631 / 2451 / 7470 / 7471

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		9/2/22			
		10:16			



Environment Testing
Xenoco

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Hobbs, NM (575) 392-7550 Carlsbad NM (575) 988-3199

Chain of Custody

Work Order No:

www.xenco.com

Page 1 of 1

Project Manager	Mason Jones	Bill to (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name:	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas, 79765	City State ZIP	
Phone:	432.310.4645	Email	MJones@earthsys.net

Work Order Comments	
Program	UST/ST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level II	☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other ☐

Project Name		Cotton Draw Unit 604		Turn Around		ANALYSIS REQUEST										Preservative Codes			
Project Number	1264	☐ Routine	☒ Rush	Due Date	3 day	Pres. Code										None NO	DI Water H ₂ O		
Project Location																Cool Cool	MeOH Me		
Sampler's Name	Ellis Pierce															HCL HC	HNO ₃ HN		
PO #					TAT starts the day received by the lab if received by 4 30pm											H ₂ SO ₄ H ₂	NaOH Na		
SAMPLE RECEIPT		Temp Blank	Yes No	Yes No	Well Ice	Yes No	Parameters												
Samples Received Intact:		Yes No	Thermometer ID																
Cooler Custody Seals		Yes No N/A	Correction Factor																
Sample Custody Seals		Yes No N/A	Temperature Reading																
Total Containers.			Corrected Temperature																
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont											Sample Comments	
HA-19		S	9/1/2022		0 - 0.5	Grab	1	X	X	X									
HA-19		S	9/1/2022		0.5 - 1	Grab	1	X											
HA-19		S	9/1/2022		1.5 - 2	Grab	1				X								
HA-19		S	9/1/2022		2.5 - 3	Grab	1			X									
HA-19		S	9/1/2022		3.5 - 4	Grab	1				X								
HA-20		S	9/1/2022		0 - 0.5	Grab	1	X	X	X									
HA-20		S	9/1/2022		0.5 - 1	Grab	1	X											
HA-20		S	9/1/2022		1.5 - 2	Grab	1					X							
HA-20		S	9/1/2022		2.5 - 3	Grab	1				X								
HA-20		S	9/1/2022		3.5 - 4	Grab	1			X									

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/24/22			
		10.16			



Environment Testing
Xenco

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Midland TX (432) 704-5440 San Antonio TX (210) 508-3334
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:

18789

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Page 9 of 9

Project Manager	Mason Jones	Bill to: (if different)	Devon Energy - Date
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City/State/Zip	Odessa, Texas, 79765	City/State/Zip	
Phone	432-310-4945	Email	MJones@earthsys.net

Work Order Comments	
Program	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project	
Reporting Level	Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables	EDD ☐ ADAPT ☐ Other

Project Name	Cotton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes						
Project Number	1264					None NO	DI Water	H ₂ O																				
Project Location		Due Date	3 day			Cool Cool	MeOH	Me																				
Sampler's Name	Ellis Pierce	TAT starts the day received by the lab if received by 4:30pm				HCL	HC	HNO ₃	HN																			
PO #		Temp Blank	Yes No	Wet Ice	Yes No	H ₂ SO ₄	H ₂	NaOH	Na																			
SAMPLE RECEIPT						H ₃ PO ₄	HP																					
Samples Received Intact	Yes No	Thermometer ID				NaHSO ₄	NABIS																					
Cooler Custody Seals	Yes No N/A	Correction Factor				Na ₂ S ₂ O ₃	NaSO ₃																					
Sample Custody Seals	Yes No N/A	Temperature Reading				Zn Acetate+NaOH	Zn																					
Total Containers		Corrected Temperature				NaOH+Ascorbic Acid	SAPC																					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chlorides	TPH 8015	BTEX	HOLD																		
HA-21	S	9/1/2022		0-0.5	Grab	1	X	X	X																			
HA-21	S	9/1/2022		0.5-1	Grab	1	X																					
HA-21	S	9/1/2022		1.5-2	Grab	1																						
HA-21	S	9/1/2022		2.5-3	Grab	1																						
HA-21	S	9/1/2022		3.5-4	Grab	1																						
HA-22	S	9/1/2022		0-0.5	Grab	1	X																					
HA-22	S	9/1/2022		0.5-1	Grab	1	X																					
HA-22	S	9/1/2022		1.5-2	Grab	1																						
HA-22	S	9/1/2022		2.5-3	Grab	1																						
HA-22	S	9/1/2022		3.5-4	Grab	1																						

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed: 8RCRA 13PFM 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
TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

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Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
		9/2/22			2
		10:16			4
					6

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-18789-3

SDG Number: 1264

Login Number: 18789

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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



Environment Testing

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- 3
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- 14

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/26/2024 10:54:34 AM

JOB DESCRIPTION

Cotton Draw Unit 604

JOB NUMBER

880-45187-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



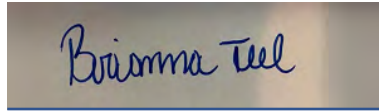
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Job Notes

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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Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-45187-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project: Cotton Draw Unit 604

Job ID: 880-45187-1

Job ID: 880-45187-1

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Job Narrative 880-45187-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt

The samples were received on 6/24/2024 4:25 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 30.5°C.

Receipt Exceptions

The following sample(s) was received at the laboratory outside the required temperature criteria. There was no cooling media present in the cooler.

The following samples were received and analyzed from an unpreserved bulk soil jar: SP-1 (880-45187-1) and SP-2 (880-45187-2).

GC VOA

Method 8021B: The following sample was diluted due to the nature of the sample matrix: (880-45187-A-1-B MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SP-2 (880-45187-2). 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-83848 and analytical batch 880-84032 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SP-1 (880-45187-1), SP-2 (880-45187-2) and (MB 880-83848/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-84085 and analytical batch 880-84101 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Client Sample ID: SP-1

Lab Sample ID: 880-45187-1

Date Collected: 06/24/24 00:00

Matrix: Solid

Date Received: 06/24/24 16:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		06/25/24 08:13	06/25/24 12:08	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		06/25/24 08:13	06/25/24 12:08	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		06/25/24 08:13	06/25/24 12:08	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		06/25/24 08:13	06/25/24 12:08	1
o-Xylene	<0.00199	U F1	0.00199		mg/Kg		06/25/24 08:13	06/25/24 12:08	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		06/25/24 08:13	06/25/24 12:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	06/25/24 08:13	06/25/24 12:08	1
1,4-Difluorobenzene (Surr)	90		70 - 130	06/25/24 08:13	06/25/24 12:08	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			06/25/24 12:08	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			06/25/24 14:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/21/24 13:24	06/25/24 14:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/21/24 13:24	06/25/24 14:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/21/24 13:24	06/25/24 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	06/21/24 13:24	06/25/24 14:55	1
o-Terphenyl	132	S1+	70 - 130	06/21/24 13:24	06/25/24 14:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	140		5.00		mg/Kg			06/25/24 19:28	1

Client Sample ID: SP-2

Lab Sample ID: 880-45187-2

Date Collected: 06/24/24 00:00

Matrix: Solid

Date Received: 06/24/24 16:25

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		06/25/24 08:13	06/25/24 12:28	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/25/24 08:13	06/25/24 12:28	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/25/24 08:13	06/25/24 12:28	1
m-Xylene & p-Xylene	0.00446		0.00402		mg/Kg		06/25/24 08:13	06/25/24 12:28	1
o-Xylene	0.00244		0.00201		mg/Kg		06/25/24 08:13	06/25/24 12:28	1
Xylenes, Total	0.00690		0.00402		mg/Kg		06/25/24 08:13	06/25/24 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	06/25/24 08:13	06/25/24 12:28	1
1,4-Difluorobenzene (Surr)	113		70 - 130	06/25/24 08:13	06/25/24 12:28	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Client Sample ID: SP-2
Date Collected: 06/24/24 00:00
Date Received: 06/24/24 16:25

Lab Sample ID: 880-45187-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	0.00690		0.00402		mg/Kg			06/25/24 12:28	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			06/25/24 15:16	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		06/21/24 13:24	06/25/24 15:16	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/24 13:24	06/25/24 15:16	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/21/24 13:24	06/25/24 15:16	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	120		70 - 130				06/21/24 13:24	06/25/24 15:16	1	
o-Terphenyl	144	S1+	70 - 130				06/21/24 13:24	06/25/24 15:16	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	106		5.00		mg/Kg			06/25/24 19:45	1	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Method: 8021B - Volatile Organic Compounds (GC)
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-45187-1	SP-1	102	90
880-45187-1 MS	SP-1	94	96
880-45187-1 MSD	SP-1	96	85
880-45187-2	SP-2	147 S1+	113
LCS 880-84040/1-A	Lab Control Sample	92	98
LCSD 880-84040/2-A	Lab Control Sample Dup	94	95
MB 880-84040/5-A	Method Blank	99	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)
880-45187-1	SP-1	113	132 S1+
880-45187-2	SP-2	120	144 S1+
890-6841-A-12-B MS	Matrix Spike	97	98
890-6841-A-12-C MSD	Matrix Spike Duplicate	96	98
LCS 880-83848/2-A	Lab Control Sample	125	133 S1+
LCSD 880-83848/3-A	Lab Control Sample Dup	121	132 S1+
MB 880-83848/1-A	Method Blank	129	148 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84040/5-A

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/25/24 08:13	06/25/24 11:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/25/24 08:13	06/25/24 11:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/25/24 08:13	06/25/24 11:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/25/24 08:13	06/25/24 11:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/25/24 08:13	06/25/24 11:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/25/24 08:13	06/25/24 11:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/25/24 08:13	06/25/24 11:46	1
1,4-Difluorobenzene (Surr)	85		70 - 130	06/25/24 08:13	06/25/24 11:46	1

Lab Sample ID: LCS 880-84040/1-A

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09856		mg/Kg		99	70 - 130
Toluene	0.100	0.08872		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.08728		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	0.200	0.1787		mg/Kg		89	70 - 130
o-Xylene	0.100	0.09298		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-84040/2-A

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09187		mg/Kg		92	70 - 130	7	35
Toluene	0.100	0.08264		mg/Kg		83	70 - 130	7	35
Ethylbenzene	0.100	0.08115		mg/Kg		81	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1663		mg/Kg		83	70 - 130	7	35
o-Xylene	0.100	0.08654		mg/Kg		87	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-45187-1 MS

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: SP-1

Prep Type: Total/NA

Prep Batch: 84040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.0996	0.09032		mg/Kg		91	70 - 130
Toluene	<0.00199	U F1	0.0996	0.08109		mg/Kg		81	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

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

Lab Sample ID: 880-45187-1 MS

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: SP-1

Prep Type: Total/NA

Prep Batch: 84040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F1	0.0996	0.07904		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1619		mg/Kg		81	70 - 130
o-Xylene	<0.00199	U F1	0.0996	0.08441		mg/Kg		85	70 - 130
Surrogate	%Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	94		70 - 130						
1,4-Difluorobenzene (Surr)	96		70 - 130						

Lab Sample ID: 880-45187-1 MSD

Matrix: Solid

Analysis Batch: 84036

Client Sample ID: SP-1

Prep Type: Total/NA

Prep Batch: 84040

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00398	U F1	0.202	<0.00403	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	96		70 - 130								
1,4-Difluorobenzene (Surr)	85		70 - 130								

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

Lab Sample ID: MB 880-83848/1-A

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 83848

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		06/21/24 13:23	06/25/24 08:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/21/24 13:23	06/25/24 08:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/21/24 13:23	06/25/24 08:22	1
Surrogate	%Recovery	MB Qualifier	MB Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130				06/21/24 13:23	06/25/24 08:22	1
o-Terphenyl	148	S1+	70 - 130				06/21/24 13:23	06/25/24 08:22	1

Lab Sample ID: LCS 880-83848/2-A

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 83848

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	989.7		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	969.8		mg/Kg		97	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

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

Lab Sample ID: LCS 880-83848/2-A

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 83848

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	133	S1+	70 - 130

Lab Sample ID: LCSD 880-83848/3-A

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 83848

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1197		mg/Kg		120	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	1000	942.3		mg/Kg		94	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	132	S1+	70 - 130

Lab Sample ID: 890-6841-A-12-B MS

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 83848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	995	509.5	F1	mg/Kg		49	70 - 130
Diesel Range Organics (Over C10-C28)	292	F1	995	753.0	F1	mg/Kg		46	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-6841-A-12-C MSD

Matrix: Solid

Analysis Batch: 84032

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 83848

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	995	516.4	F1	mg/Kg		50	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	292	F1	995	757.7	F1	mg/Kg		47	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	98		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84085/1-A Matrix: Solid Analysis Batch: 84101										Client Sample ID: Method Blank Prep Type: Soluble	
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<5.00	U	5.00		mg/Kg			06/25/24 18:37	1		

Lab Sample ID: LCS 880-84085/2-A Matrix: Solid Analysis Batch: 84101										Client Sample ID: Lab Control Sample Prep Type: Soluble	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.3		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-84085/3-A Matrix: Solid Analysis Batch: 84101										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	244.2		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-45215-A-21-C MS Matrix: Solid Analysis Batch: 84101										Client Sample ID: Matrix Spike Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	233	F1	252	456.7	F1	mg/Kg		89	90 - 110		

Lab Sample ID: 880-45215-A-21-D MSD Matrix: Solid Analysis Batch: 84101										Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	233	F1	252	455.6	F1	mg/Kg		88	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

GC VOA

Analysis Batch: 84036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	8021B	84040
880-45187-2	SP-2	Total/NA	Solid	8021B	84040
MB 880-84040/5-A	Method Blank	Total/NA	Solid	8021B	84040
LCS 880-84040/1-A	Lab Control Sample	Total/NA	Solid	8021B	84040
LCSD 880-84040/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84040
880-45187-1 MS	SP-1	Total/NA	Solid	8021B	84040
880-45187-1 MSD	SP-1	Total/NA	Solid	8021B	84040

Prep Batch: 84040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	5035	
880-45187-2	SP-2	Total/NA	Solid	5035	
MB 880-84040/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84040/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84040/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45187-1 MS	SP-1	Total/NA	Solid	5035	
880-45187-1 MSD	SP-1	Total/NA	Solid	5035	

Analysis Batch: 84213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	Total BTEX	
880-45187-2	SP-2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 83848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	8015NM Prep	
880-45187-2	SP-2	Total/NA	Solid	8015NM Prep	
MB 880-83848/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-83848/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-83848/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6841-A-12-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6841-A-12-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	8015B NM	83848
880-45187-2	SP-2	Total/NA	Solid	8015B NM	83848
MB 880-83848/1-A	Method Blank	Total/NA	Solid	8015B NM	83848
LCS 880-83848/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	83848
LCSD 880-83848/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	83848
890-6841-A-12-B MS	Matrix Spike	Total/NA	Solid	8015B NM	83848
890-6841-A-12-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	83848

Analysis Batch: 84158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Total/NA	Solid	8015 NM	
880-45187-2	SP-2	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

HPLC/IC

Leach Batch: 84085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Soluble	Solid	DI Leach	
880-45187-2	SP-2	Soluble	Solid	DI Leach	
MB 880-84085/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84085/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84085/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45215-A-21-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-45215-A-21-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 84101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45187-1	SP-1	Soluble	Solid	300.0	84085
880-45187-2	SP-2	Soluble	Solid	300.0	84085
MB 880-84085/1-A	Method Blank	Soluble	Solid	300.0	84085
LCS 880-84085/2-A	Lab Control Sample	Soluble	Solid	300.0	84085
LCSD 880-84085/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84085
880-45215-A-21-C MS	Matrix Spike	Soluble	Solid	300.0	84085
880-45215-A-21-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	84085

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

Client Sample ID: SP-1
Date Collected: 06/24/24 00:00
Date Received: 06/24/24 16:25

Lab Sample ID: 880-45187-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84040	06/25/24 08:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84036	06/25/24 12:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84213	06/25/24 12:08	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84158	06/25/24 14:55	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	83848	06/21/24 13:24	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84032	06/25/24 14:55	AJ	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84085	06/25/24 13:04	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84101	06/25/24 19:28	CH	EET MID

Client Sample ID: SP-2
Date Collected: 06/24/24 00:00
Date Received: 06/24/24 16:25

Lab Sample ID: 880-45187-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84040	06/25/24 08:13	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84036	06/25/24 12:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84213	06/25/24 12:28	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84158	06/25/24 15:16	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	83848	06/21/24 13:24	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84032	06/25/24 15:16	AJ	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84085	06/25/24 13:04	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84101	06/25/24 19:45	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: Cotton Draw Unit 604

Job ID: 880-45187-1

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	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45187-1

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: Cotton Draw Unit 604

Job ID: 880-45187-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-45187-1	SP-1	Solid	06/24/24 00:00	06/24/24 16:25
880-45187-2	SP-2	Solid	06/24/24 00:00	06/24/24 16:25

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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

000-4018 / Chain of Custody



www.xenco.com Page 1 of 1

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible][illegible]

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		11/24/2024 10:05			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-45187-1

Login Number: 45187

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tom Carlson
Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765
Generated 7/1/2024 5:52:49 PM

JOB DESCRIPTION

Cotton Draw Unit 604

JOB NUMBER

880-45332-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



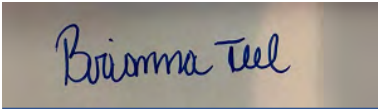
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
7/1/2024 5:52:49 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: Cotton Draw Unit 604

Laboratory Job ID: 880-45332-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, 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
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

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

Case Narrative

Client: Earth Systems Response and Restoration
Project: Cotton Draw Unit 604

Job ID: 880-45332-1

Job ID: 880-45332-1**Eurofins Midland**

Job Narrative
880-45332-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

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

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

Receipt

The samples were received on 6/27/2024 9:10 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 4.1°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 (880-45332-1), CS-2 (880-45332-2), CS-3 (880-45332-3), CS-4 (880-45332-4), CS-5 (880-45332-5), CS-6 (880-45332-6), CS-7 (880-45332-7), CS-8 (880-45332-8), CS-19 (880-45332-9), CS-10 (880-45332-10), CS-11 (880-45332-11), CS-12 (880-45332-12), CS-13 (880-45332-13), CS-14 (880-45332-14), CS-15 (880-45332-15), CS-16 (880-45332-16), CS-17 (880-45332-17), CS-18 (880-45332-18), CS-19 (880-45332-19), CS-20 (880-45332-20), CS-21 (880-45332-21), CS-22 (880-45332-22), CS-23 (880-45332-23), CS-24 (880-45332-24), CS-25 (880-45332-25), CS-26 (880-45332-26), CS-27 (880-45332-27), CS-28 (880-45332-28), CS-29 (880-45332-29), CS-30 (880-45332-30), CS-31 (880-45332-31), CS-32 (880-45332-32), CS-33 (880-45332-33), CS-34 (880-45332-34), CS-35 (880-45332-35), CS-36 (880-45332-36), CS-37 (880-45332-37), CS-38 (880-45332-38), CS-39 (880-45332-39), CS-40 (880-45332-40), CS-41 (880-45332-41), CS-42 (880-45332-42), CS-43 (880-45332-43), CS-44 (880-45332-44), CS-45 (880-45332-45), CS-46 (880-45332-46), CS-47 (880-45332-47), CS-48 (880-45332-48), CS-49 (880-45332-49), CS-50 (880-45332-50), CS-51 (880-45332-51), CS-52 (880-45332-52), CS-53 (880-45332-53), CS-54 (880-45332-54), CS-55 (880-45332-55), CS-56 (880-45332-56), CS-57 (880-45332-57), CS-58 (880-45332-58), CS-59 (880-45332-59), CS-60 (880-45332-60), CS-61 (880-45332-61), CS-62 (880-45332-62), CS-63 (880-45332-63), CS-64 (880-45332-64), NSW-1 (880-45332-65), NSW-2 (880-45332-66), NSW-3 (880-45332-67), WSW-1 (880-45332-68), WSW-2 (880-45332-69), SSW-1 (880-45332-70), ESW-1 (880-45332-71) and ESW-2 (880-45332-72).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84336 and analytical batch 880-84307 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: CS-59 (880-45332-59). 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 880-84344 and analytical batch 880-84308 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: The surrogate recovery for the blank associated with preparation batch 880-84344 and analytical batch 880-84308 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-84336/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-84307 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 880-84307/20) and (CCV 880-84307/33).

Eurofins Midland

Case Narrative

Client: Earth Systems Response and Restoration
Project: Cotton Draw Unit 604

Job ID: 880-45332-1

Job ID: 880-45332-1 (Continued)

Eurofins Midland

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-84341 and analytical batch 880-84449 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-84341 and analytical batch 880-84449 was outside the control limits.

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

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84374 and analytical batch 880-84296 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-59 (880-45332-59), CS-60 (880-45332-60), CS-61 (880-45332-61), CS-62 (880-45332-62), CS-63 (880-45332-63), CS-64 (880-45332-64), NSW-1 (880-45332-65), NSW-2 (880-45332-66), (880-45332-A-59-D MS) and (880-45332-A-59-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84374 and analytical batch 880-84296 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84376 and analytical batch 880-84437 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (MB 880-84376/1-A), (880-45332-A-67-D MS) and (880-45332-A-67-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84353 and analytical batch 880-84289 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-34 (880-45332-34). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84236 and 880-84354 and analytical batch 880-84292 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-11 (880-45332-11), CS-12 (880-45332-12) and CS-54 (880-45332-54). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84236 and 880-84354 and analytical batch 880-84292 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: WSW-1 (880-45332-68) and WSW-2 (880-45332-69). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-84358 and analytical batch 880-84373 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation

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Case Narrative

Client: Earth Systems Response and Restoration
Project: Cotton Draw Unit 604

Job ID: 880-45332-1

Job ID: 880-45332-1 (Continued) **Eurofins Midland**

batch 880-84360 and analytical batch 880-84379 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84368 and analytical batch 880-84454 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.

CS-59 (880-45332-59), CS-60 (880-45332-60), CS-61 (880-45332-61), CS-62 (880-45332-62), CS-63 (880-45332-63), CS-64 (880-45332-64) and NSW-1 (880-45332-65)

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: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-1

Lab Sample ID: 880-45332-1

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1	0.00199		mg/Kg		06/27/24 09:42	06/27/24 13:04	1
Toluene	<0.00199	U F2 F1	0.00199		mg/Kg		06/27/24 09:42	06/27/24 13:04	1
Ethylbenzene	<0.00199	U F2 F1	0.00199		mg/Kg		06/27/24 09:42	06/27/24 13:04	1
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.00398		mg/Kg		06/27/24 09:42	06/27/24 13:04	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		06/27/24 09:42	06/27/24 13:04	1
Xylenes, Total	<0.00398	U F2 F1	0.00398		mg/Kg		06/27/24 09:42	06/27/24 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	06/27/24 09:42	06/27/24 13:04	1
1,4-Difluorobenzene (Surr)	100		70 - 130	06/27/24 09:42	06/27/24 13:04	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			06/27/24 13:04	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			06/27/24 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 12:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 12:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	06/26/24 12:25	06/27/24 12:55	1
o-Terphenyl	108		70 - 130	06/26/24 12:25	06/27/24 12:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		5.02		mg/Kg			06/27/24 21:13	1

Client Sample ID: CS-2

Lab Sample ID: 880-45332-2

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 13:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 13:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 13:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 13:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 13:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/27/24 09:42	06/27/24 13:31	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-2

Lab Sample ID: 880-45332-2

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	06/27/24 09:42	06/27/24 13:31	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			06/27/24 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			06/27/24 13:16	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	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 13:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 13:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 13:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				06/26/24 12:25	06/27/24 13:16	1
o-Terphenyl	83		70 - 130				06/26/24 12:25	06/27/24 13:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	546		5.00		mg/Kg			06/27/24 21:19	1

Client Sample ID: CS-3

Lab Sample ID: 880-45332-3

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 13:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 13:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 13:58	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 13:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 13:58	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 13:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	06/27/24 09:42	06/27/24 13:58	1
1,4-Difluorobenzene (Surr)	117		70 - 130	06/27/24 09:42	06/27/24 13:58	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			06/27/24 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	<49.8	U	49.8		mg/Kg			06/27/24 13:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-3

Lab Sample ID: 880-45332-3

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/26/24 12:25	06/27/24 13:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 13:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				06/26/24 12:25	06/27/24 13:37	1
o-Terphenyl	98		70 - 130				06/26/24 12:25	06/27/24 13:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	305		4.97		mg/Kg			06/27/24 21:25	1

Client Sample ID: CS-4

Lab Sample ID: 880-45332-4

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 14:25	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 14:25	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 14:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 14:25	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 14:25	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				06/27/24 09:42	06/27/24 14:25	1
1,4-Difluorobenzene (Surr)	113		70 - 130				06/27/24 09:42	06/27/24 14:25	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			06/27/24 14:25	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			06/27/24 13:57	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		06/26/24 12:25	06/27/24 13:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 13:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 13:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/26/24 12:25	06/27/24 13:57	1
o-Terphenyl	106		70 - 130				06/26/24 12:25	06/27/24 13:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-4

Lab Sample ID: 880-45332-4

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	548		4.98		mg/Kg			06/27/24 21:43	1

Client Sample ID: CS-5

Lab Sample ID: 880-45332-5

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 14:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 14:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 14:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 14:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 14:52	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 14:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130				06/27/24 09:42	06/27/24 14:52	1
1,4-Difluorobenzene (Surr)	94		70 - 130				06/27/24 09:42	06/27/24 14:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			06/27/24 14:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 14:18	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	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 14:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 14:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 14:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				06/26/24 12:25	06/27/24 14:18	1
o-Terphenyl	107		70 - 130				06/26/24 12:25	06/27/24 14:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	530		5.02		mg/Kg			06/27/24 21:49	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-6

Lab Sample ID: 880-45332-6

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 15:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 15:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 15:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 15:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 15:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 15:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				06/27/24 09:42	06/27/24 15:19	1
1,4-Difluorobenzene (Surr)	96		70 - 130				06/27/24 09:42	06/27/24 15:19	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			06/27/24 15:19	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			06/27/24 14:39	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	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 14:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 14:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				06/26/24 12:25	06/27/24 14:39	1
o-Terphenyl	111		70 - 130				06/26/24 12:25	06/27/24 14:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	814		5.05		mg/Kg			06/27/24 21:55	1

Client Sample ID: CS-7

Lab Sample ID: 880-45332-7

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 15:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 15:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 15:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/27/24 09:42	06/27/24 15:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 15:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/27/24 09:42	06/27/24 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				06/27/24 09:42	06/27/24 15:46	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-7

Lab Sample ID: 880-45332-7

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	06/27/24 09:42	06/27/24 15:46	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			06/27/24 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	<49.8	U	49.8		mg/Kg			06/27/24 15:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 15:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 15:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 15:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130				06/26/24 12:25	06/27/24 15:00	1
o-Terphenyl	78		70 - 130				06/26/24 12:25	06/27/24 15:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	936		5.04		mg/Kg			06/27/24 22:01	1

Client Sample ID: CS-8

Lab Sample ID: 880-45332-8

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 16:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 16:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 16:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 16:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 16:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 16:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	06/27/24 09:42	06/27/24 16:13	1
1,4-Difluorobenzene (Surr)	105		70 - 130	06/27/24 09:42	06/27/24 16:13	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			06/27/24 16:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/27/24 15:20	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-8

Lab Sample ID: 880-45332-8

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/26/24 12:25	06/27/24 15:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 15:20	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 15:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				06/26/24 12:25	06/27/24 15:20	1
o-Terphenyl	96		70 - 130				06/26/24 12:25	06/27/24 15:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	924		4.99		mg/Kg			06/27/24 22:07	1

Client Sample ID: CS-19

Lab Sample ID: 880-45332-9

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 16:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 16:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 16:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 16:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 16:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 16:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				06/27/24 09:42	06/27/24 16:40	1
1,4-Difluorobenzene (Surr)	97		70 - 130				06/27/24 09:42	06/27/24 16:40	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			06/27/24 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	480		49.9		mg/Kg			06/27/24 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 16:02	1
Diesel Range Organics (Over C10-C28)	480		49.9		mg/Kg		06/26/24 12:25	06/27/24 16:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				06/26/24 12:25	06/27/24 16:02	1
o-Terphenyl	88		70 - 130				06/26/24 12:25	06/27/24 16:02	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-19

Lab Sample ID: 880-45332-9

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	413	F1	5.02		mg/Kg			06/27/24 22:12	1

Client Sample ID: CS-10

Lab Sample ID: 880-45332-10

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 17:07	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 17:07	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 17:07	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 17:07	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 17:07	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				06/27/24 09:42	06/27/24 17:07	1
1,4-Difluorobenzene (Surr)	91		70 - 130				06/27/24 09:42	06/27/24 17:07	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			06/27/24 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1380		49.9		mg/Kg			06/27/24 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 16:23	1
Diesel Range Organics (Over C10-C28)	1380		49.9		mg/Kg		06/26/24 12:25	06/27/24 16:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 16:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				06/26/24 12:25	06/27/24 16:23	1
o-Terphenyl	86		70 - 130				06/26/24 12:25	06/27/24 16:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	443		5.05		mg/Kg			06/27/24 22:30	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-11

Lab Sample ID: 880-45332-11

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 18:55	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 18:55	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 18:55	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/27/24 09:42	06/27/24 18:55	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 18:55	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/27/24 09:42	06/27/24 18:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	06/27/24 09:42	06/27/24 18:55	1
1,4-Difluorobenzene (Surr)	93		70 - 130	06/27/24 09:42	06/27/24 18:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			06/27/24 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1530		50.0		mg/Kg			06/27/24 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 16:44	1
Diesel Range Organics (Over C10-C28)	1530		50.0		mg/Kg		06/26/24 12:25	06/27/24 16:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130	06/26/24 12:25	06/27/24 16:44	1
o-Terphenyl	74		70 - 130	06/26/24 12:25	06/27/24 16:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1230		5.04		mg/Kg			06/27/24 22:36	1

Client Sample ID: CS-12

Lab Sample ID: 880-45332-12

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 19:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 19:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 19:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/27/24 09:42	06/27/24 19:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 19:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/27/24 09:42	06/27/24 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	06/27/24 09:42	06/27/24 19:22	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-12

Lab Sample ID: 880-45332-12

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	06/27/24 09:42	06/27/24 19:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/27/24 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/27/24 17:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 17:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 17:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 17:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	61	S1-	70 - 130				06/26/24 12:25	06/27/24 17:04	1
o-Terphenyl	62	S1-	70 - 130				06/26/24 12:25	06/27/24 17:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	741		4.99		mg/Kg			06/27/24 22:54	1

Client Sample ID: CS-13

Lab Sample ID: 880-45332-13

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 19:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 19:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 19:49	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 19:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 19:49	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	06/27/24 09:42	06/27/24 19:49	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/27/24 09:42	06/27/24 19:49	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			06/27/24 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/27/24 17:41	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-13

Lab Sample ID: 880-45332-13

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/26/24 12:25	06/27/24 17:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 17:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 17:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				06/26/24 12:25	06/27/24 17:41	1
o-Terphenyl	90		70 - 130				06/26/24 12:25	06/27/24 17:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		4.96		mg/Kg			06/27/24 23:00	1

Client Sample ID: CS-14

Lab Sample ID: 880-45332-14

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 20:16	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 20:16	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 20:16	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 20:16	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:42	06/27/24 20:16	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:42	06/27/24 20:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				06/27/24 09:42	06/27/24 20:16	1
1,4-Difluorobenzene (Surr)	97		70 - 130				06/27/24 09:42	06/27/24 20:16	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			06/27/24 20:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/27/24 18:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 18:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 18:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 18:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/26/24 12:25	06/27/24 18:02	1
o-Terphenyl	109		70 - 130				06/26/24 12:25	06/27/24 18:02	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-14

Lab Sample ID: 880-45332-14

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1680		24.9		mg/Kg			06/27/24 23:06	5

Client Sample ID: CS-15

Lab Sample ID: 880-45332-15

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 20:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 20:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 20:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 20:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 20:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 20:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				06/27/24 09:42	06/27/24 20:43	1
1,4-Difluorobenzene (Surr)	102		70 - 130				06/27/24 09:42	06/27/24 20:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/27/24 20:43	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			06/27/24 18:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 18:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 18:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				06/26/24 12:25	06/27/24 18:23	1
o-Terphenyl	97		70 - 130				06/26/24 12:25	06/27/24 18:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	771		4.97		mg/Kg			06/27/24 23:12	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-16

Lab Sample ID: 880-45332-16

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 21:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 21:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 21:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				06/27/24 09:42	06/27/24 21:09	1
1,4-Difluorobenzene (Surr)	96		70 - 130				06/27/24 09:42	06/27/24 21:09	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			06/27/24 21:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 18:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 18:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 18:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 18:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				06/26/24 12:25	06/27/24 18:43	1
o-Terphenyl	93		70 - 130				06/26/24 12:25	06/27/24 18:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	359		4.97		mg/Kg			06/27/24 23:18	1

Client Sample ID: CS-17

Lab Sample ID: 880-45332-17

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 21:36	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:36	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:36	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 21:36	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:42	06/27/24 21:36	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:42	06/27/24 21:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				06/27/24 09:42	06/27/24 21:36	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-17

Lab Sample ID: 880-45332-17

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	06/27/24 09:42	06/27/24 21:36	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			06/27/24 21:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 19:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 19:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 19:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/26/24 12:25	06/27/24 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				06/26/24 12:25	06/27/24 19:04	1
o-Terphenyl	92		70 - 130				06/26/24 12:25	06/27/24 19:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.2		5.04		mg/Kg			06/27/24 23:23	1

Client Sample ID: CS-18

Lab Sample ID: 880-45332-18

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 22:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 22:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 22:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 22:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 22:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 22:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	06/27/24 09:42	06/27/24 22:03	1
1,4-Difluorobenzene (Surr)	112		70 - 130	06/27/24 09:42	06/27/24 22:03	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			06/27/24 22:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/27/24 19:24	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-18

Lab Sample ID: 880-45332-18

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/26/24 12:25	06/27/24 19:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 19:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/26/24 12:25	06/27/24 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				06/26/24 12:25	06/27/24 19:24	1
o-Terphenyl	96		70 - 130				06/26/24 12:25	06/27/24 19:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	626		5.01		mg/Kg			06/27/24 23:29	1

Client Sample ID: CS-19

Lab Sample ID: 880-45332-19

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 22:30	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 22:30	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 22:30	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 22:30	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:42	06/27/24 22:30	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:42	06/27/24 22:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				06/27/24 09:42	06/27/24 22:30	1
1,4-Difluorobenzene (Surr)	89		70 - 130				06/27/24 09:42	06/27/24 22:30	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			06/27/24 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/27/24 21:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/27/24 21:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U F1	49.8		mg/Kg		06/27/24 11:13	06/27/24 21:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/27/24 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				06/27/24 11:13	06/27/24 21:07	1
o-Terphenyl	111		70 - 130				06/27/24 11:13	06/27/24 21:07	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-19

Lab Sample ID: 880-45332-19

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		4.99		mg/Kg			06/28/24 14:03	1

Client Sample ID: CS-20

Lab Sample ID: 880-45332-20

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:42	06/27/24 22:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 22:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 22:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 22:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:42	06/27/24 22:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:42	06/27/24 22:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				06/27/24 09:42	06/27/24 22:56	1
1,4-Difluorobenzene (Surr)	97		70 - 130				06/27/24 09:42	06/27/24 22:56	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/27/24 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1270		49.9		mg/Kg			06/27/24 22:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/27/24 11:13	06/27/24 22:09	1
Diesel Range Organics (Over C10-C28)	1270		49.9		mg/Kg		06/27/24 11:13	06/27/24 22:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/27/24 11:13	06/27/24 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130				06/27/24 11:13	06/27/24 22:09	1
o-Terphenyl	82		70 - 130				06/27/24 11:13	06/27/24 22:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	795		4.96		mg/Kg			06/28/24 14:23	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-21

Lab Sample ID: 880-45332-21

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 12:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 12:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 12:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 12:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 12:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/27/24 09:47	06/28/24 12:30	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/27/24 09:47	06/28/24 12:30	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			06/28/24 12:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	911		50.0		mg/Kg			06/27/24 22:30	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		06/27/24 11:13	06/27/24 22:30	1
Diesel Range Organics (Over C10-C28)	911		50.0		mg/Kg		06/27/24 11:13	06/27/24 22:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/27/24 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	06/27/24 11:13	06/27/24 22:30	1
o-Terphenyl	91		70 - 130	06/27/24 11:13	06/27/24 22:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	650		5.03		mg/Kg			06/28/24 14:30	1

Client Sample ID: CS-22

Lab Sample ID: 880-45332-22

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 12:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 12:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 12:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 12:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 12:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	06/27/24 09:47	06/28/24 12:57	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-22

Lab Sample ID: 880-45332-22

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	06/27/24 09:47	06/28/24 12:57	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			06/28/24 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	908		49.5		mg/Kg			06/27/24 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.5	U	49.5		mg/Kg		06/27/24 11:13	06/27/24 22:50	1
Diesel Range Organics (Over C10-C28)	908		49.5		mg/Kg		06/27/24 11:13	06/27/24 22:50	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		06/27/24 11:13	06/27/24 22:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				06/27/24 11:13	06/27/24 22:50	1
o-Terphenyl	106		70 - 130				06/27/24 11:13	06/27/24 22:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	745		5.02		mg/Kg			06/28/24 14:36	1

Client Sample ID: CS-23

Lab Sample ID: 880-45332-23

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 13:25	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 13:25	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 13:25	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 13:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 13:25	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 13:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/27/24 09:47	06/28/24 13:25	1
1,4-Difluorobenzene (Surr)	90		70 - 130	06/27/24 09:47	06/28/24 13:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			06/28/24 13:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1430		49.6		mg/Kg			06/27/24 23:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-23

Lab Sample ID: 880-45332-23

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:13	06/27/24 23:10	1
Diesel Range Organics (Over C10-C28)	1430		49.6		mg/Kg		06/27/24 11:13	06/27/24 23:10	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 11:13	06/27/24 23:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				06/27/24 11:13	06/27/24 23:10	1
o-Terphenyl	105		70 - 130				06/27/24 11:13	06/27/24 23:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		5.05		mg/Kg			06/28/24 14:43	1

Client Sample ID: CS-24

Lab Sample ID: 880-45332-24

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 13:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 13:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 13:52	1
m-Xylene & p-Xylene	0.00454		0.00402		mg/Kg		06/27/24 09:47	06/28/24 13:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 13:52	1
Xylenes, Total	0.00454		0.00402		mg/Kg		06/27/24 09:47	06/28/24 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				06/27/24 09:47	06/28/24 13:52	1
1,4-Difluorobenzene (Surr)	86		70 - 130				06/27/24 09:47	06/28/24 13:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00454		0.00402		mg/Kg			06/28/24 13:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1880		49.6		mg/Kg			06/27/24 23:31	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	<49.6	U	49.6		mg/Kg		06/27/24 11:13	06/27/24 23:31	1
Diesel Range Organics (Over C10-C28)	1880		49.6		mg/Kg		06/27/24 11:13	06/27/24 23:31	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 11:13	06/27/24 23:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				06/27/24 11:13	06/27/24 23:31	1
o-Terphenyl	99		70 - 130				06/27/24 11:13	06/27/24 23:31	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-24

Lab Sample ID: 880-45332-24

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	980		5.05		mg/Kg			06/28/24 15:03	1

Client Sample ID: CS-25

Lab Sample ID: 880-45332-25

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 14:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 14:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 14:19	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403		mg/Kg		06/27/24 09:47	06/28/24 14:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 14:19	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:47	06/28/24 14:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				06/27/24 09:47	06/28/24 14:19	1
1,4-Difluorobenzene (Surr)	94		70 - 130				06/27/24 09:47	06/28/24 14:19	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			06/28/24 14:19	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			06/27/24 23:52	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	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/27/24 23:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/27/24 23:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/27/24 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				06/27/24 11:13	06/27/24 23:52	1
o-Terphenyl	106		70 - 130				06/27/24 11:13	06/27/24 23:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	529		4.99		mg/Kg			06/28/24 15:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-26

Lab Sample ID: 880-45332-26

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 14:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 14:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 14:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 14:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 14:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 14:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				06/27/24 09:47	06/28/24 14:46	1
1,4-Difluorobenzene (Surr)	107		70 - 130				06/27/24 09:47	06/28/24 14:46	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			06/28/24 14:46	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			06/28/24 00:12	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		06/27/24 11:13	06/28/24 00:12	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 00:12	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				06/27/24 11:13	06/28/24 00:12	1
o-Terphenyl	119		70 - 130				06/27/24 11:13	06/28/24 00:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	717		5.00		mg/Kg			06/28/24 15:16	1

Client Sample ID: CS-27

Lab Sample ID: 880-45332-27

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 15:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 15:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 15:14	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/27/24 09:47	06/28/24 15:14	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 15:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/27/24 09:47	06/28/24 15:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				06/27/24 09:47	06/28/24 15:14	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-27

Lab Sample ID: 880-45332-27

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	06/27/24 09:47	06/28/24 15:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			06/28/24 15:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/28/24 00:32	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	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 00:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 00:32	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				06/27/24 11:13	06/28/24 00:32	1
o-Terphenyl	101		70 - 130				06/27/24 11:13	06/28/24 00:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	310		5.02		mg/Kg			06/28/24 15:23	1

Client Sample ID: CS-28

Lab Sample ID: 880-45332-28

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 15:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 15:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 15:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 15:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 15:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	06/27/24 09:47	06/28/24 15:41	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/27/24 09:47	06/28/24 15:41	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			06/28/24 15:41	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			06/28/24 00:54	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-28

Lab Sample ID: 880-45332-28

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:13	06/28/24 00:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 00:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 00:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				06/27/24 11:13	06/28/24 00:54	1
o-Terphenyl	89		70 - 130				06/27/24 11:13	06/28/24 00:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		4.98		mg/Kg			06/28/24 15:30	1

Client Sample ID: CS-29

Lab Sample ID: 880-45332-29

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 16:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 16:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 16:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 16:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 16:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 16:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				06/27/24 09:47	06/28/24 16:08	1
1,4-Difluorobenzene (Surr)	109		70 - 130				06/27/24 09:47	06/28/24 16:08	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			06/28/24 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/28/24 01:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 01:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 01:34	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 01:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				06/27/24 11:13	06/28/24 01:34	1
o-Terphenyl	93		70 - 130				06/27/24 11:13	06/28/24 01:34	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-29

Lab Sample ID: 880-45332-29

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	137		4.99		mg/Kg			06/28/24 15:36	1

Client Sample ID: CS-30

Lab Sample ID: 880-45332-30

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 16:35	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 16:35	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 16:35	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:47	06/28/24 16:35	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 16:35	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:47	06/28/24 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				06/27/24 09:47	06/28/24 16:35	1
1,4-Difluorobenzene (Surr)	110		70 - 130				06/27/24 09:47	06/28/24 16:35	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			06/28/24 16:35	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			06/28/24 01:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/28/24 01:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/28/24 01:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/28/24 01:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/27/24 11:13	06/28/24 01:55	1
o-Terphenyl	111		70 - 130				06/27/24 11:13	06/28/24 01:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1080		5.04		mg/Kg			06/28/24 15:56	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-31

Lab Sample ID: 880-45332-31

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 18:24	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 18:24	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 18:24	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/27/24 09:47	06/28/24 18:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 18:24	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/27/24 09:47	06/28/24 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/27/24 09:47	06/28/24 18:24	1
1,4-Difluorobenzene (Surr)	90		70 - 130	06/27/24 09:47	06/28/24 18:24	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			06/28/24 18:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1060		49.8		mg/Kg			06/28/24 02:15	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		06/27/24 11:13	06/28/24 02:15	1
Diesel Range Organics (Over C10-C28)	1060		49.8		mg/Kg		06/27/24 11:13	06/28/24 02:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 02:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	06/27/24 11:13	06/28/24 02:15	1
o-Terphenyl	95		70 - 130	06/27/24 11:13	06/28/24 02:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	812		4.97		mg/Kg			06/28/24 16:03	1

Client Sample ID: CS-32

Lab Sample ID: 880-45332-32

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 18:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 18:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 18:52	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/27/24 09:47	06/28/24 18:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 18:52	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/27/24 09:47	06/28/24 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	06/27/24 09:47	06/28/24 18:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-32

Lab Sample ID: 880-45332-32

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	06/27/24 09:47	06/28/24 18:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/28/24 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	123		49.9		mg/Kg			06/28/24 02:36	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		06/27/24 11:13	06/28/24 02:36	1
Diesel Range Organics (Over C10-C28)	123		49.9		mg/Kg		06/27/24 11:13	06/28/24 02:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/27/24 11:13	06/28/24 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				06/27/24 11:13	06/28/24 02:36	1
o-Terphenyl	91		70 - 130				06/27/24 11:13	06/28/24 02:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	623		5.04		mg/Kg			06/28/24 16:23	1

Client Sample ID: CS-33

Lab Sample ID: 880-45332-33

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 19:19	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 19:19	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 19:19	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 19:19	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 19:19	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	06/27/24 09:47	06/28/24 19:19	1
1,4-Difluorobenzene (Surr)	101		70 - 130	06/27/24 09:47	06/28/24 19:19	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			06/28/24 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	678		49.8		mg/Kg			06/28/24 02:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-33

Lab Sample ID: 880-45332-33

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:13	06/28/24 02:57	1
Diesel Range Organics (Over C10-C28)	678		49.8		mg/Kg		06/27/24 11:13	06/28/24 02:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 02:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				06/27/24 11:13	06/28/24 02:57	1
o-Terphenyl	113		70 - 130				06/27/24 11:13	06/28/24 02:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	581		5.04		mg/Kg			06/28/24 16:30	1

Client Sample ID: CS-34

Lab Sample ID: 880-45332-34

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 19:46	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 19:46	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 19:46	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:47	06/28/24 19:46	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:47	06/28/24 19:46	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:47	06/28/24 19:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				06/27/24 09:47	06/28/24 19:46	1
1,4-Difluorobenzene (Surr)	95		70 - 130				06/27/24 09:47	06/28/24 19:46	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			06/28/24 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	197		49.8		mg/Kg			06/28/24 03:16	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	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 03:16	1
Diesel Range Organics (Over C10-C28)	197		49.8		mg/Kg		06/27/24 11:13	06/28/24 03:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 03:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	11	S1-	70 - 130				06/27/24 11:13	06/28/24 03:16	1
o-Terphenyl	13	S1-	70 - 130				06/27/24 11:13	06/28/24 03:16	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-34

Lab Sample ID: 880-45332-34

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		5.02		mg/Kg			06/28/24 16:36	1

Client Sample ID: CS-35

Lab Sample ID: 880-45332-35

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 20:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 20:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 20:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 20:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 20:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 20:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				06/27/24 09:47	06/28/24 20:13	1
1,4-Difluorobenzene (Surr)	90		70 - 130				06/27/24 09:47	06/28/24 20:13	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/28/24 20:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1980		49.7		mg/Kg			06/28/24 04:22	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		06/27/24 11:13	06/28/24 04:22	1
Diesel Range Organics (Over C10-C28)	1980		49.7		mg/Kg		06/27/24 11:13	06/28/24 04:22	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 04:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				06/27/24 11:13	06/28/24 04:22	1
o-Terphenyl	105		70 - 130				06/27/24 11:13	06/28/24 04:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	589		5.01		mg/Kg			06/28/24 16:43	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-36

Lab Sample ID: 880-45332-36

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 20:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 20:40	1
Ethylbenzene	0.00225		0.00199		mg/Kg		06/27/24 09:47	06/28/24 20:40	1
m-Xylene & p-Xylene	0.00690		0.00398		mg/Kg		06/27/24 09:47	06/28/24 20:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 20:40	1
Xylenes, Total	0.00690		0.00398		mg/Kg		06/27/24 09:47	06/28/24 20:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				06/27/24 09:47	06/28/24 20:40	1
1,4-Difluorobenzene (Surr)	88		70 - 130				06/27/24 09:47	06/28/24 20:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00915		0.00398		mg/Kg			06/28/24 20:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	682		49.7		mg/Kg			06/28/24 04:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 04:43	1
Diesel Range Organics (Over C10-C28)	682		49.7		mg/Kg		06/27/24 11:13	06/28/24 04:43	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:13	06/28/24 04:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				06/27/24 11:13	06/28/24 04:43	1
o-Terphenyl	98		70 - 130				06/27/24 11:13	06/28/24 04:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1140		5.03		mg/Kg			06/28/24 16:49	1

Client Sample ID: CS-37

Lab Sample ID: 880-45332-37

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 21:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 21:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 21:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 21:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:47	06/28/24 21:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:47	06/28/24 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				06/27/24 09:47	06/28/24 21:07	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-37

Lab Sample ID: 880-45332-37

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	06/27/24 09:47	06/28/24 21:07	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			06/28/24 21:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	557		49.8		mg/Kg			06/28/24 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 05:04	1
Diesel Range Organics (Over C10-C28)	557		49.8		mg/Kg		06/27/24 11:13	06/28/24 05:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:13	06/28/24 05:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				06/27/24 11:13	06/28/24 05:04	1
o-Terphenyl	111		70 - 130				06/27/24 11:13	06/28/24 05:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	768		4.99		mg/Kg			06/28/24 16:56	1

Client Sample ID: CS-38

Lab Sample ID: 880-45332-38

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 21:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 21:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 21:34	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 21:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 21:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	06/27/24 09:47	06/28/24 21:34	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/27/24 09:47	06/28/24 21:34	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			06/28/24 21:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	128		50.0		mg/Kg			06/28/24 05:24	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-38

Lab Sample ID: 880-45332-38

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:13	06/28/24 05:24	1
Diesel Range Organics (Over C10-C28)	128		50.0		mg/Kg		06/27/24 11:13	06/28/24 05:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/28/24 05:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				06/27/24 11:13	06/28/24 05:24	1
o-Terphenyl	103		70 - 130				06/27/24 11:13	06/28/24 05:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	660		5.00		mg/Kg			06/28/24 17:03	1

Client Sample ID: CS-39

Lab Sample ID: 880-45332-39

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 22:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 22:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 22:01	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 22:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:47	06/28/24 22:01	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:47	06/28/24 22:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				06/27/24 09:47	06/28/24 22:01	1
1,4-Difluorobenzene (Surr)	92		70 - 130				06/27/24 09:47	06/28/24 22:01	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			06/28/24 22:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 21:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/27/24 11:18	06/27/24 21:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		06/27/24 11:18	06/27/24 21:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/27/24 11:18	06/27/24 21:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				06/27/24 11:18	06/27/24 21:07	1
o-Terphenyl	95		70 - 130				06/27/24 11:18	06/27/24 21:07	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-39

Lab Sample ID: 880-45332-39

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.9	F1	4.98		mg/Kg			06/28/24 00:23	1

Client Sample ID: CS-40

Lab Sample ID: 880-45332-40

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:47	06/28/24 22:28	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 22:28	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 22:28	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 22:28	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:47	06/28/24 22:28	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:47	06/28/24 22:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				06/27/24 09:47	06/28/24 22:28	1
1,4-Difluorobenzene (Surr)	87		70 - 130				06/27/24 09:47	06/28/24 22:28	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			06/28/24 22:28	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	289		49.7		mg/Kg			06/27/24 22:09	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/27/24 22:09	1
Diesel Range Organics (Over C10-C28)	289		49.7		mg/Kg		06/27/24 11:18	06/27/24 22:09	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/27/24 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130				06/27/24 11:18	06/27/24 22:09	1
o-Terphenyl	90		70 - 130				06/27/24 11:18	06/27/24 22:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		4.96		mg/Kg			06/28/24 00:38	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-41

Lab Sample ID: 880-45332-41

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/27/24 23:55	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/27/24 23:55	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/27/24 23:55	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		06/27/24 09:53	06/27/24 23:55	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/27/24 23:55	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		06/27/24 09:53	06/27/24 23:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/27/24 09:53	06/27/24 23:55	1
1,4-Difluorobenzene (Surr)	101		70 - 130	06/27/24 09:53	06/27/24 23:55	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			06/27/24 23:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	170		50.0		mg/Kg			06/27/24 22:30	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		06/27/24 11:18	06/27/24 22:30	1
Diesel Range Organics (Over C10-C28)	170		50.0		mg/Kg		06/27/24 11:18	06/27/24 22:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:18	06/27/24 22:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	06/27/24 11:18	06/27/24 22:30	1
o-Terphenyl	101		70 - 130	06/27/24 11:18	06/27/24 22:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1080		4.97		mg/Kg			06/28/24 00:43	1

Client Sample ID: CS-42

Lab Sample ID: 880-45332-42

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 00:16	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:16	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:16	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 00:16	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:16	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 00:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	06/27/24 09:53	06/28/24 00:16	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-42

Lab Sample ID: 880-45332-42

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	06/27/24 09:53	06/28/24 00:16	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			06/28/24 00:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/27/24 22:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/27/24 11:18	06/27/24 22:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/27/24 11:18	06/27/24 22:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/27/24 11:18	06/27/24 22:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				06/27/24 11:18	06/27/24 22:50	1
o-Terphenyl	112		70 - 130				06/27/24 11:18	06/27/24 22:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1830		25.0		mg/Kg			06/28/24 00:49	5

Client Sample ID: CS-43

Lab Sample ID: 880-45332-43

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 00:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 00:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 00:36	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:53	06/28/24 00:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 00:36	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:53	06/28/24 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	06/27/24 09:53	06/28/24 00:36	1
1,4-Difluorobenzene (Surr)	109		70 - 130	06/27/24 09:53	06/28/24 00:36	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			06/28/24 00:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	97.8		49.8		mg/Kg			06/27/24 23:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-43

Lab Sample ID: 880-45332-43

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:18	06/27/24 23:10	1
Diesel Range Organics (Over C10-C28)	97.8		49.8		mg/Kg		06/27/24 11:18	06/27/24 23:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/27/24 23:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130				06/27/24 11:18	06/27/24 23:10	1
o-Terphenyl	126		70 - 130				06/27/24 11:18	06/27/24 23:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	897		5.03		mg/Kg			06/28/24 00:54	1

Client Sample ID: CS-44

Lab Sample ID: 880-45332-44

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 00:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 00:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 00:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 00:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				06/27/24 09:53	06/28/24 00:57	1
1,4-Difluorobenzene (Surr)	104		70 - 130				06/27/24 09:53	06/28/24 00:57	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			06/28/24 00:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			06/27/24 23:31	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		06/27/24 11:18	06/27/24 23:31	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/27/24 23:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/27/24 23:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				06/27/24 11:18	06/27/24 23:31	1
o-Terphenyl	95		70 - 130				06/27/24 11:18	06/27/24 23:31	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-44

Lab Sample ID: 880-45332-44

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	555		5.00		mg/Kg			06/28/24 01:10	1

Client Sample ID: CS-45

Lab Sample ID: 880-45332-45

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 01:17	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 01:17	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 01:17	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 01:17	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 01:17	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 01:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130				06/27/24 09:53	06/28/24 01:17	1
1,4-Difluorobenzene (Surr)	112		70 - 130				06/27/24 09:53	06/28/24 01:17	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			06/28/24 01:17	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			06/27/24 23:52	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	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/27/24 23:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/27/24 23:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/27/24 23:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				06/27/24 11:18	06/27/24 23:52	1
o-Terphenyl	103		70 - 130				06/27/24 11:18	06/27/24 23:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200		5.04		mg/Kg			06/28/24 01:15	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-46

Lab Sample ID: 880-45332-46

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 01:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 01:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 01:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 01:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 01:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 01:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	06/27/24 09:53	06/28/24 01:38	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/27/24 09:53	06/28/24 01:38	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			06/28/24 01:38	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			06/28/24 00:12	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		06/27/24 11:18	06/28/24 00:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 11:18	06/28/24 00:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:18	06/28/24 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	06/27/24 11:18	06/28/24 00:12	1
o-Terphenyl	101		70 - 130	06/27/24 11:18	06/28/24 00:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1020		5.02		mg/Kg			06/28/24 01:20	1

Client Sample ID: CS-47

Lab Sample ID: 880-45332-47

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 01:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 01:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 01:58	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/27/24 09:53	06/28/24 01:58	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 01:58	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/27/24 09:53	06/28/24 01:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	06/27/24 09:53	06/28/24 01:58	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-47

Lab Sample ID: 880-45332-47

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	06/27/24 09:53	06/28/24 01:58	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			06/28/24 01:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			06/28/24 00:32	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	<49.5	U	49.5		mg/Kg		06/27/24 11:18	06/28/24 00:32	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		06/27/24 11:18	06/28/24 00:32	1
Oil Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		06/27/24 11:18	06/28/24 00:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				06/27/24 11:18	06/28/24 00:32	1
o-Terphenyl	101		70 - 130				06/27/24 11:18	06/28/24 00:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	890		4.95		mg/Kg			06/28/24 01:25	1

Client Sample ID: CS-48

Lab Sample ID: 880-45332-48

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 02:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 02:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 02:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/28/24 02:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 02:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/28/24 02:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	06/27/24 09:53	06/28/24 02:18	1
1,4-Difluorobenzene (Surr)	108		70 - 130	06/27/24 09:53	06/28/24 02:18	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			06/28/24 02:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			06/28/24 00:54	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-48

Lab Sample ID: 880-45332-48

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:18	06/28/24 00:54	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		06/27/24 11:18	06/28/24 00:54	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 11:18	06/28/24 00:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				06/27/24 11:18	06/28/24 00:54	1
o-Terphenyl	106		70 - 130				06/27/24 11:18	06/28/24 00:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	697		4.96		mg/Kg			06/28/24 01:30	1

Client Sample ID: CS-49

Lab Sample ID: 880-45332-49

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 02:39	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 02:39	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 02:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 02:39	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 02:39	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 02:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				06/27/24 09:53	06/28/24 02:39	1
1,4-Difluorobenzene (Surr)	101		70 - 130				06/27/24 09:53	06/28/24 02:39	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			06/28/24 02:39	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			06/28/24 01:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		06/27/24 11:18	06/28/24 01:34	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		06/27/24 11:18	06/28/24 01:34	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 11:18	06/28/24 01:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				06/27/24 11:18	06/28/24 01:34	1
o-Terphenyl	97		70 - 130				06/27/24 11:18	06/28/24 01:34	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-49
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.5-1

Lab Sample ID: 880-45332-49
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	333		5.00		mg/Kg			06/28/24 01:36	1

Client Sample ID: CS-50
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.5-1

Lab Sample ID: 880-45332-50
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 02:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130				06/27/24 09:53	06/28/24 02:59	1
1,4-Difluorobenzene (Surr)	107		70 - 130				06/27/24 09:53	06/28/24 02:59	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			06/28/24 02:59	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	139		49.7		mg/Kg			06/28/24 01:55	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 01:55	1
Diesel Range Organics (Over C10-C28)	139		49.7		mg/Kg		06/27/24 11:18	06/28/24 01:55	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 01:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				06/27/24 11:18	06/28/24 01:55	1
o-Terphenyl	103		70 - 130				06/27/24 11:18	06/28/24 01:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	381		4.99		mg/Kg			06/28/24 01:51	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-51

Lab Sample ID: 880-45332-51

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 04:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 04:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 04:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/27/24 09:53	06/28/24 04:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 04:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/27/24 09:53	06/28/24 04:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	06/27/24 09:53	06/28/24 04:50	1
1,4-Difluorobenzene (Surr)	105		70 - 130	06/27/24 09:53	06/28/24 04:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			06/28/24 04:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	75.1		49.7		mg/Kg			06/28/24 02:15	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	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 02:15	1
Diesel Range Organics (Over C10-C28)	75.1		49.7		mg/Kg		06/27/24 11:18	06/28/24 02:15	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 02:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	06/27/24 11:18	06/28/24 02:15	1
o-Terphenyl	108		70 - 130	06/27/24 11:18	06/28/24 02:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	735		5.01		mg/Kg			06/28/24 01:57	1

Client Sample ID: CS-52

Lab Sample ID: 880-45332-52

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 05:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 05:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 05:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/27/24 09:53	06/28/24 05:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 05:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/27/24 09:53	06/28/24 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	06/27/24 09:53	06/28/24 05:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-52

Lab Sample ID: 880-45332-52

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	06/27/24 09:53	06/28/24 05:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			06/28/24 05:10	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			06/28/24 02:36	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	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 02:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 02:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130				06/27/24 11:18	06/28/24 02:36	1
o-Terphenyl	76		70 - 130				06/27/24 11:18	06/28/24 02:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	932		5.02		mg/Kg			06/28/24 02:12	1

Client Sample ID: CS-53

Lab Sample ID: 880-45332-53

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 05:31	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 05:31	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 05:31	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:53	06/28/24 05:31	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 05:31	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:53	06/28/24 05:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	06/27/24 09:53	06/28/24 05:31	1
1,4-Difluorobenzene (Surr)	109		70 - 130	06/27/24 09:53	06/28/24 05:31	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			06/28/24 05:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	406		49.9		mg/Kg			06/28/24 02:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-53

Lab Sample ID: 880-45332-53

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 11:18	06/28/24 02:57	1
Diesel Range Organics (Over C10-C28)	332		49.9		mg/Kg		06/27/24 11:18	06/28/24 02:57	1
Oil Range Organics (Over C28-C36)	74.0		49.9		mg/Kg		06/27/24 11:18	06/28/24 02:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				06/27/24 11:18	06/28/24 02:57	1
o-Terphenyl	96		70 - 130				06/27/24 11:18	06/28/24 02:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2310		25.1		mg/Kg			06/28/24 02:18	5

Client Sample ID: CS-54

Lab Sample ID: 880-45332-54

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 05:51	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 05:51	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 05:51	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 05:51	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:53	06/28/24 05:51	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:53	06/28/24 05:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130				06/27/24 09:53	06/28/24 05:51	1
1,4-Difluorobenzene (Surr)	106		70 - 130				06/27/24 09:53	06/28/24 05:51	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			06/28/24 05:51	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			06/28/24 03:16	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		06/27/24 11:18	06/28/24 03:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 11:18	06/28/24 03:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:18	06/28/24 03:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	9	S1-	70 - 130				06/27/24 11:18	06/28/24 03:16	1
o-Terphenyl	10	S1-	70 - 130				06/27/24 11:18	06/28/24 03:16	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-54

Lab Sample ID: 880-45332-54

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2910		25.0		mg/Kg			06/28/24 02:23	5

Client Sample ID: CS-55

Lab Sample ID: 880-45332-55

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 06:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 06:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 06:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 06:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 06:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 06:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130				06/27/24 09:53	06/28/24 06:12	1
1,4-Difluorobenzene (Surr)	111		70 - 130				06/27/24 09:53	06/28/24 06:12	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			06/28/24 06:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	97.2		49.8		mg/Kg			06/28/24 04:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 04:22	1
Diesel Range Organics (Over C10-C28)	97.2		49.8		mg/Kg		06/27/24 11:18	06/28/24 04:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 04:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				06/27/24 11:18	06/28/24 04:22	1
o-Terphenyl	119		70 - 130				06/27/24 11:18	06/28/24 04:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2130		25.0		mg/Kg			06/28/24 02:28	5

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-56

Lab Sample ID: 880-45332-56

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 06:32	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 06:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 06:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				06/27/24 09:53	06/28/24 06:32	1
1,4-Difluorobenzene (Surr)	112		70 - 130				06/27/24 09:53	06/28/24 06:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/28/24 06:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	158		49.7		mg/Kg			06/28/24 04:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 04:43	1
Diesel Range Organics (Over C10-C28)	158		49.7		mg/Kg		06/27/24 11:18	06/28/24 04:43	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 11:18	06/28/24 04:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				06/27/24 11:18	06/28/24 04:43	1
o-Terphenyl	87		70 - 130				06/27/24 11:18	06/28/24 04:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2860		25.2		mg/Kg			06/28/24 02:33	5

Client Sample ID: CS-57

Lab Sample ID: 880-45332-57

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 06:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 06:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:53	06/28/24 06:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:53	06/28/24 06:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130				06/27/24 09:53	06/28/24 06:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-57

Lab Sample ID: 880-45332-57

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	06/27/24 09:53	06/28/24 06:52	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			06/28/24 06:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1320		49.8		mg/Kg			06/28/24 05:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 11:18	06/28/24 05:04	1
Diesel Range Organics (Over C10-C28)	969		49.8		mg/Kg		06/27/24 11:18	06/28/24 05:04	1
Oil Range Organics (Over C28-C36)	353		49.8		mg/Kg		06/27/24 11:18	06/28/24 05:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				06/27/24 11:18	06/28/24 05:04	1
o-Terphenyl	106		70 - 130				06/27/24 11:18	06/28/24 05:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2900		25.1		mg/Kg			06/28/24 02:39	5

Client Sample ID: CS-58

Lab Sample ID: 880-45332-58

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 07:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 07:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 07:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/28/24 07:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/28/24 07:13	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/28/24 07:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				06/27/24 09:53	06/28/24 07:13	1
1,4-Difluorobenzene (Surr)	114		70 - 130				06/27/24 09:53	06/28/24 07:13	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			06/28/24 07:13	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-58
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.5-1

Lab Sample ID: 880-45332-58
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1780		49.9		mg/Kg	-		06/28/24 05:24	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	<49.9	U	49.9		mg/Kg	-	06/27/24 11:18	06/28/24 05:24	1
Diesel Range Organics (Over C10-C28)	1680		49.9		mg/Kg	-	06/27/24 11:18	06/28/24 05:24	1
Oil Range Organics (Over C28-C36)	102		49.9		mg/Kg	-	06/27/24 11:18	06/28/24 05:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				06/27/24 11:18	06/28/24 05:24	1
o-Terphenyl	100		70 - 130				06/27/24 11:18	06/28/24 05:24	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4160		24.9		mg/Kg	-		06/28/24 02:44	5

Client Sample ID: CS-59
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.5-1

Lab Sample ID: 880-45332-59
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		06/27/24 09:53	06/28/24 07:33	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 07:33	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:53	06/28/24 07:33	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:53	06/28/24 07:33	1
o-Xylene	0.0123		0.00198		mg/Kg		06/27/24 09:53	06/28/24 07:33	1
Xylenes, Total	0.0123		0.00397		mg/Kg		06/27/24 09:53	06/28/24 07:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130				06/27/24 09:53	06/28/24 07:33	1
1,4-Difluorobenzene (Surr)	102		70 - 130				06/27/24 09:53	06/28/24 07:33	1
Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0123		0.00397		mg/Kg			06/28/24 07:33	1
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1060		50.0		mg/Kg			06/27/24 20:50	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	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 20:50	1
Diesel Range Organics (Over C10-C28)	1060	F1	50.0		mg/Kg		06/27/24 14:22	06/27/24 20:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 20:50	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-59

Lab Sample ID: 880-45332-59

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	163	S1+	70 - 130	06/27/24 14:22	06/27/24 20:50	1
o-Terphenyl	173	S1+	70 - 130	06/27/24 14:22	06/27/24 20:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2370		25.1		mg/Kg			06/28/24 14:20	5

Client Sample ID: CS-60

Lab Sample ID: 880-45332-60

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:53	06/28/24 07:54	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 07:54	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 07:54	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 07:54	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:53	06/28/24 07:54	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:53	06/28/24 07:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	06/27/24 09:53	06/28/24 07:54	1
1,4-Difluorobenzene (Surr)	110		70 - 130	06/27/24 09:53	06/28/24 07:54	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			06/28/24 07:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1560		49.7		mg/Kg			06/27/24 21:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	88.6		49.7		mg/Kg		06/27/24 14:22	06/27/24 21:49	1
Diesel Range Organics (Over C10-C28)	1470		49.7		mg/Kg		06/27/24 14:22	06/27/24 21:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 14:22	06/27/24 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	138	S1+	70 - 130	06/27/24 14:22	06/27/24 21:49	1
o-Terphenyl	155	S1+	70 - 130	06/27/24 14:22	06/27/24 21:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3640		25.3		mg/Kg			06/28/24 14:27	5

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-61

Lab Sample ID: 880-45332-61

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:50	06/27/24 23:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/27/24 23:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/27/24 23:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/27/24 23:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/27/24 23:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/27/24 23:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130				06/27/24 09:50	06/27/24 23:31	1
1,4-Difluorobenzene (Surr)	92		70 - 130				06/27/24 09:50	06/27/24 23:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/27/24 23:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	461		49.7		mg/Kg			06/27/24 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 14:22	06/27/24 22:08	1
Diesel Range Organics (Over C10-C28)	461		49.7		mg/Kg		06/27/24 14:22	06/27/24 22:08	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 14:22	06/27/24 22:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130				06/27/24 14:22	06/27/24 22:08	1
o-Terphenyl	151	S1+	70 - 130				06/27/24 14:22	06/27/24 22:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1040		4.97		mg/Kg			06/28/24 14:46	1

Client Sample ID: CS-62

Lab Sample ID: 880-45332-62

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:50	06/27/24 23:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/27/24 23:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/27/24 23:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:50	06/27/24 23:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/27/24 23:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:50	06/27/24 23:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130				06/27/24 09:50	06/27/24 23:51	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-62

Lab Sample ID: 880-45332-62

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93		70 - 130	06/27/24 09:50	06/27/24 23:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/27/24 23:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	519		49.8		mg/Kg			06/27/24 22:27	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		06/27/24 14:22	06/27/24 22:27	1
Diesel Range Organics (Over C10-C28)	519		49.8		mg/Kg		06/27/24 14:22	06/27/24 22:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 14:22	06/27/24 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130				06/27/24 14:22	06/27/24 22:27	1
o-Terphenyl	157	S1+	70 - 130				06/27/24 14:22	06/27/24 22:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	843		4.96		mg/Kg			06/28/24 14:52	1

Client Sample ID: CS-63

Lab Sample ID: 880-45332-63

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:50	06/28/24 00:12	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 00:12	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 00:12	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		06/27/24 09:50	06/28/24 00:12	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 00:12	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		06/27/24 09:50	06/28/24 00:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	06/27/24 09:50	06/28/24 00:12	1
1,4-Difluorobenzene (Surr)	84		70 - 130	06/27/24 09:50	06/28/24 00:12	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			06/28/24 00:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1060		50.0		mg/Kg			06/27/24 22:47	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-63

Lab Sample ID: 880-45332-63

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 14:22	06/27/24 22:47	1	
Diesel Range Organics (Over C10-C28)	1060		50.0		mg/Kg		06/27/24 14:22	06/27/24 22:47	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 22:47	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	149	S1+	70 - 130				06/27/24 14:22	06/27/24 22:47	1	
o-Terphenyl	164	S1+	70 - 130				06/27/24 14:22	06/27/24 22:47	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2790		24.9		mg/Kg			06/28/24 14:58	5	

Client Sample ID: CS-64

Lab Sample ID: 880-45332-64

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

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		06/27/24 09:50	06/28/24 00:32	1	
Toluene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/28/24 00:32	1	
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/28/24 00:32	1	
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/27/24 09:50	06/28/24 00:32	1	
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/27/24 09:50	06/28/24 00:32	1	
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/27/24 09:50	06/28/24 00:32	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	90		70 - 130				06/27/24 09:50	06/28/24 00:32	1	
1,4-Difluorobenzene (Surr)	85		70 - 130				06/27/24 09:50	06/28/24 00:32	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			06/28/24 00:32	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	543		49.8		mg/Kg			06/27/24 23:06	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 14:22	06/27/24 23:06	1	
Diesel Range Organics (Over C10-C28)	543		49.8		mg/Kg		06/27/24 14:22	06/27/24 23:06	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 14:22	06/27/24 23:06	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	177	S1+	70 - 130				06/27/24 14:22	06/27/24 23:06	1	
o-Terphenyl	198	S1+	70 - 130				06/27/24 14:22	06/27/24 23:06	1	

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-64

Lab Sample ID: 880-45332-64

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3410		25.1		mg/Kg			06/28/24 15:04	5

Client Sample ID: NSW-1

Lab Sample ID: 880-45332-65

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 00:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 00:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 00:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:50	06/28/24 00:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 00:53	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:50	06/28/24 00:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				06/27/24 09:50	06/28/24 00:53	1
1,4-Difluorobenzene (Surr)	85		70 - 130				06/27/24 09:50	06/28/24 00:53	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			06/28/24 00:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	589		50.0		mg/Kg			06/27/24 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 23:25	1
Diesel Range Organics (Over C10-C28)	589		50.0		mg/Kg		06/27/24 14:22	06/27/24 23:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 23:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130				06/27/24 14:22	06/27/24 23:25	1
o-Terphenyl	169	S1+	70 - 130				06/27/24 14:22	06/27/24 23:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2830		25.0		mg/Kg			06/28/24 15:10	5

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: NSW-2

Lab Sample ID: 880-45332-66

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 01:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 01:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 01:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/28/24 01:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 01:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/28/24 01:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/27/24 09:50	06/28/24 01:14	1
1,4-Difluorobenzene (Surr)	86		70 - 130	06/27/24 09:50	06/28/24 01:14	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			06/28/24 01:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	75.4		49.6		mg/Kg			06/27/24 23:45	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		06/27/24 14:22	06/27/24 23:45	1
Diesel Range Organics (Over C10-C28)	75.4		49.6		mg/Kg		06/27/24 14:22	06/27/24 23:45	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 14:22	06/27/24 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130	06/27/24 14:22	06/27/24 23:45	1
o-Terphenyl	150	S1+	70 - 130	06/27/24 14:22	06/27/24 23:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	666		5.02		mg/Kg			06/28/24 15:16	1

Client Sample ID: NSW-3

Lab Sample ID: 880-45332-67

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 01:34	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 01:34	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 01:34	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/27/24 09:50	06/28/24 01:34	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/27/24 09:50	06/28/24 01:34	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/27/24 09:50	06/28/24 01:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	06/27/24 09:50	06/28/24 01:34	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: NSW-3

Lab Sample ID: 880-45332-67

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	86		70 - 130	06/27/24 09:50	06/28/24 01:34	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			06/28/24 01:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.1		50.0		mg/Kg			06/28/24 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	<50.0	U F1	50.0		mg/Kg		06/27/24 14:29	06/28/24 11:14	1
Diesel Range Organics (Over C10-C28)	58.1	F1	50.0		mg/Kg		06/27/24 14:29	06/28/24 11:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:29	06/28/24 11:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				06/27/24 14:29	06/28/24 11:14	1
o-Terphenyl	96		70 - 130				06/27/24 14:29	06/28/24 11:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	741		4.97		mg/Kg			06/28/24 15:33	1

Client Sample ID: WSW-1

Lab Sample ID: 880-45332-68

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 01:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 01:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 01:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:50	06/28/24 01:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 01:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:50	06/28/24 01:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	06/27/24 09:50	06/28/24 01:55	1
1,4-Difluorobenzene (Surr)	77		70 - 130	06/27/24 09:50	06/28/24 01:55	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			06/28/24 01:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/28/24 14:00	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: WSW-1

Lab Sample ID: 880-45332-68

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 14:29	06/28/24 14:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/27/24 14:29	06/28/24 14:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 14:29	06/28/24 14:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	54	S1-	70 - 130				06/27/24 14:29	06/28/24 14:00	1
o-Terphenyl	51	S1-	70 - 130				06/27/24 14:29	06/28/24 14:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2470		25.0		mg/Kg			06/28/24 15:39	5

Client Sample ID: WSW-2

Lab Sample ID: 880-45332-69

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 02:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 02:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 02:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/28/24 02:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/27/24 09:50	06/28/24 02:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/27/24 09:50	06/28/24 02:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130				06/27/24 09:50	06/28/24 02:15	1
1,4-Difluorobenzene (Surr)	86		70 - 130				06/27/24 09:50	06/28/24 02:15	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			06/28/24 02:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	355		49.8		mg/Kg			06/28/24 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/27/24 14:29	06/28/24 14:21	1
Diesel Range Organics (Over C10-C28)	355		49.8		mg/Kg		06/27/24 14:29	06/28/24 14:21	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/27/24 14:29	06/28/24 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	62	S1-	70 - 130				06/27/24 14:29	06/28/24 14:21	1
o-Terphenyl	60	S1-	70 - 130				06/27/24 14:29	06/28/24 14:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: WSW-2
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.25

Lab Sample ID: 880-45332-69
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	843		5.02		mg/Kg			06/28/24 15:57	1

Client Sample ID: SSW-1
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10
Sample Depth: 0.25

Lab Sample ID: 880-45332-70
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/27/24 09:50	06/28/24 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				06/27/24 09:50	06/28/24 02:36	1
1,4-Difluorobenzene (Surr)	86		70 - 130				06/27/24 09:50	06/28/24 02:36	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			06/28/24 02:36	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	723		49.6		mg/Kg			06/28/24 14:42	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	<49.6	U	49.6		mg/Kg		06/27/24 14:29	06/28/24 14:42	1
Diesel Range Organics (Over C10-C28)	516		49.6		mg/Kg		06/27/24 14:29	06/28/24 14:42	1
Oil Range Organics (Over C28-C36)	207		49.6		mg/Kg		06/27/24 14:29	06/28/24 14:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				06/27/24 14:29	06/28/24 14:42	1
o-Terphenyl	91		70 - 130				06/27/24 14:29	06/28/24 14:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4870		49.8		mg/Kg			06/28/24 16:03	10

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: ESW-1

Lab Sample ID: 880-45332-71

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 04:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 04:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 04:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/27/24 09:50	06/28/24 04:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/27/24 09:50	06/28/24 04:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/27/24 09:50	06/28/24 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	06/27/24 09:50	06/28/24 04:00	1
1,4-Difluorobenzene (Surr)	85		70 - 130	06/27/24 09:50	06/28/24 04:00	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			06/28/24 04:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.0		49.7		mg/Kg			06/28/24 15:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/27/24 14:29	06/28/24 15:02	1
Diesel Range Organics (Over C10-C28)	58.0		49.7		mg/Kg		06/27/24 14:29	06/28/24 15:02	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/27/24 14:29	06/28/24 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130	06/27/24 14:29	06/28/24 15:02	1
o-Terphenyl	72		70 - 130	06/27/24 14:29	06/28/24 15:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2520		25.2		mg/Kg			06/28/24 16:09	5

Client Sample ID: ESW-2

Lab Sample ID: 880-45332-72

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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		06/27/24 09:50	06/28/24 04:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 04:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 04:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/27/24 09:50	06/28/24 04:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/28/24 04:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/27/24 09:50	06/28/24 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	06/27/24 09:50	06/28/24 04:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: ESW-2

Lab Sample ID: 880-45332-72

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Sample Depth: 0.25

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	85		70 - 130	06/27/24 09:50	06/28/24 04:21	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			06/28/24 04:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	231		49.6		mg/Kg			06/28/24 15:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		06/27/24 14:29	06/28/24 15:43	1
Diesel Range Organics (Over C10-C28)	231		49.6		mg/Kg		06/27/24 14:29	06/28/24 15:43	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		06/27/24 14:29	06/28/24 15:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	72		70 - 130				06/27/24 14:29	06/28/24 15:43	1
o-Terphenyl	77		70 - 130				06/27/24 14:29	06/28/24 15:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3350		25.0		mg/Kg			06/28/24 16:15	5

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-45332-1	CS-1	109	100
880-45332-1 MS	CS-1	83	95
880-45332-1 MSD	CS-1	104	95
880-45332-2	CS-2	110	99
880-45332-3	CS-3	114	117
880-45332-4	CS-4	108	113
880-45332-5	CS-5	80	94
880-45332-6	CS-6	99	96
880-45332-7	CS-7	108	110
880-45332-8	CS-8	102	105
880-45332-9	CS-19	113	97
880-45332-10	CS-10	109	91
880-45332-11	CS-11	94	93
880-45332-12	CS-12	115	97
880-45332-13	CS-13	109	102
880-45332-14	CS-14	112	97
880-45332-15	CS-15	118	102
880-45332-16	CS-16	101	96
880-45332-17	CS-17	109	99
880-45332-18	CS-18	113	112
880-45332-19	CS-19	113	89
880-45332-20	CS-20	95	97
880-45332-21	CS-21	98	97
880-45332-22	CS-22	106	90
880-45332-23	CS-23	98	90
880-45332-24	CS-24	113	86
880-45332-25	CS-25	105	94
880-45332-25 MS	CS-25	109	108
880-45332-25 MSD	CS-25	116	96
880-45332-26	CS-26	107	107
880-45332-27	CS-27	112	111
880-45332-28	CS-28	115	107
880-45332-29	CS-29	115	109
880-45332-30	CS-30	111	110
880-45332-31	CS-31	98	90
880-45332-32	CS-32	128	100
880-45332-33	CS-33	104	101
880-45332-34	CS-34	112	95
880-45332-35	CS-35	105	90
880-45332-36	CS-36	114	88
880-45332-37	CS-37	108	100
880-45332-38	CS-38	107	97
880-45332-39	CS-39	91	92
880-45332-40	CS-40	105	87
880-45332-41	CS-41	97	101
880-45332-41 MS	CS-41	111	90
880-45332-41 MSD	CS-41	111	97
880-45332-42	CS-42	117	103
880-45332-43	CS-43	109	109

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-45332-44	CS-44	124	104
880-45332-45	CS-45	124	112
880-45332-46	CS-46	123	107
880-45332-47	CS-47	122	105
880-45332-48	CS-48	123	108
880-45332-49	CS-49	115	101
880-45332-50	CS-50	118	107
880-45332-51	CS-51	100	105
880-45332-52	CS-52	124	105
880-45332-53	CS-53	125	109
880-45332-54	CS-54	120	106
880-45332-55	CS-55	133 S1+	111
880-45332-56	CS-56	122	112
880-45332-57	CS-57	128	105
880-45332-58	CS-58	115	114
880-45332-59	CS-59	138 S1+	102
880-45332-60	CS-60	128	110
880-45332-61	CS-61	86	92
880-45332-61 MS	CS-61	105	92
880-45332-61 MSD	CS-61	103	105
880-45332-62	CS-62	98	93
880-45332-63	CS-63	80	84
880-45332-64	CS-64	90	85
880-45332-65	NSW-1	91	85
880-45332-66	NSW-2	98	86
880-45332-67	NSW-3	98	86
880-45332-68	WSW-1	92	77
880-45332-69	WSW-2	90	86
880-45332-70	SSW-1	88	86
880-45332-71	ESW-1	83	85
880-45332-72	ESW-2	94	85
LCS 880-84336/1-A	Lab Control Sample	118	101
LCS 880-84341/1-A	Lab Control Sample	106	100
LCS 880-84342/1-A	Lab Control Sample	112	107
LCS 880-84344/1-A	Lab Control Sample	123	93
LCSD 880-84336/2-A	Lab Control Sample Dup	102	94
LCSD 880-84341/2-A	Lab Control Sample Dup	106	101
LCSD 880-84342/2-A	Lab Control Sample Dup	110	110
LCSD 880-84344/2-A	Lab Control Sample Dup	112	97
MB 880-84312/5-A	Method Blank	183 S1+	121
MB 880-84317/5-A	Method Blank	74	91
MB 880-84336/5-A	Method Blank	68 S1-	102
MB 880-84341/5-A	Method Blank	68 S1-	103
MB 880-84342/5-A	Method Blank	79	85
MB 880-84344/5-A	Method Blank	185 S1+	121

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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Surrogate Summary

Client: Earth Systems Response and Restoration

Job ID: 880-45332-1

Project/Site: Cotton Draw Unit 604

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-45262-A-8-C MS	Matrix Spike	102	99
880-45262-A-8-D MSD	Matrix Spike Duplicate	103	98
880-45332-1	CS-1	104	108
880-45332-2	CS-2	77	83
880-45332-3	CS-3	88	98
880-45332-4	CS-4	100	106
880-45332-5	CS-5	105	107
880-45332-6	CS-6	105	111
880-45332-7	CS-7	72	78
880-45332-8	CS-8	95	96
880-45332-9	CS-19	82	88
880-45332-10	CS-10	77	86
880-45332-11	CS-11	69 S1-	74
880-45332-12	CS-12	61 S1-	62 S1-
880-45332-13	CS-13	82	90
880-45332-14	CS-14	100	109
880-45332-15	CS-15	91	97
880-45332-16	CS-16	86	93
880-45332-17	CS-17	88	92
880-45332-18	CS-18	90	96
880-45332-19	CS-19	102	111
880-45332-19 MS	CS-19	91	91
880-45332-19 MSD	CS-19	89	92
880-45332-20	CS-20	76	82
880-45332-21	CS-21	90	91
880-45332-22	CS-22	99	106
880-45332-23	CS-23	104	105
880-45332-24	CS-24	102	99
880-45332-25	CS-25	101	106
880-45332-26	CS-26	110	119
880-45332-27	CS-27	95	101
880-45332-28	CS-28	82	89
880-45332-29	CS-29	89	93
880-45332-30	CS-30	100	111
880-45332-31	CS-31	90	95
880-45332-32	CS-32	87	91
880-45332-33	CS-33	104	113
880-45332-34	CS-34	11 S1-	13 S1-
880-45332-35	CS-35	105	105
880-45332-36	CS-36	89	98
880-45332-37	CS-37	103	111
880-45332-38	CS-38	97	103
880-45332-39	CS-39	90	95
880-45332-39 MS	CS-39	83	85
880-45332-39 MSD	CS-39	84	84
880-45332-40	CS-40	83	90
880-45332-41	CS-41	93	101
880-45332-42	CS-42	104	112
880-45332-43	CS-43	118	126
880-45332-44	CS-44	87	95

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-45332-45	CS-45	95	103
880-45332-46	CS-46	90	101
880-45332-47	CS-47	90	101
880-45332-48	CS-48	97	106
880-45332-49	CS-49	87	97
880-45332-50	CS-50	95	103
880-45332-51	CS-51	98	108
880-45332-52	CS-52	73	76
880-45332-53	CS-53	88	96
880-45332-54	CS-54	9 S1-	10 S1-
880-45332-55	CS-55	109	119
880-45332-56	CS-56	80	87
880-45332-57	CS-57	100	106
880-45332-58	CS-58	99	100
880-45332-59	CS-59	163 S1+	173 S1+
880-45332-59 MS	CS-59	134 S1+	143 S1+
880-45332-59 MSD	CS-59	134 S1+	138 S1+
880-45332-60	CS-60	138 S1+	155 S1+
880-45332-61	CS-61	139 S1+	151 S1+
880-45332-62	CS-62	145 S1+	157 S1+
880-45332-63	CS-63	149 S1+	164 S1+
880-45332-64	CS-64	177 S1+	198 S1+
880-45332-65	NSW-1	153 S1+	169 S1+
880-45332-66	NSW-2	144 S1+	150 S1+
880-45332-67	NSW-3	95	96
880-45332-67 MS	NSW-3	65 S1-	61 S1-
880-45332-67 MSD	NSW-3	62 S1-	56 S1-
880-45332-68	WSW-1	54 S1-	51 S1-
880-45332-69	WSW-2	62 S1-	60 S1-
880-45332-70	SSW-1	86	91
880-45332-71	ESW-1	72	72
880-45332-72	ESW-2	72	77
LCS 880-84236/2-A	Lab Control Sample	105	102
LCS 880-84353/2-A	Lab Control Sample	119	116
LCS 880-84354/2-A	Lab Control Sample	82	84
LCS 880-84374/2-A	Lab Control Sample	111	110
LCS 880-84376/2-A	Lab Control Sample	97	97
LCSD 880-84236/3-A	Lab Control Sample Dup	107	106
LCSD 880-84353/3-A	Lab Control Sample Dup	111	115
LCSD 880-84354/3-A	Lab Control Sample Dup	100	103
LCSD 880-84374/3-A	Lab Control Sample Dup	122	124
LCSD 880-84376/3-A	Lab Control Sample Dup	113	115
MB 880-84236/1-A	Method Blank	136 S1+	153 S1+
MB 880-84353/1-A	Method Blank	132 S1+	144 S1+
MB 880-84354/1-A	Method Blank	153 S1+	170 S1+
MB 880-84374/1-A	Method Blank	186 S1+	208 S1+
MB 880-84376/1-A	Method Blank	136 S1+	149 S1+

Surrogate Legend

1CO = 1-Chlorooctane

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604
OTPH = o-Terphenyl

Job ID: 880-45332-1

- 1
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- 13
- 14

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84312/5-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:37	06/27/24 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 08:37	06/27/24 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 08:37	06/27/24 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130	06/27/24 08:37	06/27/24 11:41	1
1,4-Difluorobenzene (Surr)	121		70 - 130	06/27/24 08:37	06/27/24 11:41	1

Lab Sample ID: MB 880-84317/5-A

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:57	06/27/24 12:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:57	06/27/24 12:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:57	06/27/24 12:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 08:57	06/27/24 12:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 08:57	06/27/24 12:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 08:57	06/27/24 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	06/27/24 08:57	06/27/24 12:23	1
1,4-Difluorobenzene (Surr)	91		70 - 130	06/27/24 08:57	06/27/24 12:23	1

Lab Sample ID: MB 880-84336/5-A

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84336

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 12:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 12:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 12:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 12:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:42	06/27/24 12:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:42	06/27/24 12:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130	06/27/24 09:42	06/27/24 12:37	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/27/24 09:42	06/27/24 12:37	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: LCS 880-84336/1-A

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84336

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09987		mg/Kg		100	70 - 130
Toluene	0.100	0.09504		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09878		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1988		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09975		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-84336/2-A

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84336

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09962		mg/Kg		100	70 - 130	0	35
Toluene	0.100	0.09402		mg/Kg		94	70 - 130	1	35
Ethylbenzene	0.100	0.1007		mg/Kg		101	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2043		mg/Kg		102	70 - 130	3	35
o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-45332-1 MS

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 84336

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F2 F1	0.100	0.05469	F1	mg/Kg		55	70 - 130
Toluene	<0.00199	U F2 F1	0.100	0.05090	F1	mg/Kg		51	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.100	0.05202	F1	mg/Kg		52	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1043	F1	mg/Kg		52	70 - 130
o-Xylene	<0.00199	U F2 F1	0.100	0.05167	F1	mg/Kg		52	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-45332-1 MSD

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 84336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0994	0.08835	F2	mg/Kg		89	70 - 130	47	35
Toluene	<0.00199	U F2 F1	0.0994	0.08594	F2	mg/Kg		86	70 - 130	51	35
Ethylbenzene	<0.00199	U F2 F1	0.0994	0.08924	F2	mg/Kg		90	70 - 130	53	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: 880-45332-1 MSD

Matrix: Solid

Analysis Batch: 84307

Client Sample ID: CS-1

Prep Type: Total/NA

Prep Batch: 84336

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.1807	F2	mg/Kg		91	70 - 130	54	35
o-Xylene	<0.00199	U F2 F1	0.0994	0.09029	F2	mg/Kg		91	70 - 130	54	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	104		70 - 130								
1,4-Difluorobenzene (Surr)	95		70 - 130								

Lab Sample ID: MB 880-84341/5-A

Matrix: Solid

Analysis Batch: 84449

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84341

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:47	06/28/24 12:03	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
%Recovery	Qualifier								
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130				06/27/24 09:47	06/28/24 12:03	1
1,4-Difluorobenzene (Surr)	103		70 - 130				06/27/24 09:47	06/28/24 12:03	1

Lab Sample ID: LCS 880-84341/1-A

Matrix: Solid

Analysis Batch: 84449

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84341

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1128		mg/Kg		113	70 - 130
Toluene	0.100	0.09780		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.09926		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2021		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1000		mg/Kg		100	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	106		70 - 130				
1,4-Difluorobenzene (Surr)	100		70 - 130				

Lab Sample ID: LCSD 880-84341/2-A

Matrix: Solid

Analysis Batch: 84449

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84341

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1140		mg/Kg		114	70 - 130	1	35
Toluene	0.100	0.09264		mg/Kg		93	70 - 130	5	35
Ethylbenzene	0.100	0.09045		mg/Kg		90	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1840		mg/Kg		92	70 - 130	9	35
o-Xylene	0.100	0.09094		mg/Kg		91	70 - 130	9	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

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

Lab Sample ID: 880-45332-25 MS

Matrix: Solid

Analysis Batch: 84449

Client Sample ID: CS-25

Prep Type: Total/NA

Prep Batch: 84341

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.09064		mg/Kg		90	70 - 130
Toluene	<0.00202	U	0.100	0.07806		mg/Kg		78	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.07681		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1467		mg/Kg		73	70 - 130
o-Xylene	<0.00202	U	0.100	0.07759		mg/Kg		77	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 880-45332-25 MSD

Matrix: Solid

Analysis Batch: 84449

Client Sample ID: CS-25

Prep Type: Total/NA

Prep Batch: 84341

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.07686		mg/Kg		77	70 - 130	16	35
Toluene	<0.00202	U	0.0994	0.07023		mg/Kg		71	70 - 130	11	35
Ethylbenzene	<0.00202	U	0.0994	0.07059		mg/Kg		71	70 - 130	8	35
m-Xylene & p-Xylene	<0.00403	U F1	0.199	0.1368	F1	mg/Kg		69	70 - 130	7	35
o-Xylene	<0.00202	U	0.0994	0.07266		mg/Kg		73	70 - 130	7	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-84342/5-A

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84342

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/27/24 23:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/27/24 23:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/27/24 23:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:50	06/27/24 23:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:50	06/27/24 23:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:50	06/27/24 23:09	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	79		70 - 130	06/27/24 09:50	06/27/24 23:09	1			
1,4-Difluorobenzene (Surr)	85		70 - 130	06/27/24 09:50	06/27/24 23:09	1			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: LCS 880-84342/1-A

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09696		mg/Kg		97	70 - 130
Toluene	0.100	0.09539		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1027		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2021		mg/Kg		101	70 - 130
o-Xylene	0.100	0.1201		mg/Kg		120	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-84342/2-A

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84342

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1095		mg/Kg		109	70 - 130	12	35
Toluene	0.100	0.1002		mg/Kg		100	70 - 130	5	35
Ethylbenzene	0.100	0.1108		mg/Kg		111	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2243		mg/Kg		112	70 - 130	10	35
o-Xylene	0.100	0.1133		mg/Kg		113	70 - 130	6	35

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

Lab Sample ID: 880-45332-61 MS

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: CS-61

Prep Type: Total/NA

Prep Batch: 84342

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.08370		mg/Kg		84	70 - 130
Toluene	<0.00199	U	0.100	0.08582		mg/Kg		86	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.09174		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1662		mg/Kg		83	70 - 130
o-Xylene	<0.00199	U	0.100	0.08557		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-45332-61 MSD

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: CS-61

Prep Type: Total/NA

Prep Batch: 84342

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08177		mg/Kg		82	70 - 130	2	35
Toluene	<0.00199	U	0.0994	0.07711		mg/Kg		78	70 - 130	11	35
Ethylbenzene	<0.00199	U	0.0994	0.08119		mg/Kg		82	70 - 130	12	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: 880-45332-61 MSD

Matrix: Solid

Analysis Batch: 84309

Client Sample ID: CS-61

Prep Type: Total/NA

Prep Batch: 84342

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1521		mg/Kg		77	70 - 130	9	35
o-Xylene	<0.00199	U	0.0994	0.1014		mg/Kg		102	70 - 130	17	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	103		70 - 130								
1,4-Difluorobenzene (Surr)	105		70 - 130								

Lab Sample ID: MB 880-84344/5-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84344

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 09:53	06/27/24 23:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	185	S1+	70 - 130				06/27/24 09:53	06/27/24 23:27	1
1,4-Difluorobenzene (Surr)	121		70 - 130				06/27/24 09:53	06/27/24 23:27	1

Lab Sample ID: LCS 880-84344/1-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84344

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	0.100	0.1007		mg/Kg		101	70 - 130		
Toluene	0.100	0.09534		mg/Kg		95	70 - 130		
Ethylbenzene	0.100	0.1068		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene	0.200	0.1834		mg/Kg		92	70 - 130		
o-Xylene	0.100	0.09627		mg/Kg		96	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	123		70 - 130						
1,4-Difluorobenzene (Surr)	93		70 - 130						

Lab Sample ID: LCSD 880-84344/2-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84344

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1048		mg/Kg		105	70 - 130	4	35
Toluene	0.100	0.09324		mg/Kg		93	70 - 130	2	35
Ethylbenzene	0.100	0.09250		mg/Kg		92	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.1591		mg/Kg		80	70 - 130	14	35
o-Xylene	0.100	0.09166		mg/Kg		92	70 - 130	5	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 880-45332-41 MS

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 84344

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.08298		mg/Kg		83	70 - 130
Toluene	<0.00199	U	0.100	0.07560		mg/Kg		75	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.07364		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1289	F1	mg/Kg		64	70 - 130
o-Xylene	<0.00199	U	0.100	0.07427		mg/Kg		74	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: 880-45332-41 MSD

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 84344

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.08721		mg/Kg		88	70 - 130	5	35
Toluene	<0.00199	U	0.0994	0.07888		mg/Kg		79	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.0994	0.08541		mg/Kg		86	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U F1	0.199	0.1560		mg/Kg		78	70 - 130	19	35
o-Xylene	<0.00199	U	0.0994	0.08166		mg/Kg		82	70 - 130	9	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-84236/1-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84236

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		06/26/24 12:25	06/27/24 08:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 08:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/26/24 12:25	06/27/24 08:24	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	136	S1+	70 - 130	06/26/24 12:25	06/27/24 08:24	1			
o-Terphenyl	153	S1+	70 - 130	06/26/24 12:25	06/27/24 08:24	1			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: LCS 880-84236/2-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84236

Analyte			Spike	LCS	LCS	Unit	D	%Rec		
			Added	Result	Qualifier			%Rec		
Gasoline Range Organics (GRO)-C6-C10			1000	1038		mg/Kg		104	70 - 130	
Diesel Range Organics (Over C10-C28)			1000	1026		mg/Kg		103	70 - 130	
Surrogate	LCS	LCS	Limits							
	%Recovery	Qualifier								
1-Chlorooctane	105		70 - 130							
o-Terphenyl	102		70 - 130							

Lab Sample ID: LCSD 880-84236/3-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84236

Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier			Limits	Limit		
Gasoline Range Organics (GRO)-C6-C10			1000	932.6		mg/Kg		93	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	947.0		mg/Kg		95	70 - 130	8	20
Surrogate	LCSD		Limits								
	%Recovery	Qualifier									
1-Chlorooctane	107		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: 880-45262-A-8-C MS

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84236

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1185		mg/Kg		119	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	624.0	F1	mg/Kg		60	70 - 130			
Surrogate	MS	MS	Limits									
	%Recovery	Qualifier										
1-Chlorooctane	102		70 - 130									
o-Terphenyl	99		70 - 130									

Lab Sample ID: 880-45262-A-8-D MSD

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 84236

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	1156		mg/Kg		116	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	626.0	F1	mg/Kg		60	70 - 130	0	20
Surrogate	MSD	MSD									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	103		70 - 130								

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: 880-45262-A-8-D MSD

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 84236

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	98		70 - 130

Lab Sample ID: MB 880-84353/1-A

Matrix: Solid

Analysis Batch: 84289

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84353

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/27/24 20:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/27/24 20:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:13	06/27/24 20:06	1
1-Chlorooctane	132	S1+	70 - 130				06/27/24 11:13	06/27/24 20:06	1
<i>o</i> -Terphenyl	144	S1+	70 - 130				06/27/24 11:13	06/27/24 20:06	1

Lab Sample ID: LCS 880-84353/2-A

Matrix: Solid

Analysis Batch: 84289

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	973.3		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	980.6		mg/Kg		98	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	119		70 - 130				
<i>o</i> -Terphenyl	116		70 - 130				

Lab Sample ID: LCSD 880-84353/3-A

Matrix: Solid

Analysis Batch: 84289

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84353

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	944.2		mg/Kg		94	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	914.0		mg/Kg		91	70 - 130	7	20
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	111		70 - 130						
<i>o</i> -Terphenyl	115		70 - 130						

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: 880-45332-19 MS

Matrix: Solid

Analysis Batch: 84289

Client Sample ID: CS-19

Prep Type: Total/NA

Prep Batch: 84353

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	944.0		mg/Kg		92		70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U F1	999	534.0	F1	mg/Kg		53		70 - 130		
Surrogate	MS	MS	Limits									
	%Recovery	Qualifier										
1-Chlorooctane	91		70 - 130									
o-Terphenyl	91		70 - 130									

Lab Sample ID: 880-45332-19 MSD

Matrix: Solid

Analysis Batch: 84289

Client Sample ID: CS-19

Prep Type: Total/NA

Prep Batch: 84353

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	940.6		mg/Kg		92		70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	999	532.7	F1	mg/Kg		53		70 - 130	0	20
Surrogate	MSD	MSD	Limits									
	%Recovery	Qualifier										
1-Chlorooctane	89		70 - 130									
o-Terphenyl	92		70 - 130									

Lab Sample ID: MB 880-84354/1-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84354

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		06/27/24 11:17	06/27/24 20:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 11:17	06/27/24 20:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 11:17	06/27/24 20:06	1
Surrogate	MB	MB	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	153	S1+	70 - 130				06/27/24 11:17	06/27/24 20:06	1
o-Terphenyl	170	S1+	70 - 130				06/27/24 11:17	06/27/24 20:06	1

Lab Sample ID: LCS 880-84354/2-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84354

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	910.8		mg/Kg		91		70 - 130		
Diesel Range Organics (Over C10-C28)	1000	818.9		mg/Kg		82		70 - 130		

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: LCS 880-84354/2-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84354

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-84354/3-A

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84354

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	904.2		mg/Kg		90	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	901.3		mg/Kg		90	70 - 130	10	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 880-45332-39 MS

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: CS-39

Prep Type: Total/NA

Prep Batch: 84354

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	993	862.6		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	993	516.3	F1	mg/Kg		52	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: 880-45332-39 MSD

Matrix: Solid

Analysis Batch: 84292

Client Sample ID: CS-39

Prep Type: Total/NA

Prep Batch: 84354

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	993	891.4		mg/Kg		88	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	993	520.1	F1	mg/Kg		52	70 - 130	1	20

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

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: MB 880-84374/1-A

Matrix: Solid

Analysis Batch: 84296

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84374

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		06/27/24 14:22	06/27/24 19:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 19:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:22	06/27/24 19:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	186	S1+	70 - 130				06/27/24 14:22	06/27/24 19:52	1
o-Terphenyl	208	S1+	70 - 130				06/27/24 14:22	06/27/24 19:52	1

Lab Sample ID: LCS 880-84374/2-A

Matrix: Solid

Analysis Batch: 84296

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	928.4		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	880.4		mg/Kg		88	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	111		70 - 130				
o-Terphenyl	110		70 - 130				

Lab Sample ID: LCSD 880-84374/3-A

Matrix: Solid

Analysis Batch: 84296

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84374

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	926.7		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	949.5		mg/Kg		95	70 - 130	8	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	122		70 - 130						
o-Terphenyl	124		70 - 130						

Lab Sample ID: 880-45332-59 MS

Matrix: Solid

Analysis Batch: 84296

Client Sample ID: CS-59

Prep Type: Total/NA

Prep Batch: 84374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	992	914.8		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1060	F1	992	1253	F1	mg/Kg		19	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: 880-45332-59 MS
Matrix: Solid
Analysis Batch: 84296

Client Sample ID: CS-59
Prep Type: Total/NA
Prep Batch: 84374

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	143	S1+	70 - 130

Lab Sample ID: 880-45332-59 MSD
Matrix: Solid
Analysis Batch: 84296

Client Sample ID: CS-59
Prep Type: Total/NA
Prep Batch: 84374

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	992	936.9		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1060	F1	992	1213	F1	mg/Kg		15	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	134	S1+	70 - 130								
o-Terphenyl	138	S1+	70 - 130								

Lab Sample ID: MB 880-84376/1-A
Matrix: Solid
Analysis Batch: 84437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84376

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		06/27/24 14:28	06/28/24 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/27/24 14:28	06/28/24 08:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/27/24 14:28	06/28/24 08:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130				06/27/24 14:28	06/28/24 08:41	1
o-Terphenyl	149	S1+	70 - 130				06/27/24 14:28	06/28/24 08:41	1

Lab Sample ID: LCS 880-84376/2-A
Matrix: Solid
Analysis Batch: 84437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	992.9		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	985.8		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	97		70 - 130				
o-Terphenyl	97		70 - 130				

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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

Lab Sample ID: LCSD 880-84376/3-A
Matrix: Solid
Analysis Batch: 84437

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84376

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	986.1		mg/Kg		99	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 880-45332-67 MS
Matrix: Solid
Analysis Batch: 84437

Client Sample ID: NSW-3
Prep Type: Total/NA
Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	362.1	F1	mg/Kg		36	70 - 130		
Diesel Range Organics (Over C10-C28)	58.1	F1	999	401.2	F1	mg/Kg		34	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	65	S1-	70 - 130								
o-Terphenyl	61	S1-	70 - 130								

Lab Sample ID: 880-45332-67 MSD
Matrix: Solid
Analysis Batch: 84437

Client Sample ID: NSW-3
Prep Type: Total/NA
Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	339.7	F1	mg/Kg		34	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	58.1	F1	999	375.2	F1	mg/Kg		32	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	62	S1-	70 - 130								
o-Terphenyl	56	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84358/1-A
Matrix: Solid
Analysis Batch: 84373

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/27/24 20:32	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-84358/2-A

Matrix: Solid

Analysis Batch: 84373

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.6		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-84358/3-A

Matrix: Solid

Analysis Batch: 84373

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	254.9		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 880-45332-9 MS

Matrix: Solid

Analysis Batch: 84373

Client Sample ID: CS-19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	413	F1	251	691.5	F1	mg/Kg		111	90 - 110

Lab Sample ID: 880-45332-9 MSD

Matrix: Solid

Analysis Batch: 84373

Client Sample ID: CS-19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	413	F1	251	694.5	F1	mg/Kg		112	90 - 110	0	20

Lab Sample ID: MB 880-84359/1-A

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/28/24 13:43	1

Lab Sample ID: LCS 880-84359/2-A

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.2		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-84359/3-A

Matrix: Solid

Analysis Batch: 84378

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	241.8		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 880-45332-19 MS

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: CS-19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	190		250	438.5		mg/Kg		99	90 - 110

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-45332-19 MSD

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: CS-19

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	190		250	436.9		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-45332-29 MS

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: CS-29

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	137		250	370.8		mg/Kg		94	90 - 110		

Lab Sample ID: 880-45332-29 MSD

Matrix: Solid

Analysis Batch: 84378

Client Sample ID: CS-29

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	137		250	370.9		mg/Kg		94	90 - 110	0	20

Lab Sample ID: MB 880-84360/1-A

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/28/24 00:07	1

Lab Sample ID: LCS 880-84360/2-A

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	235.4		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-84360/3-A

Matrix: Solid

Analysis Batch: 84379

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	235.2		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-45332-39 MS

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: CS-39

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	98.9	F1	249	247.5	F1	mg/Kg		60	90 - 110		

Lab Sample ID: 880-45332-39 MSD

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: CS-39

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	98.9	F1	249	245.5	F1	mg/Kg		59	90 - 110	1	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-45332-49 MS

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: CS-49

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	333		250	584.4		mg/Kg		101	90 - 110		

Lab Sample ID: 880-45332-49 MSD

Matrix: Solid

Analysis Batch: 84379

Client Sample ID: CS-49

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	588.3		mg/Kg		102	90 - 110	1	20

Lab Sample ID: MB 880-84368/1-A

Matrix: Solid

Analysis Batch: 84454

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/28/24 13:29	1

Lab Sample ID: LCS 880-84368/2-A

Matrix: Solid

Analysis Batch: 84454

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	249.1		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-84368/3-A

Matrix: Solid

Analysis Batch: 84454

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	250.1		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-45332-66 MS

Matrix: Solid

Analysis Batch: 84454

Client Sample ID: NSW-2

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	666		251	900.5		mg/Kg		93	90 - 110		

Lab Sample ID: 880-45332-66 MSD

Matrix: Solid

Analysis Batch: 84454

Client Sample ID: NSW-2

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	666		251	905.7		mg/Kg		95	90 - 110	1	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA

Analysis Batch: 84307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	8021B	84336
880-45332-2	CS-2	Total/NA	Solid	8021B	84336
880-45332-3	CS-3	Total/NA	Solid	8021B	84336
880-45332-4	CS-4	Total/NA	Solid	8021B	84336
880-45332-5	CS-5	Total/NA	Solid	8021B	84336
880-45332-6	CS-6	Total/NA	Solid	8021B	84336
880-45332-7	CS-7	Total/NA	Solid	8021B	84336
880-45332-8	CS-8	Total/NA	Solid	8021B	84336
880-45332-9	CS-19	Total/NA	Solid	8021B	84336
880-45332-10	CS-10	Total/NA	Solid	8021B	84336
880-45332-11	CS-11	Total/NA	Solid	8021B	84336
880-45332-12	CS-12	Total/NA	Solid	8021B	84336
880-45332-13	CS-13	Total/NA	Solid	8021B	84336
880-45332-14	CS-14	Total/NA	Solid	8021B	84336
880-45332-15	CS-15	Total/NA	Solid	8021B	84336
880-45332-16	CS-16	Total/NA	Solid	8021B	84336
880-45332-17	CS-17	Total/NA	Solid	8021B	84336
880-45332-18	CS-18	Total/NA	Solid	8021B	84336
880-45332-19	CS-19	Total/NA	Solid	8021B	84336
880-45332-20	CS-20	Total/NA	Solid	8021B	84336
MB 880-84336/5-A	Method Blank	Total/NA	Solid	8021B	84336
LCS 880-84336/1-A	Lab Control Sample	Total/NA	Solid	8021B	84336
LCSD 880-84336/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84336
880-45332-1 MS	CS-1	Total/NA	Solid	8021B	84336
880-45332-1 MSD	CS-1	Total/NA	Solid	8021B	84336

Analysis Batch: 84308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-41	CS-41	Total/NA	Solid	8021B	84344
880-45332-42	CS-42	Total/NA	Solid	8021B	84344
880-45332-43	CS-43	Total/NA	Solid	8021B	84344
880-45332-44	CS-44	Total/NA	Solid	8021B	84344
880-45332-45	CS-45	Total/NA	Solid	8021B	84344
880-45332-46	CS-46	Total/NA	Solid	8021B	84344
880-45332-47	CS-47	Total/NA	Solid	8021B	84344
880-45332-48	CS-48	Total/NA	Solid	8021B	84344
880-45332-49	CS-49	Total/NA	Solid	8021B	84344
880-45332-50	CS-50	Total/NA	Solid	8021B	84344
880-45332-51	CS-51	Total/NA	Solid	8021B	84344
880-45332-52	CS-52	Total/NA	Solid	8021B	84344
880-45332-53	CS-53	Total/NA	Solid	8021B	84344
880-45332-54	CS-54	Total/NA	Solid	8021B	84344
880-45332-55	CS-55	Total/NA	Solid	8021B	84344
880-45332-56	CS-56	Total/NA	Solid	8021B	84344
880-45332-57	CS-57	Total/NA	Solid	8021B	84344
880-45332-58	CS-58	Total/NA	Solid	8021B	84344
880-45332-59	CS-59	Total/NA	Solid	8021B	84344
880-45332-60	CS-60	Total/NA	Solid	8021B	84344
MB 880-84312/5-A	Method Blank	Total/NA	Solid	8021B	84312
MB 880-84344/5-A	Method Blank	Total/NA	Solid	8021B	84344
LCS 880-84344/1-A	Lab Control Sample	Total/NA	Solid	8021B	84344

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA (Continued)

Analysis Batch: 84308 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-84344/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84344
880-45332-41 MS	CS-41	Total/NA	Solid	8021B	84344
880-45332-41 MSD	CS-41	Total/NA	Solid	8021B	84344

Analysis Batch: 84309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-61	CS-61	Total/NA	Solid	8021B	84342
880-45332-62	CS-62	Total/NA	Solid	8021B	84342
880-45332-63	CS-63	Total/NA	Solid	8021B	84342
880-45332-64	CS-64	Total/NA	Solid	8021B	84342
880-45332-65	NSW-1	Total/NA	Solid	8021B	84342
880-45332-66	NSW-2	Total/NA	Solid	8021B	84342
880-45332-67	NSW-3	Total/NA	Solid	8021B	84342
880-45332-68	WSW-1	Total/NA	Solid	8021B	84342
880-45332-69	WSW-2	Total/NA	Solid	8021B	84342
880-45332-70	SSW-1	Total/NA	Solid	8021B	84342
880-45332-71	ESW-1	Total/NA	Solid	8021B	84342
880-45332-72	ESW-2	Total/NA	Solid	8021B	84342
MB 880-84317/5-A	Method Blank	Total/NA	Solid	8021B	84317
MB 880-84342/5-A	Method Blank	Total/NA	Solid	8021B	84342
LCS 880-84342/1-A	Lab Control Sample	Total/NA	Solid	8021B	84342
LCSD 880-84342/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84342
880-45332-61 MS	CS-61	Total/NA	Solid	8021B	84342
880-45332-61 MSD	CS-61	Total/NA	Solid	8021B	84342

Prep Batch: 84312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84312/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 84317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84317/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 84336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	5035	
880-45332-2	CS-2	Total/NA	Solid	5035	
880-45332-3	CS-3	Total/NA	Solid	5035	
880-45332-4	CS-4	Total/NA	Solid	5035	
880-45332-5	CS-5	Total/NA	Solid	5035	
880-45332-6	CS-6	Total/NA	Solid	5035	
880-45332-7	CS-7	Total/NA	Solid	5035	
880-45332-8	CS-8	Total/NA	Solid	5035	
880-45332-9	CS-19	Total/NA	Solid	5035	
880-45332-10	CS-10	Total/NA	Solid	5035	
880-45332-11	CS-11	Total/NA	Solid	5035	
880-45332-12	CS-12	Total/NA	Solid	5035	
880-45332-13	CS-13	Total/NA	Solid	5035	
880-45332-14	CS-14	Total/NA	Solid	5035	
880-45332-15	CS-15	Total/NA	Solid	5035	
880-45332-16	CS-16	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA (Continued)

Prep Batch: 84336 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-17	CS-17	Total/NA	Solid	5035	
880-45332-18	CS-18	Total/NA	Solid	5035	
880-45332-19	CS-19	Total/NA	Solid	5035	
880-45332-20	CS-20	Total/NA	Solid	5035	
MB 880-84336/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84336/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84336/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45332-1 MS	CS-1	Total/NA	Solid	5035	
880-45332-1 MSD	CS-1	Total/NA	Solid	5035	

Prep Batch: 84341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-21	CS-21	Total/NA	Solid	5035	
880-45332-22	CS-22	Total/NA	Solid	5035	
880-45332-23	CS-23	Total/NA	Solid	5035	
880-45332-24	CS-24	Total/NA	Solid	5035	
880-45332-25	CS-25	Total/NA	Solid	5035	
880-45332-26	CS-26	Total/NA	Solid	5035	
880-45332-27	CS-27	Total/NA	Solid	5035	
880-45332-28	CS-28	Total/NA	Solid	5035	
880-45332-29	CS-29	Total/NA	Solid	5035	
880-45332-30	CS-30	Total/NA	Solid	5035	
880-45332-31	CS-31	Total/NA	Solid	5035	
880-45332-32	CS-32	Total/NA	Solid	5035	
880-45332-33	CS-33	Total/NA	Solid	5035	
880-45332-34	CS-34	Total/NA	Solid	5035	
880-45332-35	CS-35	Total/NA	Solid	5035	
880-45332-36	CS-36	Total/NA	Solid	5035	
880-45332-37	CS-37	Total/NA	Solid	5035	
880-45332-38	CS-38	Total/NA	Solid	5035	
880-45332-39	CS-39	Total/NA	Solid	5035	
880-45332-40	CS-40	Total/NA	Solid	5035	
MB 880-84341/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84341/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84341/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45332-25 MS	CS-25	Total/NA	Solid	5035	
880-45332-25 MSD	CS-25	Total/NA	Solid	5035	

Prep Batch: 84342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-61	CS-61	Total/NA	Solid	5035	
880-45332-62	CS-62	Total/NA	Solid	5035	
880-45332-63	CS-63	Total/NA	Solid	5035	
880-45332-64	CS-64	Total/NA	Solid	5035	
880-45332-65	NSW-1	Total/NA	Solid	5035	
880-45332-66	NSW-2	Total/NA	Solid	5035	
880-45332-67	NSW-3	Total/NA	Solid	5035	
880-45332-68	WSW-1	Total/NA	Solid	5035	
880-45332-69	WSW-2	Total/NA	Solid	5035	
880-45332-70	SSW-1	Total/NA	Solid	5035	
880-45332-71	ESW-1	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA (Continued)

Prep Batch: 84342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-72	ESW-2	Total/NA	Solid	5035	
MB 880-84342/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84342/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84342/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45332-61 MS	CS-61	Total/NA	Solid	5035	
880-45332-61 MSD	CS-61	Total/NA	Solid	5035	

Prep Batch: 84344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-41	CS-41	Total/NA	Solid	5035	
880-45332-42	CS-42	Total/NA	Solid	5035	
880-45332-43	CS-43	Total/NA	Solid	5035	
880-45332-44	CS-44	Total/NA	Solid	5035	
880-45332-45	CS-45	Total/NA	Solid	5035	
880-45332-46	CS-46	Total/NA	Solid	5035	
880-45332-47	CS-47	Total/NA	Solid	5035	
880-45332-48	CS-48	Total/NA	Solid	5035	
880-45332-49	CS-49	Total/NA	Solid	5035	
880-45332-50	CS-50	Total/NA	Solid	5035	
880-45332-51	CS-51	Total/NA	Solid	5035	
880-45332-52	CS-52	Total/NA	Solid	5035	
880-45332-53	CS-53	Total/NA	Solid	5035	
880-45332-54	CS-54	Total/NA	Solid	5035	
880-45332-55	CS-55	Total/NA	Solid	5035	
880-45332-56	CS-56	Total/NA	Solid	5035	
880-45332-57	CS-57	Total/NA	Solid	5035	
880-45332-58	CS-58	Total/NA	Solid	5035	
880-45332-59	CS-59	Total/NA	Solid	5035	
880-45332-60	CS-60	Total/NA	Solid	5035	
MB 880-84344/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84344/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84344/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45332-41 MS	CS-41	Total/NA	Solid	5035	
880-45332-41 MSD	CS-41	Total/NA	Solid	5035	

Analysis Batch: 84449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-21	CS-21	Total/NA	Solid	8021B	84341
880-45332-22	CS-22	Total/NA	Solid	8021B	84341
880-45332-23	CS-23	Total/NA	Solid	8021B	84341
880-45332-24	CS-24	Total/NA	Solid	8021B	84341
880-45332-25	CS-25	Total/NA	Solid	8021B	84341
880-45332-26	CS-26	Total/NA	Solid	8021B	84341
880-45332-27	CS-27	Total/NA	Solid	8021B	84341
880-45332-28	CS-28	Total/NA	Solid	8021B	84341
880-45332-29	CS-29	Total/NA	Solid	8021B	84341
880-45332-30	CS-30	Total/NA	Solid	8021B	84341
880-45332-31	CS-31	Total/NA	Solid	8021B	84341
880-45332-32	CS-32	Total/NA	Solid	8021B	84341
880-45332-33	CS-33	Total/NA	Solid	8021B	84341
880-45332-34	CS-34	Total/NA	Solid	8021B	84341

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA (Continued)

Analysis Batch: 84449 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-35	CS-35	Total/NA	Solid	8021B	84341
880-45332-36	CS-36	Total/NA	Solid	8021B	84341
880-45332-37	CS-37	Total/NA	Solid	8021B	84341
880-45332-38	CS-38	Total/NA	Solid	8021B	84341
880-45332-39	CS-39	Total/NA	Solid	8021B	84341
880-45332-40	CS-40	Total/NA	Solid	8021B	84341
MB 880-84341/5-A	Method Blank	Total/NA	Solid	8021B	84341
LCS 880-84341/1-A	Lab Control Sample	Total/NA	Solid	8021B	84341
LCSD 880-84341/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84341
880-45332-25 MS	CS-25	Total/NA	Solid	8021B	84341
880-45332-25 MSD	CS-25	Total/NA	Solid	8021B	84341

Analysis Batch: 84466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	Total BTEX	
880-45332-2	CS-2	Total/NA	Solid	Total BTEX	
880-45332-3	CS-3	Total/NA	Solid	Total BTEX	
880-45332-4	CS-4	Total/NA	Solid	Total BTEX	
880-45332-5	CS-5	Total/NA	Solid	Total BTEX	
880-45332-6	CS-6	Total/NA	Solid	Total BTEX	
880-45332-7	CS-7	Total/NA	Solid	Total BTEX	
880-45332-8	CS-8	Total/NA	Solid	Total BTEX	
880-45332-9	CS-19	Total/NA	Solid	Total BTEX	
880-45332-10	CS-10	Total/NA	Solid	Total BTEX	
880-45332-11	CS-11	Total/NA	Solid	Total BTEX	
880-45332-12	CS-12	Total/NA	Solid	Total BTEX	
880-45332-13	CS-13	Total/NA	Solid	Total BTEX	
880-45332-14	CS-14	Total/NA	Solid	Total BTEX	
880-45332-15	CS-15	Total/NA	Solid	Total BTEX	
880-45332-16	CS-16	Total/NA	Solid	Total BTEX	
880-45332-17	CS-17	Total/NA	Solid	Total BTEX	
880-45332-18	CS-18	Total/NA	Solid	Total BTEX	
880-45332-19	CS-19	Total/NA	Solid	Total BTEX	
880-45332-20	CS-20	Total/NA	Solid	Total BTEX	
880-45332-21	CS-21	Total/NA	Solid	Total BTEX	
880-45332-22	CS-22	Total/NA	Solid	Total BTEX	
880-45332-23	CS-23	Total/NA	Solid	Total BTEX	
880-45332-24	CS-24	Total/NA	Solid	Total BTEX	
880-45332-25	CS-25	Total/NA	Solid	Total BTEX	
880-45332-26	CS-26	Total/NA	Solid	Total BTEX	
880-45332-27	CS-27	Total/NA	Solid	Total BTEX	
880-45332-28	CS-28	Total/NA	Solid	Total BTEX	
880-45332-29	CS-29	Total/NA	Solid	Total BTEX	
880-45332-30	CS-30	Total/NA	Solid	Total BTEX	
880-45332-31	CS-31	Total/NA	Solid	Total BTEX	
880-45332-32	CS-32	Total/NA	Solid	Total BTEX	
880-45332-33	CS-33	Total/NA	Solid	Total BTEX	
880-45332-34	CS-34	Total/NA	Solid	Total BTEX	
880-45332-35	CS-35	Total/NA	Solid	Total BTEX	
880-45332-36	CS-36	Total/NA	Solid	Total BTEX	
880-45332-37	CS-37	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC VOA (Continued)

Analysis Batch: 84466 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-38	CS-38	Total/NA	Solid	Total BTEX	
880-45332-39	CS-39	Total/NA	Solid	Total BTEX	
880-45332-40	CS-40	Total/NA	Solid	Total BTEX	
880-45332-41	CS-41	Total/NA	Solid	Total BTEX	
880-45332-42	CS-42	Total/NA	Solid	Total BTEX	
880-45332-43	CS-43	Total/NA	Solid	Total BTEX	
880-45332-44	CS-44	Total/NA	Solid	Total BTEX	
880-45332-45	CS-45	Total/NA	Solid	Total BTEX	
880-45332-46	CS-46	Total/NA	Solid	Total BTEX	
880-45332-47	CS-47	Total/NA	Solid	Total BTEX	
880-45332-48	CS-48	Total/NA	Solid	Total BTEX	
880-45332-49	CS-49	Total/NA	Solid	Total BTEX	
880-45332-50	CS-50	Total/NA	Solid	Total BTEX	
880-45332-51	CS-51	Total/NA	Solid	Total BTEX	
880-45332-52	CS-52	Total/NA	Solid	Total BTEX	
880-45332-53	CS-53	Total/NA	Solid	Total BTEX	
880-45332-54	CS-54	Total/NA	Solid	Total BTEX	
880-45332-55	CS-55	Total/NA	Solid	Total BTEX	
880-45332-56	CS-56	Total/NA	Solid	Total BTEX	
880-45332-57	CS-57	Total/NA	Solid	Total BTEX	
880-45332-58	CS-58	Total/NA	Solid	Total BTEX	
880-45332-59	CS-59	Total/NA	Solid	Total BTEX	
880-45332-60	CS-60	Total/NA	Solid	Total BTEX	
880-45332-61	CS-61	Total/NA	Solid	Total BTEX	
880-45332-62	CS-62	Total/NA	Solid	Total BTEX	
880-45332-63	CS-63	Total/NA	Solid	Total BTEX	
880-45332-64	CS-64	Total/NA	Solid	Total BTEX	
880-45332-65	NSW-1	Total/NA	Solid	Total BTEX	
880-45332-66	NSW-2	Total/NA	Solid	Total BTEX	
880-45332-67	NSW-3	Total/NA	Solid	Total BTEX	
880-45332-68	WSW-1	Total/NA	Solid	Total BTEX	
880-45332-69	WSW-2	Total/NA	Solid	Total BTEX	
880-45332-70	SSW-1	Total/NA	Solid	Total BTEX	
880-45332-71	ESW-1	Total/NA	Solid	Total BTEX	
880-45332-72	ESW-2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 84236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	8015NM Prep	
880-45332-2	CS-2	Total/NA	Solid	8015NM Prep	
880-45332-3	CS-3	Total/NA	Solid	8015NM Prep	
880-45332-4	CS-4	Total/NA	Solid	8015NM Prep	
880-45332-5	CS-5	Total/NA	Solid	8015NM Prep	
880-45332-6	CS-6	Total/NA	Solid	8015NM Prep	
880-45332-7	CS-7	Total/NA	Solid	8015NM Prep	
880-45332-8	CS-8	Total/NA	Solid	8015NM Prep	
880-45332-9	CS-19	Total/NA	Solid	8015NM Prep	
880-45332-10	CS-10	Total/NA	Solid	8015NM Prep	
880-45332-11	CS-11	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Prep Batch: 84236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-12	CS-12	Total/NA	Solid	8015NM Prep	
880-45332-13	CS-13	Total/NA	Solid	8015NM Prep	
880-45332-14	CS-14	Total/NA	Solid	8015NM Prep	
880-45332-15	CS-15	Total/NA	Solid	8015NM Prep	
880-45332-16	CS-16	Total/NA	Solid	8015NM Prep	
880-45332-17	CS-17	Total/NA	Solid	8015NM Prep	
880-45332-18	CS-18	Total/NA	Solid	8015NM Prep	
MB 880-84236/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84236/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84236/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45262-A-8-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-45262-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-19	CS-19	Total/NA	Solid	8015B NM	84353
880-45332-20	CS-20	Total/NA	Solid	8015B NM	84353
880-45332-21	CS-21	Total/NA	Solid	8015B NM	84353
880-45332-22	CS-22	Total/NA	Solid	8015B NM	84353
880-45332-23	CS-23	Total/NA	Solid	8015B NM	84353
880-45332-24	CS-24	Total/NA	Solid	8015B NM	84353
880-45332-25	CS-25	Total/NA	Solid	8015B NM	84353
880-45332-26	CS-26	Total/NA	Solid	8015B NM	84353
880-45332-27	CS-27	Total/NA	Solid	8015B NM	84353
880-45332-28	CS-28	Total/NA	Solid	8015B NM	84353
880-45332-29	CS-29	Total/NA	Solid	8015B NM	84353
880-45332-30	CS-30	Total/NA	Solid	8015B NM	84353
880-45332-31	CS-31	Total/NA	Solid	8015B NM	84353
880-45332-32	CS-32	Total/NA	Solid	8015B NM	84353
880-45332-33	CS-33	Total/NA	Solid	8015B NM	84353
880-45332-34	CS-34	Total/NA	Solid	8015B NM	84353
880-45332-35	CS-35	Total/NA	Solid	8015B NM	84353
880-45332-36	CS-36	Total/NA	Solid	8015B NM	84353
880-45332-37	CS-37	Total/NA	Solid	8015B NM	84353
880-45332-38	CS-38	Total/NA	Solid	8015B NM	84353
MB 880-84353/1-A	Method Blank	Total/NA	Solid	8015B NM	84353
LCS 880-84353/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84353
LCSD 880-84353/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84353
880-45332-19 MS	CS-19	Total/NA	Solid	8015B NM	84353
880-45332-19 MSD	CS-19	Total/NA	Solid	8015B NM	84353

Analysis Batch: 84292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	8015B NM	84236
880-45332-2	CS-2	Total/NA	Solid	8015B NM	84236
880-45332-3	CS-3	Total/NA	Solid	8015B NM	84236
880-45332-4	CS-4	Total/NA	Solid	8015B NM	84236
880-45332-5	CS-5	Total/NA	Solid	8015B NM	84236
880-45332-6	CS-6	Total/NA	Solid	8015B NM	84236
880-45332-7	CS-7	Total/NA	Solid	8015B NM	84236
880-45332-8	CS-8	Total/NA	Solid	8015B NM	84236

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Analysis Batch: 84292 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-9	CS-19	Total/NA	Solid	8015B NM	84236
880-45332-10	CS-10	Total/NA	Solid	8015B NM	84236
880-45332-11	CS-11	Total/NA	Solid	8015B NM	84236
880-45332-12	CS-12	Total/NA	Solid	8015B NM	84236
880-45332-13	CS-13	Total/NA	Solid	8015B NM	84236
880-45332-14	CS-14	Total/NA	Solid	8015B NM	84236
880-45332-15	CS-15	Total/NA	Solid	8015B NM	84236
880-45332-16	CS-16	Total/NA	Solid	8015B NM	84236
880-45332-17	CS-17	Total/NA	Solid	8015B NM	84236
880-45332-18	CS-18	Total/NA	Solid	8015B NM	84236
880-45332-39	CS-39	Total/NA	Solid	8015B NM	84354
880-45332-40	CS-40	Total/NA	Solid	8015B NM	84354
880-45332-41	CS-41	Total/NA	Solid	8015B NM	84354
880-45332-42	CS-42	Total/NA	Solid	8015B NM	84354
880-45332-43	CS-43	Total/NA	Solid	8015B NM	84354
880-45332-44	CS-44	Total/NA	Solid	8015B NM	84354
880-45332-45	CS-45	Total/NA	Solid	8015B NM	84354
880-45332-46	CS-46	Total/NA	Solid	8015B NM	84354
880-45332-47	CS-47	Total/NA	Solid	8015B NM	84354
880-45332-48	CS-48	Total/NA	Solid	8015B NM	84354
880-45332-49	CS-49	Total/NA	Solid	8015B NM	84354
880-45332-50	CS-50	Total/NA	Solid	8015B NM	84354
880-45332-51	CS-51	Total/NA	Solid	8015B NM	84354
880-45332-52	CS-52	Total/NA	Solid	8015B NM	84354
880-45332-53	CS-53	Total/NA	Solid	8015B NM	84354
880-45332-54	CS-54	Total/NA	Solid	8015B NM	84354
880-45332-55	CS-55	Total/NA	Solid	8015B NM	84354
880-45332-56	CS-56	Total/NA	Solid	8015B NM	84354
880-45332-57	CS-57	Total/NA	Solid	8015B NM	84354
880-45332-58	CS-58	Total/NA	Solid	8015B NM	84354
MB 880-84236/1-A	Method Blank	Total/NA	Solid	8015B NM	84236
MB 880-84354/1-A	Method Blank	Total/NA	Solid	8015B NM	84354
LCS 880-84236/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84236
LCS 880-84354/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84354
LCSD 880-84236/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84236
LCSD 880-84354/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84354
880-45262-A-8-C MS	Matrix Spike	Total/NA	Solid	8015B NM	84236
880-45262-A-8-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	84236
880-45332-39 MS	CS-39	Total/NA	Solid	8015B NM	84354
880-45332-39 MSD	CS-39	Total/NA	Solid	8015B NM	84354

Analysis Batch: 84296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-59	CS-59	Total/NA	Solid	8015B NM	84374
880-45332-60	CS-60	Total/NA	Solid	8015B NM	84374
880-45332-61	CS-61	Total/NA	Solid	8015B NM	84374
880-45332-62	CS-62	Total/NA	Solid	8015B NM	84374
880-45332-63	CS-63	Total/NA	Solid	8015B NM	84374
880-45332-64	CS-64	Total/NA	Solid	8015B NM	84374
880-45332-65	NSW-1	Total/NA	Solid	8015B NM	84374
880-45332-66	NSW-2	Total/NA	Solid	8015B NM	84374

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Analysis Batch: 84296 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84374/1-A	Method Blank	Total/NA	Solid	8015B NM	84374
LCS 880-84374/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84374
LCSD 880-84374/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84374
880-45332-59 MS	CS-59	Total/NA	Solid	8015B NM	84374
880-45332-59 MSD	CS-59	Total/NA	Solid	8015B NM	84374

Prep Batch: 84353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-19	CS-19	Total/NA	Solid	8015NM Prep	
880-45332-20	CS-20	Total/NA	Solid	8015NM Prep	
880-45332-21	CS-21	Total/NA	Solid	8015NM Prep	
880-45332-22	CS-22	Total/NA	Solid	8015NM Prep	
880-45332-23	CS-23	Total/NA	Solid	8015NM Prep	
880-45332-24	CS-24	Total/NA	Solid	8015NM Prep	
880-45332-25	CS-25	Total/NA	Solid	8015NM Prep	
880-45332-26	CS-26	Total/NA	Solid	8015NM Prep	
880-45332-27	CS-27	Total/NA	Solid	8015NM Prep	
880-45332-28	CS-28	Total/NA	Solid	8015NM Prep	
880-45332-29	CS-29	Total/NA	Solid	8015NM Prep	
880-45332-30	CS-30	Total/NA	Solid	8015NM Prep	
880-45332-31	CS-31	Total/NA	Solid	8015NM Prep	
880-45332-32	CS-32	Total/NA	Solid	8015NM Prep	
880-45332-33	CS-33	Total/NA	Solid	8015NM Prep	
880-45332-34	CS-34	Total/NA	Solid	8015NM Prep	
880-45332-35	CS-35	Total/NA	Solid	8015NM Prep	
880-45332-36	CS-36	Total/NA	Solid	8015NM Prep	
880-45332-37	CS-37	Total/NA	Solid	8015NM Prep	
880-45332-38	CS-38	Total/NA	Solid	8015NM Prep	
MB 880-84353/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84353/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84353/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-19 MS	CS-19	Total/NA	Solid	8015NM Prep	
880-45332-19 MSD	CS-19	Total/NA	Solid	8015NM Prep	

Prep Batch: 84354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-39	CS-39	Total/NA	Solid	8015NM Prep	
880-45332-40	CS-40	Total/NA	Solid	8015NM Prep	
880-45332-41	CS-41	Total/NA	Solid	8015NM Prep	
880-45332-42	CS-42	Total/NA	Solid	8015NM Prep	
880-45332-43	CS-43	Total/NA	Solid	8015NM Prep	
880-45332-44	CS-44	Total/NA	Solid	8015NM Prep	
880-45332-45	CS-45	Total/NA	Solid	8015NM Prep	
880-45332-46	CS-46	Total/NA	Solid	8015NM Prep	
880-45332-47	CS-47	Total/NA	Solid	8015NM Prep	
880-45332-48	CS-48	Total/NA	Solid	8015NM Prep	
880-45332-49	CS-49	Total/NA	Solid	8015NM Prep	
880-45332-50	CS-50	Total/NA	Solid	8015NM Prep	
880-45332-51	CS-51	Total/NA	Solid	8015NM Prep	
880-45332-52	CS-52	Total/NA	Solid	8015NM Prep	
880-45332-53	CS-53	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Prep Batch: 84354 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-54	CS-54	Total/NA	Solid	8015NM Prep	
880-45332-55	CS-55	Total/NA	Solid	8015NM Prep	
880-45332-56	CS-56	Total/NA	Solid	8015NM Prep	
880-45332-57	CS-57	Total/NA	Solid	8015NM Prep	
880-45332-58	CS-58	Total/NA	Solid	8015NM Prep	
MB 880-84354/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84354/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84354/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-39 MS	CS-39	Total/NA	Solid	8015NM Prep	
880-45332-39 MSD	CS-39	Total/NA	Solid	8015NM Prep	

Prep Batch: 84374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-59	CS-59	Total/NA	Solid	8015NM Prep	
880-45332-60	CS-60	Total/NA	Solid	8015NM Prep	
880-45332-61	CS-61	Total/NA	Solid	8015NM Prep	
880-45332-62	CS-62	Total/NA	Solid	8015NM Prep	
880-45332-63	CS-63	Total/NA	Solid	8015NM Prep	
880-45332-64	CS-64	Total/NA	Solid	8015NM Prep	
880-45332-65	NSW-1	Total/NA	Solid	8015NM Prep	
880-45332-66	NSW-2	Total/NA	Solid	8015NM Prep	
MB 880-84374/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84374/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84374/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-59 MS	CS-59	Total/NA	Solid	8015NM Prep	
880-45332-59 MSD	CS-59	Total/NA	Solid	8015NM Prep	

Prep Batch: 84376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-67	NSW-3	Total/NA	Solid	8015NM Prep	
880-45332-68	WSW-1	Total/NA	Solid	8015NM Prep	
880-45332-69	WSW-2	Total/NA	Solid	8015NM Prep	
880-45332-70	SSW-1	Total/NA	Solid	8015NM Prep	
880-45332-71	ESW-1	Total/NA	Solid	8015NM Prep	
880-45332-72	ESW-2	Total/NA	Solid	8015NM Prep	
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-67 MS	NSW-3	Total/NA	Solid	8015NM Prep	
880-45332-67 MSD	NSW-3	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-67	NSW-3	Total/NA	Solid	8015B NM	84376
880-45332-68	WSW-1	Total/NA	Solid	8015B NM	84376
880-45332-69	WSW-2	Total/NA	Solid	8015B NM	84376
880-45332-70	SSW-1	Total/NA	Solid	8015B NM	84376
880-45332-71	ESW-1	Total/NA	Solid	8015B NM	84376
880-45332-72	ESW-2	Total/NA	Solid	8015B NM	84376
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015B NM	84376
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84376

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Analysis Batch: 84437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84376
880-45332-67 MS	NSW-3	Total/NA	Solid	8015B NM	84376
880-45332-67 MSD	NSW-3	Total/NA	Solid	8015B NM	84376

Analysis Batch: 84556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Total/NA	Solid	8015 NM	
880-45332-2	CS-2	Total/NA	Solid	8015 NM	
880-45332-3	CS-3	Total/NA	Solid	8015 NM	
880-45332-4	CS-4	Total/NA	Solid	8015 NM	
880-45332-5	CS-5	Total/NA	Solid	8015 NM	
880-45332-6	CS-6	Total/NA	Solid	8015 NM	
880-45332-7	CS-7	Total/NA	Solid	8015 NM	
880-45332-8	CS-8	Total/NA	Solid	8015 NM	
880-45332-9	CS-19	Total/NA	Solid	8015 NM	
880-45332-10	CS-10	Total/NA	Solid	8015 NM	
880-45332-11	CS-11	Total/NA	Solid	8015 NM	
880-45332-12	CS-12	Total/NA	Solid	8015 NM	
880-45332-13	CS-13	Total/NA	Solid	8015 NM	
880-45332-14	CS-14	Total/NA	Solid	8015 NM	
880-45332-15	CS-15	Total/NA	Solid	8015 NM	
880-45332-16	CS-16	Total/NA	Solid	8015 NM	
880-45332-17	CS-17	Total/NA	Solid	8015 NM	
880-45332-18	CS-18	Total/NA	Solid	8015 NM	
880-45332-19	CS-19	Total/NA	Solid	8015 NM	
880-45332-20	CS-20	Total/NA	Solid	8015 NM	
880-45332-21	CS-21	Total/NA	Solid	8015 NM	
880-45332-22	CS-22	Total/NA	Solid	8015 NM	
880-45332-23	CS-23	Total/NA	Solid	8015 NM	
880-45332-24	CS-24	Total/NA	Solid	8015 NM	
880-45332-25	CS-25	Total/NA	Solid	8015 NM	
880-45332-26	CS-26	Total/NA	Solid	8015 NM	
880-45332-27	CS-27	Total/NA	Solid	8015 NM	
880-45332-28	CS-28	Total/NA	Solid	8015 NM	
880-45332-29	CS-29	Total/NA	Solid	8015 NM	
880-45332-30	CS-30	Total/NA	Solid	8015 NM	
880-45332-31	CS-31	Total/NA	Solid	8015 NM	
880-45332-32	CS-32	Total/NA	Solid	8015 NM	
880-45332-33	CS-33	Total/NA	Solid	8015 NM	
880-45332-34	CS-34	Total/NA	Solid	8015 NM	
880-45332-35	CS-35	Total/NA	Solid	8015 NM	
880-45332-36	CS-36	Total/NA	Solid	8015 NM	
880-45332-37	CS-37	Total/NA	Solid	8015 NM	
880-45332-38	CS-38	Total/NA	Solid	8015 NM	
880-45332-39	CS-39	Total/NA	Solid	8015 NM	
880-45332-40	CS-40	Total/NA	Solid	8015 NM	
880-45332-41	CS-41	Total/NA	Solid	8015 NM	
880-45332-42	CS-42	Total/NA	Solid	8015 NM	
880-45332-43	CS-43	Total/NA	Solid	8015 NM	
880-45332-44	CS-44	Total/NA	Solid	8015 NM	
880-45332-45	CS-45	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

GC Semi VOA (Continued)

Analysis Batch: 84556 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-46	CS-46	Total/NA	Solid	8015 NM	
880-45332-47	CS-47	Total/NA	Solid	8015 NM	
880-45332-48	CS-48	Total/NA	Solid	8015 NM	
880-45332-49	CS-49	Total/NA	Solid	8015 NM	
880-45332-50	CS-50	Total/NA	Solid	8015 NM	
880-45332-51	CS-51	Total/NA	Solid	8015 NM	
880-45332-52	CS-52	Total/NA	Solid	8015 NM	
880-45332-53	CS-53	Total/NA	Solid	8015 NM	
880-45332-54	CS-54	Total/NA	Solid	8015 NM	
880-45332-55	CS-55	Total/NA	Solid	8015 NM	
880-45332-56	CS-56	Total/NA	Solid	8015 NM	
880-45332-57	CS-57	Total/NA	Solid	8015 NM	
880-45332-58	CS-58	Total/NA	Solid	8015 NM	
880-45332-59	CS-59	Total/NA	Solid	8015 NM	
880-45332-60	CS-60	Total/NA	Solid	8015 NM	
880-45332-61	CS-61	Total/NA	Solid	8015 NM	
880-45332-62	CS-62	Total/NA	Solid	8015 NM	
880-45332-63	CS-63	Total/NA	Solid	8015 NM	
880-45332-64	CS-64	Total/NA	Solid	8015 NM	
880-45332-65	NSW-1	Total/NA	Solid	8015 NM	
880-45332-66	NSW-2	Total/NA	Solid	8015 NM	
880-45332-67	NSW-3	Total/NA	Solid	8015 NM	
880-45332-68	WSW-1	Total/NA	Solid	8015 NM	
880-45332-69	WSW-2	Total/NA	Solid	8015 NM	
880-45332-70	SSW-1	Total/NA	Solid	8015 NM	
880-45332-71	ESW-1	Total/NA	Solid	8015 NM	
880-45332-72	ESW-2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 84358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Soluble	Solid	DI Leach	
880-45332-2	CS-2	Soluble	Solid	DI Leach	
880-45332-3	CS-3	Soluble	Solid	DI Leach	
880-45332-4	CS-4	Soluble	Solid	DI Leach	
880-45332-5	CS-5	Soluble	Solid	DI Leach	
880-45332-6	CS-6	Soluble	Solid	DI Leach	
880-45332-7	CS-7	Soluble	Solid	DI Leach	
880-45332-8	CS-8	Soluble	Solid	DI Leach	
880-45332-9	CS-19	Soluble	Solid	DI Leach	
880-45332-10	CS-10	Soluble	Solid	DI Leach	
880-45332-11	CS-11	Soluble	Solid	DI Leach	
880-45332-12	CS-12	Soluble	Solid	DI Leach	
880-45332-13	CS-13	Soluble	Solid	DI Leach	
880-45332-14	CS-14	Soluble	Solid	DI Leach	
880-45332-15	CS-15	Soluble	Solid	DI Leach	
880-45332-16	CS-16	Soluble	Solid	DI Leach	
880-45332-17	CS-17	Soluble	Solid	DI Leach	
880-45332-18	CS-18	Soluble	Solid	DI Leach	
MB 880-84358/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

HPLC/IC (Continued)

Leach Batch: 84358 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-84358/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84358/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45332-9 MS	CS-19	Soluble	Solid	DI Leach	
880-45332-9 MSD	CS-19	Soluble	Solid	DI Leach	

Leach Batch: 84359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-19	CS-19	Soluble	Solid	DI Leach	
880-45332-20	CS-20	Soluble	Solid	DI Leach	
880-45332-21	CS-21	Soluble	Solid	DI Leach	
880-45332-22	CS-22	Soluble	Solid	DI Leach	
880-45332-23	CS-23	Soluble	Solid	DI Leach	
880-45332-24	CS-24	Soluble	Solid	DI Leach	
880-45332-25	CS-25	Soluble	Solid	DI Leach	
880-45332-26	CS-26	Soluble	Solid	DI Leach	
880-45332-27	CS-27	Soluble	Solid	DI Leach	
880-45332-28	CS-28	Soluble	Solid	DI Leach	
880-45332-29	CS-29	Soluble	Solid	DI Leach	
880-45332-30	CS-30	Soluble	Solid	DI Leach	
880-45332-31	CS-31	Soluble	Solid	DI Leach	
880-45332-32	CS-32	Soluble	Solid	DI Leach	
880-45332-33	CS-33	Soluble	Solid	DI Leach	
880-45332-34	CS-34	Soluble	Solid	DI Leach	
880-45332-35	CS-35	Soluble	Solid	DI Leach	
880-45332-36	CS-36	Soluble	Solid	DI Leach	
880-45332-37	CS-37	Soluble	Solid	DI Leach	
880-45332-38	CS-38	Soluble	Solid	DI Leach	
MB 880-84359/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84359/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84359/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45332-19 MS	CS-19	Soluble	Solid	DI Leach	
880-45332-19 MSD	CS-19	Soluble	Solid	DI Leach	
880-45332-29 MS	CS-29	Soluble	Solid	DI Leach	
880-45332-29 MSD	CS-29	Soluble	Solid	DI Leach	

Leach Batch: 84360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-39	CS-39	Soluble	Solid	DI Leach	
880-45332-40	CS-40	Soluble	Solid	DI Leach	
880-45332-41	CS-41	Soluble	Solid	DI Leach	
880-45332-42	CS-42	Soluble	Solid	DI Leach	
880-45332-43	CS-43	Soluble	Solid	DI Leach	
880-45332-44	CS-44	Soluble	Solid	DI Leach	
880-45332-45	CS-45	Soluble	Solid	DI Leach	
880-45332-46	CS-46	Soluble	Solid	DI Leach	
880-45332-47	CS-47	Soluble	Solid	DI Leach	
880-45332-48	CS-48	Soluble	Solid	DI Leach	
880-45332-49	CS-49	Soluble	Solid	DI Leach	
880-45332-50	CS-50	Soluble	Solid	DI Leach	
880-45332-51	CS-51	Soluble	Solid	DI Leach	
880-45332-52	CS-52	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

HPLC/IC (Continued)

Leach Batch: 84360 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-53	CS-53	Soluble	Solid	DI Leach	
880-45332-54	CS-54	Soluble	Solid	DI Leach	
880-45332-55	CS-55	Soluble	Solid	DI Leach	
880-45332-56	CS-56	Soluble	Solid	DI Leach	
880-45332-57	CS-57	Soluble	Solid	DI Leach	
880-45332-58	CS-58	Soluble	Solid	DI Leach	
MB 880-84360/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84360/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84360/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45332-39 MS	CS-39	Soluble	Solid	DI Leach	
880-45332-39 MSD	CS-39	Soluble	Solid	DI Leach	
880-45332-49 MS	CS-49	Soluble	Solid	DI Leach	
880-45332-49 MSD	CS-49	Soluble	Solid	DI Leach	

Leach Batch: 84368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-59	CS-59	Soluble	Solid	DI Leach	
880-45332-60	CS-60	Soluble	Solid	DI Leach	
880-45332-61	CS-61	Soluble	Solid	DI Leach	
880-45332-62	CS-62	Soluble	Solid	DI Leach	
880-45332-63	CS-63	Soluble	Solid	DI Leach	
880-45332-64	CS-64	Soluble	Solid	DI Leach	
880-45332-65	NSW-1	Soluble	Solid	DI Leach	
880-45332-66	NSW-2	Soluble	Solid	DI Leach	
880-45332-67	NSW-3	Soluble	Solid	DI Leach	
880-45332-68	WSW-1	Soluble	Solid	DI Leach	
880-45332-69	WSW-2	Soluble	Solid	DI Leach	
880-45332-70	SSW-1	Soluble	Solid	DI Leach	
880-45332-71	ESW-1	Soluble	Solid	DI Leach	
880-45332-72	ESW-2	Soluble	Solid	DI Leach	
MB 880-84368/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84368/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84368/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45332-66 MS	NSW-2	Soluble	Solid	DI Leach	
880-45332-66 MSD	NSW-2	Soluble	Solid	DI Leach	

Analysis Batch: 84373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-1	CS-1	Soluble	Solid	300.0	84358
880-45332-2	CS-2	Soluble	Solid	300.0	84358
880-45332-3	CS-3	Soluble	Solid	300.0	84358
880-45332-4	CS-4	Soluble	Solid	300.0	84358
880-45332-5	CS-5	Soluble	Solid	300.0	84358
880-45332-6	CS-6	Soluble	Solid	300.0	84358
880-45332-7	CS-7	Soluble	Solid	300.0	84358
880-45332-8	CS-8	Soluble	Solid	300.0	84358
880-45332-9	CS-19	Soluble	Solid	300.0	84358
880-45332-10	CS-10	Soluble	Solid	300.0	84358
880-45332-11	CS-11	Soluble	Solid	300.0	84358
880-45332-12	CS-12	Soluble	Solid	300.0	84358
880-45332-13	CS-13	Soluble	Solid	300.0	84358

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

HPLC/IC (Continued)

Analysis Batch: 84373 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-14	CS-14	Soluble	Solid	300.0	84358
880-45332-15	CS-15	Soluble	Solid	300.0	84358
880-45332-16	CS-16	Soluble	Solid	300.0	84358
880-45332-17	CS-17	Soluble	Solid	300.0	84358
880-45332-18	CS-18	Soluble	Solid	300.0	84358
MB 880-84358/1-A	Method Blank	Soluble	Solid	300.0	84358
LCS 880-84358/2-A	Lab Control Sample	Soluble	Solid	300.0	84358
LCSD 880-84358/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84358
880-45332-9 MS	CS-19	Soluble	Solid	300.0	84358
880-45332-9 MSD	CS-19	Soluble	Solid	300.0	84358

Analysis Batch: 84378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-19	CS-19	Soluble	Solid	300.0	84359
880-45332-20	CS-20	Soluble	Solid	300.0	84359
880-45332-21	CS-21	Soluble	Solid	300.0	84359
880-45332-22	CS-22	Soluble	Solid	300.0	84359
880-45332-23	CS-23	Soluble	Solid	300.0	84359
880-45332-24	CS-24	Soluble	Solid	300.0	84359
880-45332-25	CS-25	Soluble	Solid	300.0	84359
880-45332-26	CS-26	Soluble	Solid	300.0	84359
880-45332-27	CS-27	Soluble	Solid	300.0	84359
880-45332-28	CS-28	Soluble	Solid	300.0	84359
880-45332-29	CS-29	Soluble	Solid	300.0	84359
880-45332-30	CS-30	Soluble	Solid	300.0	84359
880-45332-31	CS-31	Soluble	Solid	300.0	84359
880-45332-32	CS-32	Soluble	Solid	300.0	84359
880-45332-33	CS-33	Soluble	Solid	300.0	84359
880-45332-34	CS-34	Soluble	Solid	300.0	84359
880-45332-35	CS-35	Soluble	Solid	300.0	84359
880-45332-36	CS-36	Soluble	Solid	300.0	84359
880-45332-37	CS-37	Soluble	Solid	300.0	84359
880-45332-38	CS-38	Soluble	Solid	300.0	84359
MB 880-84359/1-A	Method Blank	Soluble	Solid	300.0	84359
LCS 880-84359/2-A	Lab Control Sample	Soluble	Solid	300.0	84359
LCSD 880-84359/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84359
880-45332-19 MS	CS-19	Soluble	Solid	300.0	84359
880-45332-19 MSD	CS-19	Soluble	Solid	300.0	84359
880-45332-29 MS	CS-29	Soluble	Solid	300.0	84359
880-45332-29 MSD	CS-29	Soluble	Solid	300.0	84359

Analysis Batch: 84379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-39	CS-39	Soluble	Solid	300.0	84360
880-45332-40	CS-40	Soluble	Solid	300.0	84360
880-45332-41	CS-41	Soluble	Solid	300.0	84360
880-45332-42	CS-42	Soluble	Solid	300.0	84360
880-45332-43	CS-43	Soluble	Solid	300.0	84360
880-45332-44	CS-44	Soluble	Solid	300.0	84360
880-45332-45	CS-45	Soluble	Solid	300.0	84360
880-45332-46	CS-46	Soluble	Solid	300.0	84360

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

HPLC/IC (Continued)

Analysis Batch: 84379 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-47	CS-47	Soluble	Solid	300.0	84360
880-45332-48	CS-48	Soluble	Solid	300.0	84360
880-45332-49	CS-49	Soluble	Solid	300.0	84360
880-45332-50	CS-50	Soluble	Solid	300.0	84360
880-45332-51	CS-51	Soluble	Solid	300.0	84360
880-45332-52	CS-52	Soluble	Solid	300.0	84360
880-45332-53	CS-53	Soluble	Solid	300.0	84360
880-45332-54	CS-54	Soluble	Solid	300.0	84360
880-45332-55	CS-55	Soluble	Solid	300.0	84360
880-45332-56	CS-56	Soluble	Solid	300.0	84360
880-45332-57	CS-57	Soluble	Solid	300.0	84360
880-45332-58	CS-58	Soluble	Solid	300.0	84360
MB 880-84360/1-A	Method Blank	Soluble	Solid	300.0	84360
LCS 880-84360/2-A	Lab Control Sample	Soluble	Solid	300.0	84360
LCSD 880-84360/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84360
880-45332-39 MS	CS-39	Soluble	Solid	300.0	84360
880-45332-39 MSD	CS-39	Soluble	Solid	300.0	84360
880-45332-49 MS	CS-49	Soluble	Solid	300.0	84360
880-45332-49 MSD	CS-49	Soluble	Solid	300.0	84360

Analysis Batch: 84454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45332-59	CS-59	Soluble	Solid	300.0	84368
880-45332-60	CS-60	Soluble	Solid	300.0	84368
880-45332-61	CS-61	Soluble	Solid	300.0	84368
880-45332-62	CS-62	Soluble	Solid	300.0	84368
880-45332-63	CS-63	Soluble	Solid	300.0	84368
880-45332-64	CS-64	Soluble	Solid	300.0	84368
880-45332-65	NSW-1	Soluble	Solid	300.0	84368
880-45332-66	NSW-2	Soluble	Solid	300.0	84368
880-45332-67	NSW-3	Soluble	Solid	300.0	84368
880-45332-68	WSW-1	Soluble	Solid	300.0	84368
880-45332-69	WSW-2	Soluble	Solid	300.0	84368
880-45332-70	SSW-1	Soluble	Solid	300.0	84368
880-45332-71	ESW-1	Soluble	Solid	300.0	84368
880-45332-72	ESW-2	Soluble	Solid	300.0	84368
MB 880-84368/1-A	Method Blank	Soluble	Solid	300.0	84368
LCS 880-84368/2-A	Lab Control Sample	Soluble	Solid	300.0	84368
LCSD 880-84368/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84368
880-45332-66 MS	NSW-2	Soluble	Solid	300.0	84368
880-45332-66 MSD	NSW-2	Soluble	Solid	300.0	84368

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-1

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 13:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 13:04	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 12:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 12:55	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:13	CH	EET MID

Client Sample ID: CS-2

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 13:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 13:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 13:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 13:16	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:19	CH	EET MID

Client Sample ID: CS-3

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-3

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			5.04 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 13:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 13:58	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 13:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 13:37	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:25	CH	EET MID

Client Sample ID: CS-4

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 14:25	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-4

Lab Sample ID: 880-45332-4

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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			84556	06/27/24 13:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 13:57	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:43	CH	EET MID

Client Sample ID: CS-5

Lab Sample ID: 880-45332-5

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 14:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 14:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 14:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 14:18	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:49	CH	EET MID

Client Sample ID: CS-6

Lab Sample ID: 880-45332-6

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 15:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 15:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 14:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 14:39	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 21:55	CH	EET MID

Client Sample ID: CS-7

Lab Sample ID: 880-45332-7

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 15:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 15:46	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 15:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 15:00	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-7
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:01	CH	EET MID

Client Sample ID: CS-8
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 16:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 16:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 15:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 15:20	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:07	CH	EET MID

Client Sample ID: CS-19
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 16:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 16:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 16:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 16:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:12	CH	EET MID

Client Sample ID: CS-10
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 17:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 17:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 16:23	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:30	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-11

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 18:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 18:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 16:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:36	CH	EET MID

Client Sample ID: CS-12

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 19:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 19:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 17:04	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 22:54	CH	EET MID

Client Sample ID: CS-13

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 19:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 19:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 17:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 17:41	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 23:00	CH	EET MID

Client Sample ID: CS-14

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 20:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 20:16	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-14

Lab Sample ID: 880-45332-14

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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			84556	06/27/24 18:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 18:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84373	06/27/24 23:06	CH	EET MID

Client Sample ID: CS-15

Lab Sample ID: 880-45332-15

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 20:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 20:43	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 18:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 18:23	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 23:12	CH	EET MID

Client Sample ID: CS-16

Lab Sample ID: 880-45332-16

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 21:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 21:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 18:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 18:43	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 23:18	CH	EET MID

Client Sample ID: CS-17

Lab Sample ID: 880-45332-17

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 21:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 21:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 19:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 19:04	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-17
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 23:23	CH	EET MID

Client Sample ID: CS-18
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 22:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 22:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 19:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84236	06/26/24 12:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 19:24	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	84358	06/27/24 11:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84373	06/27/24 23:29	CH	EET MID

Client Sample ID: CS-19
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 22:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 22:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 21:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 21:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 14:03	SMC	EET MID

Client Sample ID: CS-20
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	84336	06/27/24 09:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84307	06/27/24 22:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 22:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 14:23	SMC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-21
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 12:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 12:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 22:30	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 14:30	SMC	EET MID

Client Sample ID: CS-22
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 12:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 12:57	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 22:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 14:36	SMC	EET MID

Client Sample ID: CS-23
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 13:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 13:25	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 23:10	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 14:43	SMC	EET MID

Client Sample ID: CS-24
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 13:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 13:52	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-24

Lab Sample ID: 880-45332-24

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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			84556	06/27/24 23:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 23:31	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:03	SMC	EET MID

Client Sample ID: CS-25

Lab Sample ID: 880-45332-25

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 14:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/27/24 23:52	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:10	SMC	EET MID

Client Sample ID: CS-26

Lab Sample ID: 880-45332-26

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 14:46	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 00:12	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:16	SMC	EET MID

Client Sample ID: CS-27

Lab Sample ID: 880-45332-27

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 15:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 15:14	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 00:32	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-27

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:23	SMC	EET MID

Client Sample ID: CS-28

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-28

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 15:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 15:41	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 00:54	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:30	SMC	EET MID

Client Sample ID: CS-29

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-29

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 16:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 16:08	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 01:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 01:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:36	SMC	EET MID

Client Sample ID: CS-30

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 16:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 16:35	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 01:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 01:55	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 15:56	SMC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-31
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 18:24	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 02:15	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:03	SMC	EET MID

Client Sample ID: CS-32
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 18:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 02:36	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:23	SMC	EET MID

Client Sample ID: CS-33
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 19:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 19:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 02:57	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:30	SMC	EET MID

Client Sample ID: CS-34
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 19:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 19:46	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-34

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-34

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			84556	06/28/24 03:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 03:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:36	SMC	EET MID

Client Sample ID: CS-35

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-35

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 20:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 20:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 04:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 04:22	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:43	SMC	EET MID

Client Sample ID: CS-36

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-36

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 20:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 20:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 04:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 04:43	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:49	SMC	EET MID

Client Sample ID: CS-37

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-37

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 21:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 21:07	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 05:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 05:04	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-37

Lab Sample ID: 880-45332-37

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 16:56	SMC	EET MID

Client Sample ID: CS-38

Lab Sample ID: 880-45332-38

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 21:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 21:34	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 05:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84353	06/27/24 11:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84289	06/28/24 05:24	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84359	06/27/24 11:57	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84378	06/28/24 17:03	SMC	EET MID

Client Sample ID: CS-39

Lab Sample ID: 880-45332-39

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 22:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 22:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 21:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 21:07	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 00:23	CH	EET MID

Client Sample ID: CS-40

Lab Sample ID: 880-45332-40

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84341	06/27/24 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84449	06/28/24 22:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 22:28	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 00:38	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-41
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-41
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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/27/24 23:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 23:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 22:30	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 00:43	CH	EET MID

Client Sample ID: CS-42
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-42
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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 00:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 22:50	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 00:49	CH	EET MID

Client Sample ID: CS-43
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-43
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 00:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 23:10	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 00:54	CH	EET MID

Client Sample ID: CS-44
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 00:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:57	AJ	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-44
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 23:31	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:10	CH	EET MID

Client Sample ID: CS-45
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-45
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 01:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:17	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/27/24 23:52	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:15	CH	EET MID

Client Sample ID: CS-46
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-46
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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 01:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 00:12	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:20	CH	EET MID

Client Sample ID: CS-47
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-47
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 01:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:58	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 00:32	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-47
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-47
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:25	CH	EET MID

Client Sample ID: CS-48
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-48
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 02:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 02:18	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 00:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 00:54	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:30	CH	EET MID

Client Sample ID: CS-49
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-49
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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 02:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 02:39	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 01:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 01:34	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:36	CH	EET MID

Client Sample ID: CS-50
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-50
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 02:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 02:59	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 01:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 01:55	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:51	CH	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-51

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-51

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 04:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 04:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 02:15	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 01:57	CH	EET MID

Client Sample ID: CS-52

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-52

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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 05:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 05:10	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 02:36	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84379	06/28/24 02:12	CH	EET MID

Client Sample ID: CS-53

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-53

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 05:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 05:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 02:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 02:57	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:18	CH	EET MID

Client Sample ID: CS-54

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-54

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 05:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 05:51	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-54

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-54

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			84556	06/28/24 03:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 03:16	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:23	CH	EET MID

Client Sample ID: CS-55

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-55

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 06:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 06:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 04:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 04:22	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:28	CH	EET MID

Client Sample ID: CS-56

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-56

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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 06:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 06:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 04:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 04:43	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:33	CH	EET MID

Client Sample ID: CS-57

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-57

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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 06:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 06:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 05:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 05:04	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-57
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-57
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			4.99 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:39	CH	EET MID

Client Sample ID: CS-58
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-58
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 07:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 07:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 05:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84354	06/27/24 11:18	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84292	06/28/24 05:24	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84360	06/27/24 12:08	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84379	06/28/24 02:44	CH	EET MID

Client Sample ID: CS-59
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-59
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 07:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 07:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 20:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 20:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 14:20	SMC	EET MID

Client Sample ID: CS-60
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-60
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	84344	06/27/24 09:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/28/24 07:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 07:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 21:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 21:49	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 14:27	SMC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-61
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-61
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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/27/24 23:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 23:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 22:08	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84454	06/28/24 14:46	SMC	EET MID

Client Sample ID: CS-62
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-62
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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/27/24 23:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/27/24 23:51	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 22:27	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84454	06/28/24 14:52	SMC	EET MID

Client Sample ID: CS-63
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-63
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 00:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 22:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 22:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 14:58	SMC	EET MID

Client Sample ID: CS-64
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-64
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 00:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:32	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: CS-64

Lab Sample ID: 880-45332-64

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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			84556	06/27/24 23:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 23:06	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 15:04	SMC	EET MID

Client Sample ID: NSW-1

Lab Sample ID: 880-45332-65

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 00:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 00:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 23:25	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 15:10	SMC	EET MID

Client Sample ID: NSW-2

Lab Sample ID: 880-45332-66

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 01:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:14	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/27/24 23:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	84374	06/27/24 14:22	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84296	06/27/24 23:45	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84454	06/28/24 15:16	SMC	EET MID

Client Sample ID: NSW-3

Lab Sample ID: 880-45332-67

Date Collected: 06/26/24 00:00

Matrix: Solid

Date Received: 06/27/24 09:10

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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 01:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:34	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 11:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 11:14	AJ	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: NSW-3

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-67

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84454	06/28/24 15:33	SMC	EET MID

Client Sample ID: WSW-1

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-68

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 01:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 01:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 14:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 14:00	AJ	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 15:39	SMC	EET MID

Client Sample ID: WSW-2

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-69

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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 02:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 02:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 14:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 14:21	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84454	06/28/24 15:57	SMC	EET MID

Client Sample ID: SSW-1

Date Collected: 06/26/24 00:00

Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-70

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 02:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 02:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 14:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 14:42	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	84454	06/28/24 16:03	SMC	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Client Sample ID: ESW-1
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-71
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 04:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 04:00	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 15:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 15:02	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 16:09	SMC	EET MID

Client Sample ID: ESW-2
Date Collected: 06/26/24 00:00
Date Received: 06/27/24 09:10

Lab Sample ID: 880-45332-72
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	84342	06/27/24 09:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84309	06/28/24 04:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84466	06/28/24 04:21	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84556	06/28/24 15:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 15:43	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	84368	06/27/24 13:42	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	84454	06/28/24 16:15	SMC	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: Cotton Draw Unit 604

Job ID: 880-45332-1

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	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

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: Cotton Draw Unit 604

Job ID: 880-45332-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-45332-1	CS-1	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-2	CS-2	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-3	CS-3	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-4	CS-4	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-5	CS-5	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-6	CS-6	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-7	CS-7	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-8	CS-8	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-9	CS-19	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-10	CS-10	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-11	CS-11	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-12	CS-12	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-13	CS-13	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-14	CS-14	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-15	CS-15	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-16	CS-16	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-17	CS-17	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-18	CS-18	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-19	CS-19	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-20	CS-20	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-21	CS-21	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-22	CS-22	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-23	CS-23	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-24	CS-24	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-25	CS-25	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-26	CS-26	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-27	CS-27	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-28	CS-28	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-29	CS-29	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-30	CS-30	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-31	CS-31	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-32	CS-32	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-33	CS-33	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-34	CS-34	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-35	CS-35	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-36	CS-36	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-37	CS-37	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-38	CS-38	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-39	CS-39	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-40	CS-40	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-41	CS-41	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-42	CS-42	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-43	CS-43	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-44	CS-44	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-45	CS-45	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-46	CS-46	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-47	CS-47	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-48	CS-48	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-49	CS-49	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-50	CS-50	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-51	CS-51	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-52	CS-52	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-53	CS-53	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-54	CS-54	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-45332-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-45332-55	CS-55	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-56	CS-56	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-57	CS-57	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-58	CS-58	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-59	CS-59	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-60	CS-60	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-61	CS-61	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-62	CS-62	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-63	CS-63	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-64	CS-64	Solid	06/26/24 00:00	06/27/24 09:10	0.5-1
880-45332-65	NSW-1	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-66	NSW-2	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-67	NSW-3	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-68	WSW-1	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-69	WSW-2	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-70	SSW-1	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-71	ESW-1	Solid	06/26/24 00:00	06/27/24 09:10	0.25
880-45332-72	ESW-2	Solid	06/26/24 00:00	06/27/24 09:10	0.25



Environment Testing
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EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Chain of Custody

Work



880-45332 Chain of Custody

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Page 1 of 8

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	lcarlson@earthsys.net

Program: ☐ PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Colton Draw Unit 604	Turn Around	☐ Routine ☒ Rush	Due Date:	3 Day
Project Location:	1264	TAT starts the day received by the lab, if received by 4:30pm			
Sample's Name:					
PO #:					
SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	Well Ice:	Yes ☒ No ☐	
Samples Received Inact:	Yes ☒ No ☐	Thermometer ID:	TK8		
Cooler Custody Seals:	Yes ☐ No ☒	Correction Factor:	-1		
Sample Custody Seals:	Yes ☐ No ☒	Temperature Reading:	4.2		
Total Containers:		Corrected Temperature:	4.1		

Sample Identification							Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Chloride	TPH 80	BTEX 6	Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
CS-1							S	6/26/2024		0.5 - 1	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 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471

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		6/27/24 9:12			



Environment Testing
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Chain of Custody

Work Order No.:

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Page 2 of 6

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	lcarlson@earthsys.net

Work Order Comments			
Program:	UST/PST ☐	PRF ☐	Brownfields ☐ RRD ☐ Superfund ☐
State of Project:			
Reporting:	Level II ☐	Level III ☐	PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables:	EDD ☐	ADAPT ☐	Other:

[illegible]

Total	200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn
Circle Method(s) and Metal(s)	to be analyzed		TCLP / SPLP	6010:	8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U	Hg: 1631 / 245.1 / 7470 / 7471											

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		06/07/24 910			



Environment Testing
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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

Work Order No:

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Page 4 of 8

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	lcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRd ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Cotton Draw Unit 604		Turn Around			Pres. Code	ANALYSIS REQUEST												Preservative Codes			
Project Number:		1264		☐ Routine	☒ Rush	Due Date:	3 Day												None: NO	DI Water: H ₂ O			
Project Location:																			Cool: Cool	MeOH: Me			
Sampler's Name:																			HCL: HC	HNO ₃ : HN			
PO #:																			H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT				Temp Blank:	Yes	No	Thermometer ID:												H ₃ PO ₄ : HP				
Samples Received Intact:				Yes	No		Correction Factor:												NaHSO ₄ : NABIS				
Cooler Custody Seals:				Yes	No	N/A													Na ₂ S ₂ O ₃ : NaSO ₃				
Sample Custody Seals:				Yes	No	N/A	Temperature Reading:												Zn Acetate+NaOH: Zn				
Total Containers:							Corrected Temperature:												NaOH+Ascorbic Acid: SAPC				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters												Sample Comments			
CS-21		S	6/26/2024		0.5 - 1	Comp	1	Chlorides 300															
CS-22		S	6/26/2024		0.5 - 1	Comp	1	TPH 8015															
CS-23		S	6/26/2024		0.5 - 1	Comp	1	BTEX 8021B															
CS-24		S	6/26/2024		0.5 - 1	Comp	1																
CS-25		S	6/26/2024		0.5 - 1	Comp	1																
CS-26		S	6/26/2024		0.5 - 1	Comp	1																
CS-27		S	6/26/2024		0.5 - 1	Comp	1																
CS-28		S	6/26/2024		0.5 - 1	Comp	1																
CS-29		S	6/26/2024		0.5 - 1	Comp	1																
CS-30		S	6/26/2024		0.5 - 1	Comp	1																

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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		6/27/24 9:10			



Environment Testing

Chain of Custody

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Work Order No:

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Page 4 of 8

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	icarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRQ ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Cotton Draw Unit 604		Turn Around			Pres. Code	ANALYSIS REQUEST																Preservative Codes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Project Number:	1264	☐ Routine ☒ Rush	Due Date:	3 Day																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

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		6/27/09 9h			



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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

www

Page 1 of 1

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments			
Program: UST/PST	☐ PRF	☐ Brownfields	☐ RRd ☐ Superfund
State of Project:			
Reporting: Level II	☐ Level III	☐ PST/UST	TRRP ☐ Level IV ☐
Deliverables: EDD	☐ ADAPT	☐ Other:	

Project Name:		Cotton Draw Unit 604		Turn Around			ANALYSIS REQUEST										Preservative Codes				
Project Number:		1264		☐ Routine ☒ Rush		Due Date: 3 Day												None: NO DI Water: H ₂ O			
Project Location:				TAT starts the day received by the lab - if received by 4.30pm														Cool: Cool MeOH: Me			
Sampler's Name:																		HCL: HC HNO ₃ : HN			
PO #:																		H ₂ SO ₄ : H ₂ NaOH: Na			
SAMPLE RECEIPT		Temp Blank:		Yes No		Wet Ice:		Yes No												H ₃ PO ₄ : HP	
Samples Received Intact:		Yes No		Thermometer ID:																NaHSO ₄ : NABIS	
Cooler Custody Seals:		Yes No		N/A		Correction Factor:														Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:		Yes No		N/A		Temperature Reading:														Zn Acetate+NaOH: Zn	
Total Containers:						Corrected Temperature:														NaOH+Ascorbic Acid: SAPC	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments			
CS-41		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-42		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-43		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-44		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-45		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-46		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-47		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-48		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-49		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										
CS-50		S	6/26/2024		0.5 - 1	Comp	1	X	X	X	X										

Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Tl	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP		6010	8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U	Hg: 1631 / 245.1 / 7470 / 7471										

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		6/27/24 9:10			

Revised Date: 08/25/2020 Rev. 2020



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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 6 of 8

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfields ☐ RRQ ☐ Superfund ☐ State of Project: Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐ Deliverables: EDD ☐ ADAPT ☐ Other: _____	

Project Name:		Cotton Draw Unit 604		Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes	
Project Number:	1264	☐ Routine	☒ Rush	Due Date:	3 Day														None: NO	DI Water: H ₂ O
Project Location:		TAT starts the day received by the lab, if received by 4:30pm																Cool: Cool	MeOH: Me	
Sample's Name:																		HCL: HC	HNO ₃ : HN	
PO #:																		H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No													H ₃ PO ₄ : HP
Samples Received Intact:		Yes	No	Thermometer ID:													NaHSO ₄ : NABIS			
Cooler Custody Seals:		Yes	No	Correction Factor:													Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:		Yes	No	Temperature Reading:													Zn Acetate+NaOH: Zn			
Total Containers:		Corrected Temperature:																NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont													Sample Comments
CS-51		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-52		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-53		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-54		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-55		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-56		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-57		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-58		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-59		S	6/26/2024		0.5 -1	Comp	1	X	X	X										
CS-60		S	6/26/2024		0.5 -1	Comp	1	X	X	X										

Total	200.7 / 6010	200.8 / 6020:
8RCRA	13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn	
TCLP / SPLP 6010- 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

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Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	lcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfield ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		Cotton Draw Unit 604			Turn Around			ANALYSIS REQUEST												Preservative Codes					
Project Number:	1264				☐ Routine	☒ Rush	Due Date: 3 Day														None: NO	DI Water: H ₂ O			
Project Location:					TAT starts the day received by the lab, if received by 4:30pm																Cool: Cool	MeOH: Me			
Sampler's Name:																					HCL: HC	HNO ₃ : HN			
PO #:																					H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT	Temp Blank:	Yes	No	Yes	No	Well Ice:	Yes	No													H ₃ PO ₄ : HP				
	Samples Received Intact:	Yes	No	Thermometer ID:																	NaHSO ₄ : NABIS				
	Cooler Custody Seals:	Yes	No	N/A	Correction Factor:																	Na ₂ S ₂ O ₃ : NaSO ₃			
	Sample Custody Seals:	Yes	No	N/A	Temperature Reading:																	Zn Acetate+NaOH: Zn			
	Total Containers:					Corrected Temperature:																	NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters												Sample Comments					
CS-61		S	6/26/2024		0.5 - 1	Comp	1	Chlorides 300																	
CS-62		S	6/26/2024		0.5 - 1	Comp	1	TPH 8015																	
CS-63		S	6/26/2024		0.5 - 1	Comp	1	BTEX 8021B																	
CS-64		S	6/26/2024		0.5 - 1	Comp	1																		
NSW-1		S	6/26/2024		0.25	Comp	1																		
NSW-2		S	6/26/2024		0.25	Comp	1																		
NSW-3		S	6/26/2024		0.25	Comp	1																		
WSW-1		S	6/26/2024		0.25	Comp	1																		
WSW-2		S	6/26/2024		0.25	Comp	1																		
SSW-1		S	6/26/2024		0.25	Comp	1																		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471

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 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 1 of 1

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

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Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-45332-1

SDG Number:

Login Number: 45332

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/16/2024 8:14:28 AM Revision 1

JOB DESCRIPTION

CDU 604

JOB NUMBER

880-45775-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



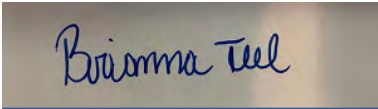
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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

Generated
7/16/2024 8:14:28 AM
Revision 1

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Laboratory Job ID: 880-45775-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Qualifiers

GC Semi VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLCL	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: CDU 604

Job ID: 880-45775-1

Job ID: 880-45775-1

Eurofins Midland

Job Narrative 880-45775-1

REVISION

The report being provided is a revision of the original report sent on 7/11/2024. The report (revision 1) is being revised due to Per client email to take samples 012,013,014,019,023 & 024 off hold for TPH.

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 7/10/2024 8:55 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 2.5°C.

Diesel Range Organics

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-85307 and analytical batch 880-85234 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: CS-10 (880-45775-1), CS-10 (880-45775-2), CS-23 (880-45775-16), CS-31 (880-45775-20), CS-57 (880-45775-25), CS-58 (880-45775-26), CS-60 (880-45775-28), (880-45775-A-1-B MS) and (880-45775-A-1-C MSD). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-20 (880-45775-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-85307 and analytical batch 880-85234 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-85274 and analytical batch 880-85439 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-6919-A-1-B MS) and (890-6919-A-1-C MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-85274 and analytical batch 880-85439 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-85546 and analytical batch 880-85578 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.

Eurofins Midland

Case Narrative

Client: Earth Systems Response and Restoration
Project: CDU 604

Job ID: 880-45775-1

Job ID: 880-45775-1 (Continued)

Eurofins Midland

Method 8015MOD_NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (880-45775-A-12-B MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-20 (880-45775-14). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-85546 and analytical batch 880-85578 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-35 (880-45775-24). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-85572 and analytical batch 880-85584 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL) in the method blank; therefore, re-extraction and re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-85572 and analytical batch 880-85584 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) samples: (890-6926-A-4-E MS) and (890-6926-A-4-F MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported>

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-85572 and analytical batch 880-85584 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-85572 and analytical batch 880-85584 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-10

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	194		50.3		mg/Kg			07/10/24 12:35	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	<50.3	U *1 F1	50.3		mg/Kg		07/10/24 09:12	07/10/24 12:35	1
Diesel Range Organics (Over C10-C28)	194	*1 F1	50.3		mg/Kg		07/10/24 09:12	07/10/24 12:35	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		07/10/24 09:12	07/10/24 12:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130				07/10/24 09:12	07/10/24 12:35	1
o-Terphenyl	60	S1-	70 - 130				07/10/24 09:12	07/10/24 12:35	1

Client Sample ID: CS-10

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 2.5-3

Lab Sample ID: 880-45775-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	143		49.9		mg/Kg			07/10/24 13:27	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 *1	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:27	1
Diesel Range Organics (Over C10-C28)	143	*1	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				07/10/24 09:12	07/10/24 13:27	1
o-Terphenyl	65	S1-	70 - 130				07/10/24 09:12	07/10/24 13:27	1

Client Sample ID: CS-11

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	221		49.9		mg/Kg			07/10/24 13:46	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 *1	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:46	1
Diesel Range Organics (Over C10-C28)	221	*1	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/10/24 09:12	07/10/24 13:46	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-11

Lab Sample ID: 880-45775-4

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	07/10/24 09:12	07/10/24 13:46	1
o-Terphenyl	71		70 - 130	07/10/24 09:12	07/10/24 13:46	1

Client Sample ID: CS-11

Lab Sample ID: 880-45775-5

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	52.5		49.8		mg/Kg			07/10/24 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/10/24 09:12	07/10/24 14:04	1
Diesel Range Organics (Over C10-C28)	52.5	*1	49.8		mg/Kg		07/10/24 09:12	07/10/24 14:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/10/24 09:12	07/10/24 14:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				07/10/24 09:12	07/10/24 14:04	1
o-Terphenyl	72		70 - 130				07/10/24 09:12	07/10/24 14:04	1

Client Sample ID: CS-20

Lab Sample ID: 880-45775-8

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4900		49.9		mg/Kg			07/10/24 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/10/24 09:12	07/10/24 14:21	1
Diesel Range Organics (Over C10-C28)	4900	*1	49.9		mg/Kg		07/10/24 09:12	07/10/24 14:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/10/24 09:12	07/10/24 14:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/10/24 09:12	07/10/24 14:21	1
o-Terphenyl	87		70 - 130				07/10/24 09:12	07/10/24 14:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-20

Lab Sample ID: 880-45775-9

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4670		49.6		mg/Kg			07/10/24 14:39	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	<49.6	U *1	49.6		mg/Kg		07/10/24 09:12	07/10/24 14:39	1
Diesel Range Organics (Over C10-C28)	4670	*1	49.6		mg/Kg		07/10/24 09:12	07/10/24 14:39	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/10/24 09:12	07/10/24 14:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				07/10/24 09:12	07/10/24 14:39	1
o-Terphenyl	81		70 - 130				07/10/24 09:12	07/10/24 14:39	1

Client Sample ID: CS-20

Lab Sample ID: 880-45775-10

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 2.5-3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5900		50.3		mg/Kg			07/10/24 14:57	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	<50.3	U *1	50.3		mg/Kg		07/10/24 09:12	07/10/24 14:57	1
Diesel Range Organics (Over C10-C28)	5900	*1	50.3		mg/Kg		07/10/24 09:12	07/10/24 14:57	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		07/10/24 09:12	07/10/24 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	180	S1+	70 - 130				07/10/24 09:12	07/10/24 14:57	1
o-Terphenyl	171	S1+	70 - 130				07/10/24 09:12	07/10/24 14:57	1

Client Sample ID: CS-20

Lab Sample ID: 880-45775-11

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 3.5-4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3280		50.1		mg/Kg			07/10/24 15:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1	50.1		mg/Kg		07/10/24 09:12	07/10/24 15:15	1
Diesel Range Organics (Over C10-C28)	3280	*1	50.1		mg/Kg		07/10/24 09:12	07/10/24 15:15	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		07/10/24 09:12	07/10/24 15:15	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-20

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 3.5-4

Lab Sample ID: 880-45775-11

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	07/10/24 09:12	07/10/24 15:15	1
o-Terphenyl	113		70 - 130	07/10/24 09:12	07/10/24 15:15	1

Client Sample ID: CS-20

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 4.5-5

Lab Sample ID: 880-45775-12

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2700		50.0		mg/Kg			07/12/24 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		07/12/24 10:17	07/12/24 14:51	1
Diesel Range Organics (Over C10-C28)	2700	F1	50.0		mg/Kg		07/12/24 10:17	07/12/24 14:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/24 10:17	07/12/24 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				07/12/24 10:17	07/12/24 14:51	1
o-Terphenyl	109		70 - 130				07/12/24 10:17	07/12/24 14:51	1

Client Sample ID: CS-20

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 5.5-6

Lab Sample ID: 880-45775-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3320		49.7		mg/Kg			07/12/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		07/12/24 10:17	07/12/24 17:11	1
Diesel Range Organics (Over C10-C28)	3320		49.7		mg/Kg		07/12/24 10:17	07/12/24 17:11	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/12/24 10:17	07/12/24 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				07/12/24 10:17	07/12/24 17:11	1
o-Terphenyl	107		70 - 130				07/12/24 10:17	07/12/24 17:11	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-20

Lab Sample ID: 880-45775-14

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 6.5-7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	391		49.8		mg/Kg			07/12/24 17:29	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	<49.8	U *1	49.8		mg/Kg		07/12/24 10:17	07/12/24 17:29	1
Diesel Range Organics (Over C10-C28)	391		49.8		mg/Kg		07/12/24 10:17	07/12/24 17:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/12/24 10:17	07/12/24 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130				07/12/24 10:17	07/12/24 17:29	1
o-Terphenyl	64	S1-	70 - 130				07/12/24 10:17	07/12/24 17:29	1

Client Sample ID: CS-23

Lab Sample ID: 880-45775-15

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	569		50.5		mg/Kg			07/10/24 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:33	1
Diesel Range Organics (Over C10-C28)	569	*1	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:33	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				07/10/24 09:12	07/10/24 15:33	1
o-Terphenyl	76		70 - 130				07/10/24 09:12	07/10/24 15:33	1

Client Sample ID: CS-23

Lab Sample ID: 880-45775-16

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2R

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			07/10/24 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:51	1
Diesel Range Organics (Over C10-C28)	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:51	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/10/24 09:12	07/10/24 15:51	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-23

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2R

Lab Sample ID: 880-45775-16

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	07/10/24 09:12	07/10/24 15:51	1
o-Terphenyl	63	S1-	70 - 130	07/10/24 09:12	07/10/24 15:51	1

Client Sample ID: CS-24

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-17

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2860		49.7		mg/Kg			07/10/24 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		07/10/24 09:12	07/10/24 16:27	1
Diesel Range Organics (Over C10-C28)	2860	*1	49.7		mg/Kg		07/10/24 09:12	07/10/24 16:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/10/24 09:12	07/10/24 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130				07/10/24 09:12	07/10/24 16:27	1
o-Terphenyl	75		70 - 130				07/10/24 09:12	07/10/24 16:27	1

Client Sample ID: CS-24

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2

Lab Sample ID: 880-45775-18

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2560		49.6		mg/Kg			07/10/24 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U *1	49.6		mg/Kg		07/10/24 09:12	07/10/24 16:44	1
Diesel Range Organics (Over C10-C28)	2560	*1	49.6		mg/Kg		07/10/24 09:12	07/10/24 16:44	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/10/24 09:12	07/10/24 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/10/24 09:12	07/10/24 16:44	1
o-Terphenyl	79		70 - 130				07/10/24 09:12	07/10/24 16:44	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-24

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 2.5-3R

Lab Sample ID: 880-45775-19

Matrix: Solid

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			07/12/24 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/12/24 11:55	07/12/24 16:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		07/12/24 11:55	07/12/24 16:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/12/24 11:55	07/12/24 16:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	76		70 - 130				07/12/24 11:55	07/12/24 16:54	1
o-Terphenyl	75		70 - 130				07/12/24 11:55	07/12/24 16:54	1

Client Sample ID: CS-31

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-20

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	185		49.7		mg/Kg			07/10/24 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		07/10/24 09:12	07/10/24 17:02	1
Diesel Range Organics (Over C10-C28)	185	*1	49.7		mg/Kg		07/10/24 09:12	07/10/24 17:02	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/10/24 09:12	07/10/24 17:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130				07/10/24 09:12	07/10/24 17:02	1
o-Terphenyl	69	S1-	70 - 130				07/10/24 09:12	07/10/24 17:02	1

Client Sample ID: CS-35

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-21

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2510		49.9		mg/Kg			07/10/24 17:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/10/24 09:12	07/10/24 17:19	1
Diesel Range Organics (Over C10-C28)	2510	*1	49.9		mg/Kg		07/10/24 09:12	07/10/24 17:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/10/24 09:12	07/10/24 17:19	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-35

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-21

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	07/10/24 09:12	07/10/24 17:19	1
o-Terphenyl	87		70 - 130	07/10/24 09:12	07/10/24 17:19	1

Client Sample ID: CS-35

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1.5-2

Lab Sample ID: 880-45775-22

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9110		251		mg/Kg			07/11/24 13:13	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	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 17:37	1
Diesel Range Organics (Over C10-C28)	9110		251		mg/Kg		07/11/24 11:17	07/11/24 13:13	5
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/10/24 09:12	07/10/24 17:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/10/24 09:12	07/10/24 17:37	1
o-Terphenyl	101		70 - 130				07/10/24 09:12	07/10/24 17:37	1

Client Sample ID: CS-35

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 2.5-3

Lab Sample ID: 880-45775-23

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3980		50.0		mg/Kg			07/12/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:11	1
Diesel Range Organics (Over C10-C28)	3980	*1	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130				07/12/24 11:55	07/12/24 17:11	1
o-Terphenyl	103		70 - 130				07/12/24 11:55	07/12/24 17:11	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-35

Lab Sample ID: 880-45775-24

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 3.5-4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5660		50.0		mg/Kg			07/12/24 17:29	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 *1	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:29	1
Diesel Range Organics (Over C10-C28)	5660	*1	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/24 11:55	07/12/24 17:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130				07/12/24 11:55	07/12/24 17:29	1
o-Terphenyl	176	S1+	70 - 130				07/12/24 11:55	07/12/24 17:29	1

Client Sample ID: CS-57

Lab Sample ID: 880-45775-25

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			07/10/24 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 17:54	1
Diesel Range Organics (Over C10-C28)	<50.5	U *1	50.5		mg/Kg		07/10/24 09:12	07/10/24 17:54	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/10/24 09:12	07/10/24 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/10/24 09:12	07/10/24 17:54	1
o-Terphenyl	69	S1-	70 - 130				07/10/24 09:12	07/10/24 17:54	1

Client Sample ID: CS-58

Lab Sample ID: 880-45775-26

Date Collected: 07/09/24 00:00

Matrix: Solid

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

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			07/10/24 18:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		07/10/24 09:12	07/10/24 18:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		07/10/24 09:12	07/10/24 18:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/10/24 09:12	07/10/24 18:11	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-58

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-26

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	07/10/24 09:12	07/10/24 18:11	1
o-Terphenyl	68	S1-	70 - 130	07/10/24 09:12	07/10/24 18:11	1

Client Sample ID: CS-59

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-27

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.7		49.8		mg/Kg			07/10/24 18:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/10/24 09:12	07/10/24 18:27	1
Diesel Range Organics (Over C10-C28)	86.7	*1	49.8		mg/Kg		07/10/24 09:12	07/10/24 18:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/10/24 09:12	07/10/24 18:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/10/24 09:12	07/10/24 18:27	1
o-Terphenyl	76		70 - 130				07/10/24 09:12	07/10/24 18:27	1

Client Sample ID: CS-60

Date Collected: 07/09/24 00:00

Date Received: 07/10/24 08:55

Sample Depth: 1-1.5

Lab Sample ID: 880-45775-28

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	109		49.9		mg/Kg			07/10/24 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/10/24 09:12	07/10/24 18:44	1
Diesel Range Organics (Over C10-C28)	109	*1	49.9		mg/Kg		07/10/24 09:12	07/10/24 18:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/10/24 09:12	07/10/24 18:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				07/10/24 09:12	07/10/24 18:44	1
o-Terphenyl	65	S1-	70 - 130				07/10/24 09:12	07/10/24 18:44	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-63
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55
Sample Depth: 1-1.5

Lab Sample ID: 880-45775-29
Matrix: Solid

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			07/10/24 19:00	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/10/24 09:12	07/10/24 19:00	1	
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		07/10/24 09:12	07/10/24 19:00	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/10/24 09:12	07/10/24 19:00	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	86		70 - 130				07/10/24 09:12	07/10/24 19:00	1	
o-Terphenyl	71		70 - 130				07/10/24 09:12	07/10/24 19:00	1	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)**Matrix: Solid****Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-45775-1	CS-10	75	60 S1-
880-45775-1 MS	CS-10	73	62 S1-
880-45775-1 MSD	CS-10	74	64 S1-
880-45775-2	CS-10	79	65 S1-
880-45775-4	CS-11	78	71
880-45775-5	CS-11	85	72
880-45775-8	CS-20	81	87
880-45775-9	CS-20	79	81
880-45775-10	CS-20	180 S1+	171 S1+
880-45775-11	CS-20	90	113
880-45775-12	CS-20	79	109
880-45775-12 MS	CS-20	69 S1-	97
880-45775-12 MSD	CS-20	70	96
880-45775-13	CS-20	77	107
880-45775-14	CS-20	75	64 S1-
880-45775-15	CS-23	84	76
880-45775-16	CS-23	79	63 S1-
880-45775-17	CS-24	75	75
880-45775-18	CS-24	81	79
880-45775-19	CS-24	76	75
880-45775-20	CS-31	84	69 S1-
880-45775-21	CS-35	82	87
880-45775-22	CS-35	81	101
880-45775-23	CS-35	78	103
880-45775-24	CS-35	82	176 S1+
880-45775-25	CS-57	81	69 S1-
880-45775-26	CS-58	80	68 S1-
880-45775-27	CS-59	93	76
880-45775-28	CS-60	81	65 S1-
880-45775-29	CS-63	86	71
890-6919-A-1-B MS	Matrix Spike	74	63 S1-
890-6919-A-1-C MSD	Matrix Spike Duplicate	73	60 S1-
890-6926-A-4-E MS	Matrix Spike	69 S1-	74
890-6926-A-4-F MSD	Matrix Spike Duplicate	70	74
LCS 880-85274/2-A	Lab Control Sample	92	82
LCS 880-85307/2-A	Lab Control Sample	113	85
LCS 880-85546/2-A	Lab Control Sample	93	84
LCS 880-85572/2-A	Lab Control Sample	117	113
LCSD 880-85274/3-A	Lab Control Sample Dup	95	87
LCSD 880-85307/3-A	Lab Control Sample Dup	91	84
LCSD 880-85546/3-A	Lab Control Sample Dup	94	88
LCSD 880-85572/3-A	Lab Control Sample Dup	96	114
MB 880-85274/1-A	Method Blank	79	99
MB 880-85307/1-A	Method Blank	88	85
MB 880-85546/1-A	Method Blank	115	120
MB 880-85572/1-A	Method Blank	117	149 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: MB 880-85274/1-A

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 85274

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		07/09/24 21:08	07/11/24 09:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/09/24 21:08	07/11/24 09:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/09/24 21:08	07/11/24 09:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130				07/09/24 21:08	07/11/24 09:42	1
o-Terphenyl	99		70 - 130				07/09/24 21:08	07/11/24 09:42	1

Lab Sample ID: LCS 880-85274/2-A

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 85274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	892.1		mg/Kg		89	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	803.2		mg/Kg		80	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
1-Chlorooctane	92		70 - 130					
o-Terphenyl	82		70 - 130					

Lab Sample ID: LCSD 880-85274/3-A

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 85274

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1109	*1	mg/Kg		111	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	1000	961.6		mg/Kg		96	70 - 130	18	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	95		70 - 130						
o-Terphenyl	87		70 - 130						

Lab Sample ID: 890-6919-A-1-B MS

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 85274

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1 F1	996	651.0	F1	mg/Kg		65	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.8	U F1	996	515.5	F1	mg/Kg		48	70 - 130	

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: 890-6919-A-1-B MS

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 85274

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	63	S1-	70 - 130

Lab Sample ID: 890-6919-A-1-C MSD

Matrix: Solid

Analysis Batch: 85439

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 85274

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1 F1	996	644.3	F1	mg/Kg		65	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1	996	515.0	F1	mg/Kg		48	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	73		70 - 130
o-Terphenyl	60	S1-	70 - 130

Lab Sample ID: MB 880-85307/1-A

Matrix: Solid

Analysis Batch: 85234

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 85307

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		07/10/24 09:12	07/10/24 09:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/10/24 09:12	07/10/24 09:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/10/24 09:12	07/10/24 09:37	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	88		70 - 130	07/10/24 09:12	07/10/24 09:37	1			
o-Terphenyl	85		70 - 130	07/10/24 09:12	07/10/24 09:37	1			

Lab Sample ID: LCS 880-85307/2-A

Matrix: Solid

Analysis Batch: 85234

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 85307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	893.7		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	1000	725.7		mg/Kg		73	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	85		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: LCSD 880-85307/3-A

Matrix: Solid

Analysis Batch: 85234

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 85307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1099	*1	mg/Kg		110	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	897.7	*1	mg/Kg		90	70 - 130	21	20
	LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	91		70 - 130						
o-Terphenyl	84		70 - 130						

Lab Sample ID: 880-45775-1 MS

Matrix: Solid

Analysis Batch: 85234

Client Sample ID: CS-10

Prep Type: Total/NA

Prep Batch: 85307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1 F1	1000	624.4	F1	mg/Kg		62	70 - 130		
Diesel Range Organics (Over C10-C28)	194	*1 F1	1000	489.5	F1	mg/Kg		29	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	73		70 - 130								
o-Terphenyl	62	S1-	70 - 130								

Lab Sample ID: 880-45775-1 MSD

Matrix: Solid

Analysis Batch: 85234

Client Sample ID: CS-10

Prep Type: Total/NA

Prep Batch: 85307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U *1 F1	1000	622.0	F1	mg/Kg		62	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	194	*1 F1	1000	488.3	F1	mg/Kg		29	70 - 130	0	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	74		70 - 130								
o-Terphenyl	64	S1-	70 - 130								

Lab Sample ID: MB 880-85546/1-A

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 85546

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		07/12/24 10:17	07/12/24 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/24 10:17	07/12/24 12:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/24 10:17	07/12/24 12:31	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: MB 880-85546/1-A

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 85546

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
1-Chlorooctane	115		70 - 130	07/12/24 10:17	07/12/24 12:31	1				
o-Terphenyl	120		70 - 130	07/12/24 10:17	07/12/24 12:31	1				

Lab Sample ID: LCS 880-85546/2-A

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 85546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	916.6		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	815.9		mg/Kg		82	70 - 130		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	93		70 - 130								
o-Terphenyl	84		70 - 130								

Lab Sample ID: LCSD 880-85546/3-A

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 85546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1128	*1	mg/Kg		113	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	972.7		mg/Kg		97	70 - 130	18	20
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	94		70 - 130								
o-Terphenyl	88		70 - 130								

Lab Sample ID: 880-45775-12 MS

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: CS-20

Prep Type: Total/NA

Prep Batch: 85546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	997	748.9		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)	2700	F1	997	2884	F1	mg/Kg		19	70 - 130		
Surrogate	MS	MS									
	%Recovery	Qualifier	Limits								
1-Chlorooctane	69	S1-	70 - 130								
o-Terphenyl	97		70 - 130								

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: 880-45775-12 MSD

Matrix: Solid

Analysis Batch: 85578

Client Sample ID: CS-20

Prep Type: Total/NA

Prep Batch: 85546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	997	758.5		mg/Kg		76	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	2700	F1	997	3005	F1	mg/Kg		31	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	70		70 - 130								
o-Terphenyl	96		70 - 130								

Lab Sample ID: MB 880-85572/1-A

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 85572

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		07/12/24 11:55	07/12/24 12:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/12/24 11:55	07/12/24 12:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/12/24 11:55	07/12/24 12:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	117		70 - 130				07/12/24 11:55	07/12/24 12:31	1
o-Terphenyl	149	S1+	70 - 130				07/12/24 11:55	07/12/24 12:31	1

Lab Sample ID: LCS 880-85572/2-A

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 85572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	835.8		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	981.9		mg/Kg		98	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	117		70 - 130						
o-Terphenyl	113		70 - 130						

Lab Sample ID: LCSD 880-85572/3-A

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 85572

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1028	*1	mg/Kg		103	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	1211	*1	mg/Kg		121	70 - 130	21	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

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

Lab Sample ID: LCSD 880-85572/3-A

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 85572

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 890-6926-A-4-E MS

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 85572

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1 *1	1000	620.9	F1	mg/Kg		62	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U F1 *1	1000	728.8		mg/Kg		73	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	69	S1-	70 - 130						
o-Terphenyl	74		70 - 130						

Lab Sample ID: 890-6926-A-4-F MSD

Matrix: Solid

Analysis Batch: 85584

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 85572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U F1 *1	1000	616.7	F1	mg/Kg		62	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U F1 *1	1000	692.3	F1	mg/Kg		69	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	70		70 - 130								
o-Terphenyl	74		70 - 130								

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

GC Semi VOA

Analysis Batch: 85234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-1	CS-10	Total/NA	Solid	8015B NM	85307
880-45775-2	CS-10	Total/NA	Solid	8015B NM	85307
880-45775-4	CS-11	Total/NA	Solid	8015B NM	85307
880-45775-5	CS-11	Total/NA	Solid	8015B NM	85307
880-45775-8	CS-20	Total/NA	Solid	8015B NM	85307
880-45775-9	CS-20	Total/NA	Solid	8015B NM	85307
880-45775-10	CS-20	Total/NA	Solid	8015B NM	85307
880-45775-11	CS-20	Total/NA	Solid	8015B NM	85307
880-45775-15	CS-23	Total/NA	Solid	8015B NM	85307
880-45775-16	CS-23	Total/NA	Solid	8015B NM	85307
880-45775-17	CS-24	Total/NA	Solid	8015B NM	85307
880-45775-18	CS-24	Total/NA	Solid	8015B NM	85307
880-45775-20	CS-31	Total/NA	Solid	8015B NM	85307
880-45775-21	CS-35	Total/NA	Solid	8015B NM	85307
880-45775-22	CS-35	Total/NA	Solid	8015B NM	85307
880-45775-25	CS-57	Total/NA	Solid	8015B NM	85307
880-45775-26	CS-58	Total/NA	Solid	8015B NM	85307
880-45775-27	CS-59	Total/NA	Solid	8015B NM	85307
880-45775-28	CS-60	Total/NA	Solid	8015B NM	85307
880-45775-29	CS-63	Total/NA	Solid	8015B NM	85307
MB 880-85307/1-A	Method Blank	Total/NA	Solid	8015B NM	85307
LCS 880-85307/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	85307
LCSD 880-85307/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	85307
880-45775-1 MS	CS-10	Total/NA	Solid	8015B NM	85307
880-45775-1 MSD	CS-10	Total/NA	Solid	8015B NM	85307

Prep Batch: 85274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-22	CS-35	Total/NA	Solid	8015NM Prep	
MB 880-85274/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-85274/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-85274/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6919-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6919-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 85307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-1	CS-10	Total/NA	Solid	8015NM Prep	
880-45775-2	CS-10	Total/NA	Solid	8015NM Prep	
880-45775-4	CS-11	Total/NA	Solid	8015NM Prep	
880-45775-5	CS-11	Total/NA	Solid	8015NM Prep	
880-45775-8	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-9	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-10	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-11	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-15	CS-23	Total/NA	Solid	8015NM Prep	
880-45775-16	CS-23	Total/NA	Solid	8015NM Prep	
880-45775-17	CS-24	Total/NA	Solid	8015NM Prep	
880-45775-18	CS-24	Total/NA	Solid	8015NM Prep	
880-45775-20	CS-31	Total/NA	Solid	8015NM Prep	
880-45775-21	CS-35	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

GC Semi VOA (Continued)

Prep Batch: 85307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-22	CS-35	Total/NA	Solid	8015NM Prep	
880-45775-25	CS-57	Total/NA	Solid	8015NM Prep	
880-45775-26	CS-58	Total/NA	Solid	8015NM Prep	
880-45775-27	CS-59	Total/NA	Solid	8015NM Prep	
880-45775-28	CS-60	Total/NA	Solid	8015NM Prep	
880-45775-29	CS-63	Total/NA	Solid	8015NM Prep	
MB 880-85307/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-85307/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-85307/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45775-1 MS	CS-10	Total/NA	Solid	8015NM Prep	
880-45775-1 MSD	CS-10	Total/NA	Solid	8015NM Prep	

Analysis Batch: 85439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-22	CS-35	Total/NA	Solid	8015B NM	85274
MB 880-85274/1-A	Method Blank	Total/NA	Solid	8015B NM	85274
LCS 880-85274/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	85274
LCSD 880-85274/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	85274
890-6919-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	85274
890-6919-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	85274

Analysis Batch: 85472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-1	CS-10	Total/NA	Solid	8015 NM	
880-45775-2	CS-10	Total/NA	Solid	8015 NM	
880-45775-4	CS-11	Total/NA	Solid	8015 NM	
880-45775-5	CS-11	Total/NA	Solid	8015 NM	
880-45775-8	CS-20	Total/NA	Solid	8015 NM	
880-45775-9	CS-20	Total/NA	Solid	8015 NM	
880-45775-10	CS-20	Total/NA	Solid	8015 NM	
880-45775-11	CS-20	Total/NA	Solid	8015 NM	
880-45775-12	CS-20	Total/NA	Solid	8015 NM	
880-45775-13	CS-20	Total/NA	Solid	8015 NM	
880-45775-14	CS-20	Total/NA	Solid	8015 NM	
880-45775-15	CS-23	Total/NA	Solid	8015 NM	
880-45775-16	CS-23	Total/NA	Solid	8015 NM	
880-45775-17	CS-24	Total/NA	Solid	8015 NM	
880-45775-18	CS-24	Total/NA	Solid	8015 NM	
880-45775-19	CS-24	Total/NA	Solid	8015 NM	
880-45775-20	CS-31	Total/NA	Solid	8015 NM	
880-45775-21	CS-35	Total/NA	Solid	8015 NM	
880-45775-22	CS-35	Total/NA	Solid	8015 NM	
880-45775-23	CS-35	Total/NA	Solid	8015 NM	
880-45775-24	CS-35	Total/NA	Solid	8015 NM	
880-45775-25	CS-57	Total/NA	Solid	8015 NM	
880-45775-26	CS-58	Total/NA	Solid	8015 NM	
880-45775-27	CS-59	Total/NA	Solid	8015 NM	
880-45775-28	CS-60	Total/NA	Solid	8015 NM	
880-45775-29	CS-63	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

GC Semi VOA

Prep Batch: 85546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-12	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-13	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-14	CS-20	Total/NA	Solid	8015NM Prep	
MB 880-85546/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-85546/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-85546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45775-12 MS	CS-20	Total/NA	Solid	8015NM Prep	
880-45775-12 MSD	CS-20	Total/NA	Solid	8015NM Prep	

Prep Batch: 85572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-19	CS-24	Total/NA	Solid	8015NM Prep	
880-45775-23	CS-35	Total/NA	Solid	8015NM Prep	
880-45775-24	CS-35	Total/NA	Solid	8015NM Prep	
MB 880-85572/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-85572/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-85572/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6926-A-4-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6926-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 85578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-12	CS-20	Total/NA	Solid	8015B NM	85546
880-45775-13	CS-20	Total/NA	Solid	8015B NM	85546
880-45775-14	CS-20	Total/NA	Solid	8015B NM	85546
MB 880-85546/1-A	Method Blank	Total/NA	Solid	8015B NM	85546
LCS 880-85546/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	85546
LCSD 880-85546/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	85546
880-45775-12 MS	CS-20	Total/NA	Solid	8015B NM	85546
880-45775-12 MSD	CS-20	Total/NA	Solid	8015B NM	85546

Analysis Batch: 85584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45775-19	CS-24	Total/NA	Solid	8015B NM	85572
880-45775-23	CS-35	Total/NA	Solid	8015B NM	85572
880-45775-24	CS-35	Total/NA	Solid	8015B NM	85572
MB 880-85572/1-A	Method Blank	Total/NA	Solid	8015B NM	85572
LCS 880-85572/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	85572
LCSD 880-85572/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	85572
890-6926-A-4-E MS	Matrix Spike	Total/NA	Solid	8015B NM	85572
890-6926-A-4-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	85572

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-10
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 12:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 12:35	TKC	EET MID

Client Sample ID: CS-10
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 13:27	TKC	EET MID

Client Sample ID: CS-11
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 13:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 13:46	TKC	EET MID

Client Sample ID: CS-11
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 14:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 14:04	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 14:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 14:21	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 14:39	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 14:39	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 14:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 14:57	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 15:15	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 15:15	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 14:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	85546	07/12/24 10:17	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85578	07/12/24 14:51	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	85546	07/12/24 10:17	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85578	07/12/24 17:11	TKC	EET MID

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 17:29	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-20
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	85546	07/12/24 10:17	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85578	07/12/24 17:29	TKC	EET MID

Client Sample ID: CS-23
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 15:33	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 15:33	TKC	EET MID

Client Sample ID: CS-23
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 15:51	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 15:51	TKC	EET MID

Client Sample ID: CS-24
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 16:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 16:27	TKC	EET MID

Client Sample ID: CS-24
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 16:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 16:44	TKC	EET MID

Client Sample ID: CS-24
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 16:54	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-24
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	85572	07/12/24 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85584	07/12/24 16:54	TKC	EET MID

Client Sample ID: CS-31
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 17:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 17:02	TKC	EET MID

Client Sample ID: CS-35
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 17:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 17:19	TKC	EET MID

Client Sample ID: CS-35
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/11/24 13:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 17:37	TKC	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	85274	07/11/24 11:17	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	85439	07/11/24 13:13	TKC	EET MID

Client Sample ID: CS-35
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	85572	07/12/24 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85584	07/12/24 17:11	TKC	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-35
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-24
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/12/24 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	85572	07/12/24 11:55	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85584	07/12/24 17:29	TKC	EET MID

Client Sample ID: CS-57
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 17:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 17:54	TKC	EET MID

Client Sample ID: CS-58
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 18:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 18:11	TKC	EET MID

Client Sample ID: CS-59
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 18:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 18:27	TKC	EET MID

Client Sample ID: CS-60
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 18:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 18:44	TKC	EET MID

Client Sample ID: CS-63
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			85472	07/10/24 19:00	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Client Sample ID: CS-63
Date Collected: 07/09/24 00:00
Date Received: 07/10/24 08:55

Lab Sample ID: 880-45775-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	85307	07/10/24 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	85234	07/10/24 19:00	TKC	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: CDU 604

Job ID: 880-45775-1

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:
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

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Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: CDU 604

Job ID: 880-45775-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-45775-1	CS-10	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-2	CS-10	Solid	07/09/24 00:00	07/10/24 08:55	2.5-3
880-45775-4	CS-11	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-5	CS-11	Solid	07/09/24 00:00	07/10/24 08:55	1.5-2
880-45775-8	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-9	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	1.5-2
880-45775-10	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	2.5-3
880-45775-11	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	3.5-4
880-45775-12	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	4.5-5
880-45775-13	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	5.5-6
880-45775-14	CS-20	Solid	07/09/24 00:00	07/10/24 08:55	6.5-7
880-45775-15	CS-23	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-16	CS-23	Solid	07/09/24 00:00	07/10/24 08:55	1.5-2R
880-45775-17	CS-24	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-18	CS-24	Solid	07/09/24 00:00	07/10/24 08:55	1.5-2
880-45775-19	CS-24	Solid	07/09/24 00:00	07/10/24 08:55	2.5-3R
880-45775-20	CS-31	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-21	CS-35	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-22	CS-35	Solid	07/09/24 00:00	07/10/24 08:55	1.5-2
880-45775-23	CS-35	Solid	07/09/24 00:00	07/10/24 08:55	2.5-3
880-45775-24	CS-35	Solid	07/09/24 00:00	07/10/24 08:55	3.5-4
880-45775-25	CS-57	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-26	CS-58	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-27	CS-59	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-28	CS-60	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5
880-45775-29	CS-63	Solid	07/09/24 00:00	07/10/24 08:55	1-1.5



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 C



880-45775 Chain of Custody

www.xenco.com

Page 1 of 3

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	lcarlson@earthsys.net

Program: ☐ PST ☐ PRF ☐ Brownfield ☐ RRD ☐ Superfund	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	CDU 604	Turn Around	TSR
Project Number:	1264	☐ Routine ☒ Rush	Code
Project Location:	Marvin	Due Date:	24 Hour
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm	
PO #:		Well Ice:	☒ Yes ☐ No
SAMPLE RECEIPT	Temp Blank:	Yes ☒ No ☐	TSR
Samples Received Inact:	Yes ☒ No ☐	Thermometer ID:	2.1
Cooler Custody Seals:	Yes ☒ No ☐	Correction Factor:	2.4
Sample Custody Seals:	Yes ☒ No ☐	Temperature Reading:	2.5
Total Containers:		Corrected Temperature:	2.5

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH 8	HOLD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/16/24 5:55			
5		6			



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) 986-3199

Chain of Custody

Work Order No:

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Page _____ of _____
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Page 2 of 3

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfields ☐ RRQ ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	CDU 604		Turn Around	
Project Number:	1264	☐ Routine	☒ Rush	
Project Location:		Due Date:	24 Hour	
Sampler's Name:	Marvin	TAT starts the day received by the lab, if received by 4:30pm		
PO #:				
SAMPLE RECEIPT				
Samples Received Intact:	Temp Blank:	Yes	No	Thermometer ID:
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:
Sample Custody Seals:	Yes	No	N/A	Temperature Reading:
Total Containers:				Corrected Temperature:

ANALYSIS REQUEST										Preservative Codes	
Pres. Code											
										None: NO	DI Water: H ₂ O
										Cool: Cool	MeOH: Me
										HCl: HC	HNO ₃ : HN
										H ₂ SO ₄ : H ₂	NaOH: Na
										H ₃ PO ₄ : HP	
										NaHSO ₄ : NABIS	
										Na ₂ S ₂ O ₃ : NASO ₃	
										Zn Acetate+NaOH: Zn	
										NaOH+Ascorbic Acid: S:APC	

[illegible]

Circle Method(s) and Metal(s) to be analyzed	200.7 / 6010	200.8 / 6020:
Total	200.7 / 6010	200.8 / 6020:
8RCRA	13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zr
TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

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		7/6/08 658			
		4			
		6			



Environment Testing
Xenco

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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

Work Order No:

45775

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Page 3 of 3

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: ☐ PST/ST ☐ PRF ☐ Brownfields ☐ RRD ☐ Superfund	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:		CDU 604		Turn Around			PRES. Code	ANALYSIS REQUEST														Preservative Codes	
Project Number:	1264	☐ Routine	☒ Rush	Due Date:	24 Hour	None: NO		DI Water: H ₂ O															
Project Location:		Marvin			TAT starts the day received by the lab, if received by 4:30pm			Cool: Cool	MeOH: Me														
Sampler's Name:								HCL: HC	HNO ₃ : HN														
PO #:								H ₂ SO ₄ : H ₂	NaOH: Na														
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No															H ₃ PO ₄ : HP		
	Samples Received Intact:	Yes	No	Thermometer ID:															NaHSO ₄ : NABIS				
	Cooler Custody Seals:	Yes	No	Correction Factor:															Na ₂ S ₂ O ₅ : NaSO ₃				
	Sample Custody Seals:	Yes	No	Temperature Reading:															Zn Acetate+NaOH: Zn				
	Total Containers:	Yes	No	Corrected Temperature:															NaOH+Ascorbic Acid: SAPC				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH 8015	HOLD														Sample Comments
CS-35		S	7/9/2024		1 - 1.5	Grab	1	X															
CS-35		S	7/9/2024		1.5 - 2	Grab	1	X															
CS-35		S	7/9/2024		2.5 - 3	Grab	1	X															
CS-35		S	7/9/2024		3.5 - 4	Grab	1	X															
CS-57		S	7/9/2024		1 - 1.5	Grab	1	X															
CS-58		S	7/9/2024		1 - 1.5	Grab	1	X															
CS-59		S	7/9/2024		1 - 1.5	Grab	1	X															
CS-60		S	7/9/2024		1 - 1.5	Grab	1	X															
CS-63		S	7/9/2024		1 - 1.5	Grab	1	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
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245, 1 / 7470 / 7471

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/10/24 855			
5		6			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-45775-1

Login Number: 45775
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/25/2024 1:19:11 PM

JOB DESCRIPTION

Cotton Draw Unit 604

JOB NUMBER

880-46406-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



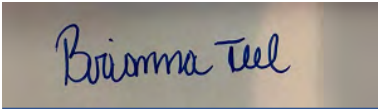
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
7/25/2024 1:19:11 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: Cotton Draw Unit 604

Laboratory Job ID: 880-46406-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project: Cotton Draw Unit 604

Job ID: 880-46406-1

Job ID: 880-46406-1

Eurofins Midland

Job Narrative 880-46406-1

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 7/24/2024 10:16 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 4.5°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-20 (880-46406-1), CS-24 (880-46406-2), CS-31 (880-46406-3), NSW-4 (880-46406-4), NSW-5 (880-46406-5), ESW-3 (880-46406-6), ESW-4 (880-46406-7), WSW-3 (880-46406-8), WSW-4 (880-46406-9), SSW-2 (880-46406-10) and SSW-3 (880-46406-11).

Diesel Range Organics

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-86534 exhibited % difference of > 20% for the following analyte(s) Gasoline Range Organics (GRO)-C6-C10. The CCV prior to and post are both passing, and they are within 20 samples of each other. Data is acceptable and reported for samples.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-86411/21) and (CCV 880-86411/26). 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.

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: CS-20

Lab Sample ID: 880-46406-1

Date Collected: 07/23/24 11:30

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 7-7.5

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			07/24/24 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	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 20:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 20:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 20:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				07/24/24 10:23	07/24/24 20:14	1
o-Terphenyl	104		70 - 130				07/24/24 10:23	07/24/24 20:14	1

Client Sample ID: CS-24

Lab Sample ID: 880-46406-2

Date Collected: 07/23/24 11:35

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 2.5-3

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			07/24/24 20:32	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	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				07/24/24 10:23	07/24/24 20:32	1
o-Terphenyl	102		70 - 130				07/24/24 10:23	07/24/24 20:32	1

Client Sample ID: CS-31

Lab Sample ID: 880-46406-3

Date Collected: 07/23/24 11:40

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 6.5-7

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			07/24/24 20:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/24/24 10:23	07/24/24 20:49	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: CS-31

Lab Sample ID: 880-46406-3

Date Collected: 07/23/24 11:40

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 6.5-7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	07/24/24 10:23	07/24/24 20:49	1
o-Terphenyl	93		70 - 130	07/24/24 10:23	07/24/24 20:49	1

Client Sample ID: NSW-4

Lab Sample ID: 880-46406-4

Date Collected: 07/23/24 11:45

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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			07/24/24 21:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 21:06	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 21:06	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 21:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130				07/24/24 10:23	07/24/24 21:06	1
o-Terphenyl	97		70 - 130				07/24/24 10:23	07/24/24 21:06	1

Client Sample ID: NSW-5

Lab Sample ID: 880-46406-5

Date Collected: 07/23/24 11:50

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 1.5

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			07/24/24 21:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:23	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:23	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				07/24/24 10:23	07/24/24 21:23	1
o-Terphenyl	90		70 - 130				07/24/24 10:23	07/24/24 21:23	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: ESW-3

Lab Sample ID: 880-46406-6

Date Collected: 07/23/24 11:55

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	119		50.0		mg/Kg			07/24/24 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 21:40	1
Diesel Range Organics (Over C10-C28)	119		50.0		mg/Kg		07/24/24 10:23	07/24/24 21:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 21:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				07/24/24 10:23	07/24/24 21:40	1
o-Terphenyl	96		70 - 130				07/24/24 10:23	07/24/24 21:40	1

Client Sample ID: ESW-4

Lab Sample ID: 880-46406-7

Date Collected: 07/23/24 12:00

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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			07/24/24 21:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:56	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:56	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 21:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				07/24/24 10:23	07/24/24 21:56	1
o-Terphenyl	90		70 - 130				07/24/24 10:23	07/24/24 21:56	1

Client Sample ID: WSW-3

Lab Sample ID: 880-46406-8

Date Collected: 07/23/24 12:05

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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			07/24/24 22:13	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		07/24/24 10:23	07/24/24 22:13	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 22:13	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/24/24 10:23	07/24/24 22:13	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: WSW-3

Lab Sample ID: 880-46406-8

Date Collected: 07/23/24 12:05

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	07/24/24 10:23	07/24/24 22:13	1
o-Terphenyl	91		70 - 130	07/24/24 10:23	07/24/24 22:13	1

Client Sample ID: WSW-4

Lab Sample ID: 880-46406-9

Date Collected: 07/23/24 12:10

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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			07/24/24 22:29	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	<49.6	U	49.6		mg/Kg		07/24/24 10:23	07/24/24 22:29	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		07/24/24 10:23	07/24/24 22:29	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/24/24 10:23	07/24/24 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/24/24 10:23	07/24/24 22:29	1
o-Terphenyl	93		70 - 130				07/24/24 10:23	07/24/24 22:29	1

Client Sample ID: SSW-2

Lab Sample ID: 880-46406-10

Date Collected: 07/23/24 12:15

Matrix: Solid

Date Received: 07/24/24 10:16

Sample Depth: 3.5

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			07/24/24 22:46	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	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 22:46	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 22:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/24/24 10:23	07/24/24 22:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				07/24/24 10:23	07/24/24 22:46	1
o-Terphenyl	98		70 - 130				07/24/24 10:23	07/24/24 22:46	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: SSW-3
Date Collected: 07/23/24 12:20
Date Received: 07/24/24 10:16
Sample Depth: 3.5

Lab Sample ID: 880-46406-11
Matrix: Solid

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			07/24/24 18:31	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	<49.9	U	49.9		mg/Kg		07/24/24 11:27	07/24/24 18:31	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/24/24 11:27	07/24/24 18:31	1	
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/24/24 11:27	07/24/24 18:31	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	80		70 - 130				07/24/24 11:27	07/24/24 18:31	1	
o-Terphenyl	73		70 - 130				07/24/24 11:27	07/24/24 18:31	1	

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-46406-1	CS-20	101	104
880-46406-2	CS-24	101	102
880-46406-3	CS-31	93	93
880-46406-4	NSW-4	95	97
880-46406-5	NSW-5	87	90
880-46406-6	ESW-3	93	96
880-46406-7	ESW-4	88	90
880-46406-8	WSW-3	92	91
880-46406-9	WSW-4	91	93
880-46406-10	SSW-2	96	98
880-46406-11	SSW-3	80	73
885-8432-A-2-B MS	Matrix Spike	95	77
885-8432-A-2-C MSD	Matrix Spike Duplicate	96	78
890-6951-A-6-C MS	Matrix Spike	93	102
890-6951-A-6-D MSD	Matrix Spike Duplicate	94	101
LCS 880-86481/2-A	Lab Control Sample	98	111
LCS 880-86504/2-A	Lab Control Sample	95	80
LCSD 880-86481/3-A	Lab Control Sample Dup	108	121
LCSD 880-86504/3-A	Lab Control Sample Dup	110	94
MB 880-86481/1-A	Method Blank	116	123
MB 880-86504/1-A	Method Blank	89	83
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

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

Lab Sample ID: MB 880-86481/1-A

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 86481

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		07/24/24 10:23	07/24/24 12:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 12:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/24/24 10:23	07/24/24 12:18	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130				07/24/24 10:23	07/24/24 12:18	1
o-Terphenyl	123		70 - 130				07/24/24 10:23	07/24/24 12:18	1

Lab Sample ID: LCS 880-86481/2-A

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 86481

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	926.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	997.9		mg/Kg		100	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	98		70 - 130				
o-Terphenyl	111		70 - 130				

Lab Sample ID: LCSD 880-86481/3-A

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 86481

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1033		mg/Kg		103	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1077		mg/Kg		108	70 - 130	8	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	108		70 - 130						
o-Terphenyl	121		70 - 130						

Lab Sample ID: 890-6951-A-6-C MS

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 86481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	997	974.8		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U	997	1015		mg/Kg		100	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

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

Lab Sample ID: 890-6951-A-6-C MS

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 86481

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-6951-A-6-D MSD

Matrix: Solid

Analysis Batch: 86534

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 86481

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	<49.6	U	996	970.9		mg/Kg		97	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.6	U	996	1016		mg/Kg		100	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: MB 880-86504/1-A

Matrix: Solid

Analysis Batch: 86411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 86504

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		07/24/24 08:00	07/24/24 09:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/24/24 08:00	07/24/24 09:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/24/24 08:00	07/24/24 09:34	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	89		70 - 130	07/24/24 08:00	07/24/24 09:34	1			
o-Terphenyl	83		70 - 130	07/24/24 08:00	07/24/24 09:34	1			

Lab Sample ID: LCS 880-86504/2-A

Matrix: Solid

Analysis Batch: 86411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 86504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	977.2		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	825.2		mg/Kg		83	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	80		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

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

Lab Sample ID: LCSD 880-86504/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 86411				Prep Batch: 86504							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1042		mg/Kg		104	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	948.3		mg/Kg		95	70 - 130	14	20
LCSD LCSD											
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	94		70 - 130								

Lab Sample ID: 885-8432-A-2-B MS				Client Sample ID: Matrix Spike							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 86411				Prep Batch: 86504							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	964.0		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	728.4		mg/Kg		73	70 - 130		
MS MS											
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	95		70 - 130								
o-Terphenyl	77		70 - 130								

Lab Sample ID: 885-8432-A-2-C MSD				Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 86411				Prep Batch: 86504							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	968.4		mg/Kg		97	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	809.8		mg/Kg		81	70 - 130	11	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	78		70 - 130								

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

GC Semi VOA

Analysis Batch: 86411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46406-11	SSW-3	Total/NA	Solid	8015B NM	86504
MB 880-86504/1-A	Method Blank	Total/NA	Solid	8015B NM	86504
LCS 880-86504/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	86504
LCSD 880-86504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	86504
885-8432-A-2-B MS	Matrix Spike	Total/NA	Solid	8015B NM	86504
885-8432-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	86504

Prep Batch: 86481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46406-1	CS-20	Total/NA	Solid	8015NM Prep	
880-46406-2	CS-24	Total/NA	Solid	8015NM Prep	
880-46406-3	CS-31	Total/NA	Solid	8015NM Prep	
880-46406-4	NSW-4	Total/NA	Solid	8015NM Prep	
880-46406-5	NSW-5	Total/NA	Solid	8015NM Prep	
880-46406-6	ESW-3	Total/NA	Solid	8015NM Prep	
880-46406-7	ESW-4	Total/NA	Solid	8015NM Prep	
880-46406-8	WSW-3	Total/NA	Solid	8015NM Prep	
880-46406-9	WSW-4	Total/NA	Solid	8015NM Prep	
880-46406-10	SSW-2	Total/NA	Solid	8015NM Prep	
MB 880-86481/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-86481/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-86481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6951-A-6-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6951-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 86504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46406-11	SSW-3	Total/NA	Solid	8015NM Prep	
MB 880-86504/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-86504/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-86504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
885-8432-A-2-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
885-8432-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 86534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46406-1	CS-20	Total/NA	Solid	8015B NM	86481
880-46406-2	CS-24	Total/NA	Solid	8015B NM	86481
880-46406-3	CS-31	Total/NA	Solid	8015B NM	86481
880-46406-4	NSW-4	Total/NA	Solid	8015B NM	86481
880-46406-5	NSW-5	Total/NA	Solid	8015B NM	86481
880-46406-6	ESW-3	Total/NA	Solid	8015B NM	86481
880-46406-7	ESW-4	Total/NA	Solid	8015B NM	86481
880-46406-8	WSW-3	Total/NA	Solid	8015B NM	86481
880-46406-9	WSW-4	Total/NA	Solid	8015B NM	86481
880-46406-10	SSW-2	Total/NA	Solid	8015B NM	86481
MB 880-86481/1-A	Method Blank	Total/NA	Solid	8015B NM	86481
LCS 880-86481/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	86481
LCSD 880-86481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	86481
890-6951-A-6-C MS	Matrix Spike	Total/NA	Solid	8015B NM	86481
890-6951-A-6-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	86481

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

GC Semi VOA

Analysis Batch: 86637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46406-1	CS-20	Total/NA	Solid	8015 NM	
880-46406-2	CS-24	Total/NA	Solid	8015 NM	
880-46406-3	CS-31	Total/NA	Solid	8015 NM	
880-46406-4	NSW-4	Total/NA	Solid	8015 NM	
880-46406-5	NSW-5	Total/NA	Solid	8015 NM	
880-46406-6	ESW-3	Total/NA	Solid	8015 NM	
880-46406-7	ESW-4	Total/NA	Solid	8015 NM	
880-46406-8	WSW-3	Total/NA	Solid	8015 NM	
880-46406-9	WSW-4	Total/NA	Solid	8015 NM	
880-46406-10	SSW-2	Total/NA	Solid	8015 NM	
880-46406-11	SSW-3	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: CS-20

Date Collected: 07/23/24 11:30

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 20:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 20:14	TKC	EET MID

Client Sample ID: CS-24

Date Collected: 07/23/24 11:35

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 20:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 20:32	TKC	EET MID

Client Sample ID: CS-31

Date Collected: 07/23/24 11:40

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 20:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 20:49	TKC	EET MID

Client Sample ID: NSW-4

Date Collected: 07/23/24 11:45

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 21:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 21:06	TKC	EET MID

Client Sample ID: NSW-5

Date Collected: 07/23/24 11:50

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 21:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 21:23	TKC	EET MID

Client Sample ID: ESW-3

Date Collected: 07/23/24 11:55

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 21:40	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: ESW-3
Date Collected: 07/23/24 11:55
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 21:40	TKC	EET MID

Client Sample ID: ESW-4
Date Collected: 07/23/24 12:00
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 21:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 21:56	TKC	EET MID

Client Sample ID: WSW-3
Date Collected: 07/23/24 12:05
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 22:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 22:13	TKC	EET MID

Client Sample ID: WSW-4
Date Collected: 07/23/24 12:10
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 22:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 22:29	TKC	EET MID

Client Sample ID: SSW-2
Date Collected: 07/23/24 12:15
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 22:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	86481	07/24/24 10:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86534	07/24/24 22:46	TKC	EET MID

Client Sample ID: SSW-3
Date Collected: 07/23/24 12:20
Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			86637	07/24/24 18:31	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Client Sample ID: SSW-3

Date Collected: 07/23/24 12:20

Date Received: 07/24/24 10:16

Lab Sample ID: 880-46406-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	86504	07/24/24 11:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	86411	07/24/24 18:31	TKC	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: Cotton Draw Unit 604

Job ID: 880-46406-1

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:

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

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Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-46406-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-46406-1	CS-20	Solid	07/23/24 11:30	07/24/24 10:16	7-7.5
880-46406-2	CS-24	Solid	07/23/24 11:35	07/24/24 10:16	2.5-3
880-46406-3	CS-31	Solid	07/23/24 11:40	07/24/24 10:16	6.5-7
880-46406-4	NSW-4	Solid	07/23/24 11:45	07/24/24 10:16	3.5
880-46406-5	NSW-5	Solid	07/23/24 11:50	07/24/24 10:16	1.5
880-46406-6	ESW-3	Solid	07/23/24 11:55	07/24/24 10:16	3.5
880-46406-7	ESW-4	Solid	07/23/24 12:00	07/24/24 10:16	3.5
880-46406-8	WSW-3	Solid	07/23/24 12:05	07/24/24 10:16	3.5
880-46406-9	WSW-4	Solid	07/23/24 12:10	07/24/24 10:16	3.5
880-46406-10	SSW-2	Solid	07/23/24 12:15	07/24/24 10:16	3.5
880-46406-11	SSW-3	Solid	07/23/24 12:20	07/24/24 10:16	3.5





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

Wo.

880-46406 Chain of Custody

www.xenco.com Page 1 of 2

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfields ☐ RRD ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Cotton Draw Unit 604	Turn Around	Pres. Code	ANALYSIS REQUEST												Preservative Codes			
Project Number:	1264	☐ Routine ☒ Rush	Due Date:	24 Hour													None: NO	DI Water: H ₂ O	
Sampler's Name:	Marvin	TAT starts the day received by the lab, if received by 4:30pm															Cool: Cool	MeOH: Me	
PO #:		Temp Blank:	Yes ☒ No ☐	Wet Ice:	Yes ☒ No ☐													HCL: HC	HNO ₃ : HN
SAMPLE RECEIPT		Samples Received Intact:	Yes ☒ No ☐	Thermometer ID:	FLR													H ₂ SO ₄ : H ₂	NaOH: Na
Cooler Custody Seals:	Yes ☒ No ☐	Correction Factor:																H ₃ PO ₄ : HP	
Sample Custody Seals:	Yes ☒ No ☐	Temperature Reading:	4.5															NaHSO ₄ : NABIS	
Total Containers:		Corrected Temperature:	4.5															Na ₂ S ₂ O ₃ : NaSO ₃	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	TPH	8015B	Sample Comments																	
CS-20	S	7/23/2024	11:30	7 - 7.5	Comp	1	X																			
CS-24	S	7/23/2024	11:35	2.5 - 3	Comp	1	X																			
CS-31	S	7/23/2024	11:40	6.5 - 7	Comp	1	X																			
NSW-4	S	7/23/2024	11:45	3.5	Comp	1	X																			
NSW-5	S	7/23/2024	11:50	1.5	Comp	1	X																			
ESW-3	S	7/23/2024	11:55	3.5	Comp	1	X																			
ESW-4	S	7/23/2024	12:00	3.5	Comp	1	X																			
WSW-3	S	7/23/2024	12:05	3.5	Comp	1	X																			
WSW-4	S	7/23/2024	12:10	3.5	Comp	1	X																			
SSW-2	S	7/23/2024	12:15	3.5	Comp	1	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 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 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
		7/24/24 1016			



Environment Testing

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

Chain of Custody

Work Order No:

46406

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Page 1 of 5

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name:	Earth Systems R&R	Company Name:	
Address:	5114 West County Road 128	Address:	
City, State ZIP:	Midland Texas 79706	City, State ZIP:	
Phone:	432-894-6385	Email:	tcarlson@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRD ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible]

Total	200.7 / 6010	200.8 / 6020:	
	8RCRA	13PPM	Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zr
Circle Method(s) and Metal(s) to be analyzed	TCPLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471		

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		7/24/24 1016			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-46406-1

Login Number: 46406
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/21/2024 12:34:19 PM

JOB DESCRIPTION

Cotton Draw Unit 604

JOB NUMBER

880-49736-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



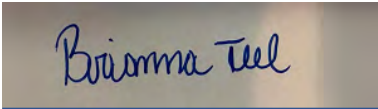
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-49736-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Cotton Draw Unit 604

Job ID: 880-49736-1

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Job Narrative 880-49736-1

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 10/14/2024 8:55 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 0.7°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 laboratory control sample (LCS) associated with preparation batch 880-93653 and analytical batch 880-93701 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-93653/2-A) and (LCSD 880-93653/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Client Sample ID: P5

Lab Sample ID: 880-49736-1

Date Collected: 10/11/24 12:10

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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		10/18/24 08:04	10/18/24 15:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:19	1
Ethylbenzene	0.0161		0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/18/24 08:04	10/18/24 15:19	1
o-Xylene	0.00202		0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/18/24 08:04	10/18/24 15:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				10/18/24 08:04	10/18/24 15:19	1
1,4-Difluorobenzene (Surr)	101		70 - 130				10/18/24 08:04	10/18/24 15:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0181		0.00398		mg/Kg			10/18/24 15:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	241		49.8		mg/Kg			10/19/24 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		10/18/24 09:50	10/19/24 10:54	1
Diesel Range Organics (Over C10-C28)	241	*+ *1	49.8		mg/Kg		10/18/24 09:50	10/19/24 10:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/18/24 09:50	10/19/24 10:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130				10/18/24 09:50	10/19/24 10:54	1
o-Terphenyl	112		70 - 130				10/18/24 09:50	10/19/24 10:54	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.5		9.96		mg/Kg			10/19/24 16:45	1

Client Sample ID: P6

Lab Sample ID: 880-49736-2

Date Collected: 10/11/24 12:15

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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		10/18/24 08:04	10/18/24 15:40	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:40	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/18/24 08:04	10/18/24 15:40	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/18/24 08:04	10/18/24 15:40	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/18/24 08:04	10/18/24 15:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				10/18/24 08:04	10/18/24 15:40	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Client Sample ID: P6

Lab Sample ID: 880-49736-2

Date Collected: 10/11/24 12:15

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	10/18/24 08:04	10/18/24 15:40	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			10/18/24 15:40	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			10/19/24 11:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		10/18/24 09:50	10/19/24 11:09	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+ *1	49.7		mg/Kg		10/18/24 09:50	10/19/24 11:09	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/18/24 09:50	10/19/24 11:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				10/18/24 09:50	10/19/24 11:09	1
o-Terphenyl	109		70 - 130				10/18/24 09:50	10/19/24 11:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	498		9.90		mg/Kg			10/19/24 17:01	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-49736-1	P5	114	101
880-49736-2	P6	106	100
880-49948-A-41-A MS	Matrix Spike	112	102
880-49948-A-41-B MSD	Matrix Spike Duplicate	108	102
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB2 (70-130)	DFBZ2 (70-130)
LCS 880-93611/1-A	Lab Control Sample	105	103
LCSD 880-93611/2-A	Lab Control Sample Dup	107	102
MB 880-93611/5-A	Method Blank	99	96
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-49736-1	P5	122	112
880-49736-2	P6	124	109
880-49951-A-21-B MS	Matrix Spike	119	116
880-49951-A-21-C MSD	Matrix Spike Duplicate	116	113
LCS 880-93653/2-A	Lab Control Sample	89	137 S1+
LCSD 880-93653/3-A	Lab Control Sample Dup	120	184 S1+
MB 880-93653/1-A	Method Blank	110	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-93611/5-A

Matrix: Solid

Analysis Batch: 93627

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/18/24 08:04	10/18/24 11:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/18/24 08:04	10/18/24 11:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/18/24 08:04	10/18/24 11:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/18/24 08:04	10/18/24 11:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/18/24 08:04	10/18/24 11:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/18/24 08:04	10/18/24 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	10/18/24 08:04	10/18/24 11:58	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/18/24 08:04	10/18/24 11:58	1

Lab Sample ID: LCS 880-93611/1-A

Matrix: Solid

Analysis Batch: 93627

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 93611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09340		mg/Kg		93	70 - 130
Toluene	0.100	0.09071		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.09926		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1850		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1017		mg/Kg		102	70 - 130

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

Lab Sample ID: LCSD 880-93611/2-A

Matrix: Solid

Analysis Batch: 93627

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 93611

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09233		mg/Kg		92	70 - 130	1	35
Toluene	0.100	0.08977		mg/Kg		90	70 - 130	1	35
Ethylbenzene	0.100	0.09750		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.1800		mg/Kg		90	70 - 130	3	35
o-Xylene	0.100	0.09942		mg/Kg		99	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-49948-A-41-A MS

Matrix: Solid

Analysis Batch: 93627

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 93611

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.09194		mg/Kg		92	70 - 130
Toluene	<0.00201	U	0.100	0.08966		mg/Kg		90	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

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

Lab Sample ID: 880-49948-A-41-A MS
Matrix: Solid
Analysis Batch: 93627

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 93611

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.09616		mg/Kg		96	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1793		mg/Kg		90	70 - 130
o-Xylene	<0.00201	U	0.100	0.09763		mg/Kg		98	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	112		70 - 130						
1,4-Difluorobenzene (Surr)	102		70 - 130						

Lab Sample ID: 880-49948-A-41-B MSD
Matrix: Solid
Analysis Batch: 93627

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 93611

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.100	0.09084		mg/Kg		91	70 - 130	1	35
Toluene	<0.00201	U	0.100	0.08896		mg/Kg		89	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.100	0.09526		mg/Kg		95	70 - 130	1	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1740		mg/Kg		87	70 - 130	3	35
o-Xylene	<0.00201	U	0.100	0.09572		mg/Kg		96	70 - 130	2	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	108		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

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

Lab Sample ID: MB 880-93653/1-A
Matrix: Solid
Analysis Batch: 93701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93653

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		10/18/24 09:50	10/19/24 08:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/18/24 09:50	10/19/24 08:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/18/24 09:50	10/19/24 08:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: LCS 880-93653/2-A
Matrix: Solid
Analysis Batch: 93701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	814.5		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1052		mg/Kg		105	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

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

Lab Sample ID: LCS 880-93653/2-A

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 93653

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: LCSD 880-93653/3-A

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 93653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1083	*1	mg/Kg		108	70 - 130	28	20
Diesel Range Organics (Over C10-C28)	1000	1410	*+ *1	mg/Kg		141	70 - 130	29	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	184	S1+	70 - 130

Lab Sample ID: 880-49951-A-21-B MS

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 93653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	902.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *+ *1	998	940.5		mg/Kg		94	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: 880-49951-A-21-C MSD

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 93653

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	903.4		mg/Kg		91	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U *+ *1	998	938.3		mg/Kg		94	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	113		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-93673/1-A Matrix: Solid Analysis Batch: 93707										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			10/19/24 16:29	1			

Lab Sample ID: LCS 880-93673/2-A Matrix: Solid Analysis Batch: 93707										Client Sample ID: Lab Control Sample Prep Type: Soluble		
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride			250	237.9		mg/Kg		95	90 - 110			

Lab Sample ID: LCSD 880-93673/3-A Matrix: Solid Analysis Batch: 93707										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	238.3		mg/Kg		95	90 - 110	0	20	

Lab Sample ID: 880-49736-1 MS Matrix: Solid Analysis Batch: 93707										Client Sample ID: P5 Prep Type: Soluble		
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride	69.5		249	303.0		mg/Kg		94	90 - 110			

Lab Sample ID: 880-49736-1 MSD Matrix: Solid Analysis Batch: 93707										Client Sample ID: P5 Prep Type: Soluble		
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	69.5		249	304.7		mg/Kg		94	90 - 110	1	20	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

GC VOA

Prep Batch: 93611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	5035	
880-49736-2	P6	Total/NA	Solid	5035	
MB 880-93611/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-93611/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-93611/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-49948-A-41-A MS	Matrix Spike	Total/NA	Solid	5035	
880-49948-A-41-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 93627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	8021B	93611
880-49736-2	P6	Total/NA	Solid	8021B	93611
MB 880-93611/5-A	Method Blank	Total/NA	Solid	8021B	93611
LCS 880-93611/1-A	Lab Control Sample	Total/NA	Solid	8021B	93611
LCSD 880-93611/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	93611
880-49948-A-41-A MS	Matrix Spike	Total/NA	Solid	8021B	93611
880-49948-A-41-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	93611

Analysis Batch: 93695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	Total BTEX	
880-49736-2	P6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 93653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	8015NM Prep	
880-49736-2	P6	Total/NA	Solid	8015NM Prep	
MB 880-93653/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-93653/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-93653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-49951-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-49951-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 93701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	8015B NM	93653
880-49736-2	P6	Total/NA	Solid	8015B NM	93653
MB 880-93653/1-A	Method Blank	Total/NA	Solid	8015B NM	93653
LCS 880-93653/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	93653
LCSD 880-93653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	93653
880-49951-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	93653
880-49951-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	93653

Analysis Batch: 93780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Total/NA	Solid	8015 NM	
880-49736-2	P6	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

HPLC/IC

Leach Batch: 93673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Soluble	Solid	DI Leach	
880-49736-2	P6	Soluble	Solid	DI Leach	
MB 880-93673/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-93673/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-93673/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-49736-1 MS	P5	Soluble	Solid	DI Leach	
880-49736-1 MSD	P5	Soluble	Solid	DI Leach	

Analysis Batch: 93707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49736-1	P5	Soluble	Solid	300.0	93673
880-49736-2	P6	Soluble	Solid	300.0	93673
MB 880-93673/1-A	Method Blank	Soluble	Solid	300.0	93673
LCS 880-93673/2-A	Lab Control Sample	Soluble	Solid	300.0	93673
LCSD 880-93673/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	93673
880-49736-1 MS	P5	Soluble	Solid	300.0	93673
880-49736-1 MSD	P5	Soluble	Solid	300.0	93673

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

Client Sample ID: P5
Date Collected: 10/11/24 12:10
Date Received: 10/14/24 08:55

Lab Sample ID: 880-49736-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	93611	10/18/24 08:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	93627	10/18/24 15:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			93695	10/18/24 15:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			93780	10/19/24 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	93653	10/18/24 09:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93701	10/19/24 10:54	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	93673	10/18/24 14:45	SA	EET MID
Soluble	Analysis	300.0		1			93707	10/19/24 16:45	CH	EET MID

Client Sample ID: P6
Date Collected: 10/11/24 12:15
Date Received: 10/14/24 08:55

Lab Sample ID: 880-49736-2
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			5.03 g	5 mL	93611	10/18/24 08:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	93627	10/18/24 15:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			93695	10/18/24 15:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			93780	10/19/24 11:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	93653	10/18/24 09:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93701	10/19/24 11:09	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	93673	10/18/24 14:45	SA	EET MID
Soluble	Analysis	300.0		1			93707	10/19/24 17:01	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: Cotton Draw Unit 604

Job ID: 880-49736-1

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49736-1

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: Cotton Draw Unit 604

Job ID: 880-49736-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-49736-1	P5	Solid	10/11/24 12:10	10/14/24 08:55	0-0.5
880-49736-2	P6	Solid	10/11/24 12:15	10/14/24 08:55	0-0.5

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Chain of Custody

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



Environment Testing
Xenco

Work O



880-49736 Chain of Custody

www.xe

Project Manager: Kris Williams		Bill to: (if different)		Devon Energy	
Company Name: Earth Systems R&R		Company Name:		Date Woodall	
Address: 5114 West County Road 128		Address:		205 E Bender Blvd	
City, State ZIP: Midland Texas 79706		City, State ZIP:		Hobbs, New Mexico, 88240	
Phone: 325-665-3604		Email: kwilliams@earthsys.net			

Project Name: Cotton Draw Unit 604		Turn Around		Pres. Code	
Project Number: 1284		☐ Routine ☒ Rush			
Project Location: Marvin		Due Date: 3 Day			
Sampler's Name: PO #:		TAT starts the day received by the lab, if received by 4:30pm			

SAMPLE RECEIPT		Temp Blank: Yes No		Wet Ice: Yes No	
Samples Received Intact: Yes No		Thermometer ID: TRS			
Cooler Custody Seals: Yes No		Correction Factor: -			
Sample Custody Seals: Yes No		Temperature Reading: 8.8			
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
P5	S	10/11/2024	12:10	0 - 0.5	Grab/	1
P6	S	10/11/2024	12:15	0 - 0.5	Grab/	1

ANALYSIS REQUEST		PRESERVATIVE CODES	
TPH 8015	Chlorides	None: NO	DI Water: H ₂ O
BTEX 8021B		Cool: Cool	MeOH: Me
		HCL: HC	HNO ₃ : HN
		H ₂ SO ₄ : H ₂	NaOH: Na
		H ₃ PO ₄ : HP	
		NaHSO ₄ : NABIS	
		Na ₂ S ₂ O ₃ : NaSO ₃	
		Zn Acetate+NaOH: Zn	
		NaOH+Ascorbic Acid: SAPC	

Sample Comments

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Cu	Co	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn				
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA		Sb		As	Ba	Be	B	Cd	Ca	Cr	Cu	Co	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Ti	U	Hg: 1631 / 245.1 / 7470 / 7471									

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/14/24 855			
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5		6			

Revised Date: 09/25/2020 Rev. 2020.2

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Environment Testing

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

Chain of Custody

Work O



880-49736 Chain of Custody

Project Manager:	Kris Williams	Bill to: (if different)	Devon Energy
Company Name:	Earth Systems R&R	Company Name:	Date Woodall
Address:	5114 West County Road 128	Address:	205 E Bender Blvd
City, State ZIP:	Midland Texas 79706	City, State ZIP:	Hobbs, New Mexico, 88240
Phone:	325-665-3604	Email:	kwilliams@earthsys.net

Work Order Comments			
Program:	UST/PST ☐	PRF ☐	Brownfields ☐ RRD ☐ Superfund ☐
State of Project:			
Reporting:	Level II ☐	Level III ☐	PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables:	EDD ☐	AdAPT ☐	Other:

[illegible]

Total 200.7 / 6010	200.8 / 5020:	8RCRA	13PPM	Texas	11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP	6010:	8RCRA	Sb	As	Ba	Be	B	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Ti	U			Hg	1631 / 245.1	7470 / 7471							

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10/14/24 SSS			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-49736-1

Login Number: 49736

List Number: 1

Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/21/2024 11:57:37 AM Revision 1

JOB DESCRIPTION

Cotton Draw Unit 604

JOB NUMBER

880-49737-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

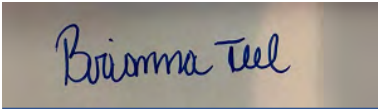
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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

Generated
10/21/2024 11:57:37 AM
Revision 1

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Laboratory Job ID: 880-49737-1

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Cotton Draw Unit 604

Job ID: 880-49737-1

Job ID: 880-49737-1

Eurofins Midland

**Job Narrative
880-49737-1**

REVISION

The report being provided is a revision of the original report sent on 10/16/2024. The report (revision 1) is being revised due to Per client email, requesting TPH re run.

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 10/14/2024 8:55 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 0.7°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: P1 (880-49737-1) and P4 (880-49737-2).

GC VOA

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

Diesel Range Organics

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-93653 and analytical batch 880-93701 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-93653/2-A) and (LCSD 880-93653/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: P1 (880-49737-1). Percent recoveries are based on the amount spiked.

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

HPLC/IC

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

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Client Sample ID: P1

Lab Sample ID: 880-49737-1

Date Collected: 10/11/24 12:00

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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		10/14/24 09:45	10/14/24 16:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/14/24 09:45	10/14/24 16:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/14/24 09:45	10/14/24 16:50	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		10/14/24 09:45	10/14/24 16:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/14/24 09:45	10/14/24 16:50	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/14/24 09:45	10/14/24 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	10/14/24 09:45	10/14/24 16:50	1
1,4-Difluorobenzene (Surr)	101		70 - 130	10/14/24 09:45	10/14/24 16:50	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			10/14/24 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	98.5		50.0		mg/Kg			10/19/24 10:21	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	<50.0	U *1	50.0		mg/Kg		10/18/24 09:50	10/19/24 10:21	1
Diesel Range Organics (Over C10-C28)	98.5	*+ *1	50.0		mg/Kg		10/18/24 09:50	10/19/24 10:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/18/24 09:50	10/19/24 10:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	160	S1+	70 - 130	10/18/24 09:50	10/19/24 10:21	1
o-Terphenyl	141	S1+	70 - 130	10/18/24 09:50	10/19/24 10:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		9.92		mg/Kg			10/15/24 23:12	1

Client Sample ID: P4

Lab Sample ID: 880-49737-2

Date Collected: 10/11/24 12:05

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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		10/14/24 09:45	10/14/24 17:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/14/24 09:45	10/14/24 17:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/14/24 09:45	10/14/24 17:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		10/14/24 09:45	10/14/24 17:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/14/24 09:45	10/14/24 17:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/14/24 09:45	10/14/24 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	10/14/24 09:45	10/14/24 17:10	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Client Sample ID: P4

Lab Sample ID: 880-49737-2

Date Collected: 10/11/24 12:05

Matrix: Solid

Date Received: 10/14/24 08:55

Sample Depth: 0-0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	10/14/24 09:45	10/14/24 17:10	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			10/14/24 17:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	297		49.9		mg/Kg			10/19/24 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	<49.9	U *1	49.9		mg/Kg		10/18/24 09:50	10/19/24 10:37	1
Diesel Range Organics (Over C10-C28)	297	*+ *1	49.9		mg/Kg		10/18/24 09:50	10/19/24 10:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		10/18/24 09:50	10/19/24 10:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130				10/18/24 09:50	10/19/24 10:37	1
o-Terphenyl	108		70 - 130				10/18/24 09:50	10/19/24 10:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76.9		9.96		mg/Kg			10/15/24 23:33	1

Eurofins Midland

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Method: 8021B - Volatile Organic Compounds (GC)
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-49737-1	P1	109	101
880-49737-2	P4	107	103
LCS 880-93140/1-A	Lab Control Sample	108	100
LCSD 880-93140/2-A	Lab Control Sample Dup	107	100
MB 880-93140/5-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)
880-49737-1	P1	160 S1+	141 S1+
880-49737-2	P4	119	108
LCS 880-93653/2-A	Lab Control Sample	89	137 S1+
LCSD 880-93653/3-A	Lab Control Sample Dup	120	184 S1+
MB 880-93653/1-A	Method Blank	110	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-93140/5-A							Client Sample ID: Method Blank		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 93171							Prep Batch: 93140		
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/11/24 16:04	10/14/24 11:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				10/11/24 16:04	10/14/24 11:40	1
1,4-Difluorobenzene (Surr)	98		70 - 130				10/11/24 16:04	10/14/24 11:40	1

Lab Sample ID: LCS 880-93140/1-A							Client Sample ID: Lab Control Sample		
Matrix: Solid							Prep Type: Total/NA		
Analysis Batch: 93171							Prep Batch: 93140		
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	0.100	0.09611		mg/Kg		96	70 - 130		
Toluene	0.100	0.09059		mg/Kg		91	70 - 130		
Ethylbenzene	0.100	0.09166		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene	0.200	0.1969		mg/Kg		98	70 - 130		
o-Xylene	0.100	0.09946		mg/Kg		99	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	108		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: LCSD 880-93140/2-A					Client Sample ID: Lab Control Sample Dup							
Matrix: Solid					Prep Type: Total/NA							
Analysis Batch: 93171					Prep Batch: 93140							
Analyte				Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene				0.100	0.09444		mg/Kg		94	70 - 130	2	35
Toluene				0.100	0.08975		mg/Kg		90	70 - 130	1	35
Ethylbenzene				0.100	0.08962		mg/Kg		90	70 - 130	2	35
m-Xylene & p-Xylene				0.200	0.1925		mg/Kg		96	70 - 130	2	35
o-Xylene				0.100	0.09627		mg/Kg		96	70 - 130	3	35
							</					

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

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

Lab Sample ID: MB 880-93653/1-A

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 93653

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		10/18/24 09:50	10/19/24 08:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/18/24 09:50	10/19/24 08:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/18/24 09:50	10/19/24 08:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	10/18/24 09:50	10/19/24 08:45	1
o-Terphenyl	102		70 - 130	10/18/24 09:50	10/19/24 08:45	1

Lab Sample ID: LCS 880-93653/2-A

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 93653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	814.5		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1052		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: LCSD 880-93653/3-A

Matrix: Solid

Analysis Batch: 93701

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 93653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1083	*1	mg/Kg		108	70 - 130	28	20
Diesel Range Organics (Over C10-C28)	1000	1410	*+ *1	mg/Kg		141	70 - 130	29	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	184	S1+	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-93302/1-A

Matrix: Solid

Analysis Batch: 93336

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			10/15/24 22:51	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-93302/2-A				Client Sample ID: Lab Control Sample							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 93336											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	252.7		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-93302/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 93336											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	256.5		mg/Kg		103	90 - 110	2	20

Lab Sample ID: 880-49737-1 MS				Client Sample ID: P1							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 93336											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	152		248	393.8		mg/Kg		97	90 - 110		

Lab Sample ID: 880-49737-1 MSD				Client Sample ID: P1							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 93336											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	152		248	394.7		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration

Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

GC VOA

Prep Batch: 93140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	5035	
880-49737-2	P4	Total/NA	Solid	5035	
MB 880-93140/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-93140/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-93140/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 93171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	8021B	93140
880-49737-2	P4	Total/NA	Solid	8021B	93140
MB 880-93140/5-A	Method Blank	Total/NA	Solid	8021B	93140
LCS 880-93140/1-A	Lab Control Sample	Total/NA	Solid	8021B	93140
LCSD 880-93140/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	93140

Analysis Batch: 93330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	Total BTEX	
880-49737-2	P4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 93378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	8015 NM	
880-49737-2	P4	Total/NA	Solid	8015 NM	

Prep Batch: 93653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	8015NM Prep	
880-49737-2	P4	Total/NA	Solid	8015NM Prep	
MB 880-93653/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-93653/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-93653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 93701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Total/NA	Solid	8015B NM	93653
880-49737-2	P4	Total/NA	Solid	8015B NM	93653
MB 880-93653/1-A	Method Blank	Total/NA	Solid	8015B NM	93653
LCS 880-93653/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	93653
LCSD 880-93653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	93653

HPLC/IC

Leach Batch: 93302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Soluble	Solid	DI Leach	
880-49737-2	P4	Soluble	Solid	DI Leach	
MB 880-93302/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-93302/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-93302/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-49737-1 MS	P1	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

HPLC/IC (Continued)

Leach Batch: 93302 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1 MSD	P1	Soluble	Solid	DI Leach	

Analysis Batch: 93336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49737-1	P1	Soluble	Solid	300.0	93302
880-49737-2	P4	Soluble	Solid	300.0	93302
MB 880-93302/1-A	Method Blank	Soluble	Solid	300.0	93302
LCS 880-93302/2-A	Lab Control Sample	Soluble	Solid	300.0	93302
LCSD 880-93302/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	93302
880-49737-1 MS	P1	Soluble	Solid	300.0	93302
880-49737-1 MSD	P1	Soluble	Solid	300.0	93302

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

Client Sample ID: P1
Date Collected: 10/11/24 12:00
Date Received: 10/14/24 08:55

Lab Sample ID: 880-49737-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	93140	10/14/24 09:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	93171	10/14/24 16:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			93330	10/14/24 16:50	MNR	EET MID
Total/NA	Analysis	8015 NM		1			93378	10/19/24 10:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	93653	10/18/24 09:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93701	10/19/24 10:21	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	93302	10/15/24 08:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	93336	10/15/24 23:12	CH	EET MID

Client Sample ID: P4
Date Collected: 10/11/24 12:05
Date Received: 10/14/24 08:55

Lab Sample ID: 880-49737-2
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			5.03 g	5 mL	93140	10/14/24 09:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	93171	10/14/24 17:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			93330	10/14/24 17:10	MNR	EET MID
Total/NA	Analysis	8015 NM		1			93378	10/19/24 10:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	93653	10/18/24 09:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93701	10/19/24 10:37	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	93302	10/15/24 08:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	93336	10/15/24 23:33	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: Cotton Draw Unit 604

Job ID: 880-49737-1

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-49737-1

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: Cotton Draw Unit 604

Job ID: 880-49737-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-49737-1	P1	Solid	10/11/24 12:00	10/14/24 08:55	0-0.5
880-49737-2	P4	Solid	10/11/24 12:05	10/14/24 08:55	0-0.5

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



Environment Testing
Xenco

Chain of Custody

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



880-49737 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Kris Williams	Bill to: (if different)	Devon Energy
Company Name:	Earth Systems R&R	Company Name:	Date Woodall
Address:	5114 West County Road 128	Address:	205 E Bender Blvd
City, State ZIP:	Midland Texas 79706	City, State ZIP:	Hobbs, New Mexico, 88240
Phone:	325-665-3604	Email:	kwilliams@earthsys.net

Work Order Comments	
Program: ☐ UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund	State of Project: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV
Reporting: ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Other:	
Deliverables: ☐ EDD ☐ ADaPT ☐ Other:	

ANALYSIS REQUEST				Preservative Codes	
Project Name:	Cotton Draw Unit 604	Turn Around	Pres. Code	None: NO	DI Water: H ₂ O
Project Number:	1284	☐ Routine ☒ Rush		Cool: Cool	MeOH: Me
Project Location:		Due Date: 3 Day		HCL: HC	HNO ₃ : HN
Sampler's Name:	Marvin	TAT starts the day received by the lab, if received by 4:30pm		H ₂ SO ₄ : H ₂	NaOH: Na
PO #:		Wet Ice: Yes No		H ₃ PO ₄ : HP	
SAMPLE RECEIPT		Temp Blank: Yes No		NaHSO ₄ : NABIS	
Samples Received Intact:	Yes No	Thermometer ID:		Na ₂ S ₂ O ₃ : NaSO ₃	
Cooler Custody Seals:	Yes No	Correction Factor:		Zn Acetate+NaOH: Zn	
Sample Custody Seals:	Yes No	Temperature Reading:		NaOH+Ascorbic Acid: SAPC	
Total Containers:		Corrected Temperature:			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp
P1	S	10/11/2024	12:00	0 - 0.5	Grab/1
P4	S	10/11/2024	12:05	0 - 0.5	Grab/1

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$5.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10/11/2024 8:55			
3					
5					

Revised Date 08/25/2020 Rev 2020.2

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Environment Testing

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

Chain of Custody



880-49737 Chain of Custody

Page 1 of 1

Project Manager:	Kris Williams	Bill to: (if different)	Devon Energy
Company Name:	Earth Systems R&R	Company Name:	Dale Woodall
Address:	5114 West County Road 128	Address:	205 E Bender Blvd
City, State ZIP:	Midland Texas 79706	City, State ZIP:	Hobbs, New Mexico, 88240
Phone:	325-665-3604	Email:	kwilliams@earthsys.net

Work Order Comments	
Program: UST/PST ☐ PRF ☐ Brownfields ☐ RRQ ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level N ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible]

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed	8RCRA TCLP / SPLP 6010:	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zr Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 		10/1/14 8:55	2		
3			4		
5			6		

Revised Date: 08/25/2009 Rev: 2000.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-49737-1

Login Number: 49737
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/5/2024 11:34:41 AM

JOB DESCRIPTION

Cotton Draw Unit 604
Eddy Co. New Mexico

JOB NUMBER

880-50603-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

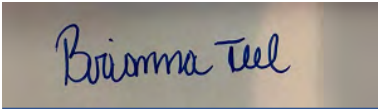
Eurofins Midland

Job Notes

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

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
11/5/2024 11:34:41 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: Cotton Draw Unit 604

Laboratory Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Qualifiers

GC Semi VOA

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

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: Cotton Draw Unit 604

Job ID: 880-50603-1

Job ID: 880-50603-1

Eurofins Midland

Job Narrative 880-50603-1

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 11/4/2024 9:05 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 5.6°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: P-7 (880-50603-1), P-8 (880-50603-2) and P-9 (880-50603-3).

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-94749 and analytical batch 880-94750 was outside the control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-94749/2-A) and (LCSD 880-94749/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: P-7 (880-50603-1), P-8 (880-50603-2) and P-9 (880-50603-3). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-94749 and analytical batch 880-94750 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: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Client Sample ID: P-7

Lab Sample ID: 880-50603-1

Date Collected: 11/01/24 10:30

Matrix: Solid

Date Received: 11/04/24 09:05

Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	196		50.0		mg/Kg			11/04/24 23:59	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		11/04/24 09:49	11/04/24 23:59	1
Diesel Range Organics (Over C10-C28)	196	F1	50.0		mg/Kg		11/04/24 09:49	11/04/24 23:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/04/24 09:49	11/04/24 23:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				11/04/24 09:49	11/04/24 23:59	1
o-Terphenyl	62	S1-	70 - 130				11/04/24 09:49	11/04/24 23:59	1

Client Sample ID: P-8

Lab Sample ID: 880-50603-2

Date Collected: 11/01/24 10:35

Matrix: Solid

Date Received: 11/04/24 09:05

Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	125		50.0		mg/Kg			11/05/24 00:46	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		11/04/24 09:49	11/05/24 00:46	1
Diesel Range Organics (Over C10-C28)	125		50.0		mg/Kg		11/04/24 09:49	11/05/24 00:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/04/24 09:49	11/05/24 00:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130				11/04/24 09:49	11/05/24 00:46	1
o-Terphenyl	69	S1-	70 - 130				11/04/24 09:49	11/05/24 00:46	1

Client Sample ID: P-9

Lab Sample ID: 880-50603-3

Date Collected: 11/01/24 10:40

Matrix: Solid

Date Received: 11/04/24 09:05

Sample Depth: 0-0.5

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			11/05/24 01:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/04/24 09:49	11/05/24 01:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/04/24 09:49	11/05/24 01:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/04/24 09:49	11/05/24 01:02	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Client Sample ID: P-9
Date Collected: 11/01/24 10:40
Date Received: 11/04/24 09:05
Sample Depth: 0-0.5

Lab Sample ID: 880-50603-3
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	11/04/24 09:49	11/05/24 01:02	1
o-Terphenyl	68	S1-	70 - 130	11/04/24 09:49	11/05/24 01:02	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

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

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-50603-1	P-7	77	62 S1-
880-50603-1 MS	P-7	82	73
880-50603-1 MSD	P-7	84	72
880-50603-2	P-8	86	69 S1-
880-50603-3	P-9	90	68 S1-
LCS 880-94749/2-A	Lab Control Sample	137 S1+	119
LCSD 880-94749/3-A	Lab Control Sample Dup	139 S1+	122
MB 880-94749/1-A	Method Blank	81	64 S1-
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

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

Lab Sample ID: MB 880-94749/1-A

Matrix: Solid

Analysis Batch: 94750

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 94749

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		11/04/24 09:49	11/04/24 23:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/04/24 09:49	11/04/24 23:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/04/24 09:49	11/04/24 23:12	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				11/04/24 09:49	11/04/24 23:12	1
o-Terphenyl	64	S1-	70 - 130				11/04/24 09:49	11/04/24 23:12	1

Lab Sample ID: LCS 880-94749/2-A

Matrix: Solid

Analysis Batch: 94750

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 94749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1236		mg/Kg		124	70 - 130
Diesel Range Organics (Over C10-C28)	1000	948.1		mg/Kg		95	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	137	S1+	70 - 130				
o-Terphenyl	119		70 - 130				

Lab Sample ID: LCSD 880-94749/3-A

Matrix: Solid

Analysis Batch: 94750

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 94749

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1229		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	971.4		mg/Kg		97	70 - 130	2	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	139	S1+	70 - 130						
o-Terphenyl	122		70 - 130						

Lab Sample ID: 880-50603-1 MS

Matrix: Solid

Analysis Batch: 94750

Client Sample ID: P-7

Prep Type: Total/NA

Prep Batch: 94749

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	786.8		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	196	F1	997	722.1	F1	mg/Kg		53	70 - 130

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

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

Lab Sample ID: 880-50603-1 MS
Matrix: Solid
Analysis Batch: 94750

Client Sample ID: P-7
Prep Type: Total/NA
Prep Batch: 94749

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	73		70 - 130

Lab Sample ID: 880-50603-1 MSD
Matrix: Solid
Analysis Batch: 94750

Client Sample ID: P-7
Prep Type: Total/NA
Prep Batch: 94749

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	788.5		mg/Kg		79	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	196	F1	997	721.1	F1	mg/Kg		53	70 - 130	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	72		70 - 130

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

GC Semi VOA

Prep Batch: 94749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50603-1	P-7	Total/NA	Solid	8015NM Prep	
880-50603-2	P-8	Total/NA	Solid	8015NM Prep	
880-50603-3	P-9	Total/NA	Solid	8015NM Prep	
MB 880-94749/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-94749/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-94749/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-50603-1 MS	P-7	Total/NA	Solid	8015NM Prep	
880-50603-1 MSD	P-7	Total/NA	Solid	8015NM Prep	

Analysis Batch: 94750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50603-1	P-7	Total/NA	Solid	8015B NM	94749
880-50603-2	P-8	Total/NA	Solid	8015B NM	94749
880-50603-3	P-9	Total/NA	Solid	8015B NM	94749
MB 880-94749/1-A	Method Blank	Total/NA	Solid	8015B NM	94749
LCS 880-94749/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	94749
LCSD 880-94749/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	94749
880-50603-1 MS	P-7	Total/NA	Solid	8015B NM	94749
880-50603-1 MSD	P-7	Total/NA	Solid	8015B NM	94749

Analysis Batch: 94957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50603-1	P-7	Total/NA	Solid	8015 NM	
880-50603-2	P-8	Total/NA	Solid	8015 NM	
880-50603-3	P-9	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Client Sample ID: P-7
Date Collected: 11/01/24 10:30
Date Received: 11/04/24 09:05

Lab Sample ID: 880-50603-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			94957	11/04/24 23:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	94749	11/04/24 09:49	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	94750	11/04/24 23:59	TKC	EET MID

Client Sample ID: P-8
Date Collected: 11/01/24 10:35
Date Received: 11/04/24 09:05

Lab Sample ID: 880-50603-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			94957	11/05/24 00:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	94749	11/04/24 09:49	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	94750	11/05/24 00:46	TKC	EET MID

Client Sample ID: P-9
Date Collected: 11/01/24 10:40
Date Received: 11/04/24 09:05

Lab Sample ID: 880-50603-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			94957	11/05/24 01:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	94749	11/04/24 09:49	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	94750	11/05/24 01:02	TKC	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: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:

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: Cotton Draw Unit 604

Job ID: 880-50603-1
SDG: Eddy Co. New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-50603-1	P-7	Solid	11/01/24 10:30	11/04/24 09:05	0-0.5
880-50603-2	P-8	Solid	11/01/24 10:35	11/04/24 09:05	0-0.5
880-50603-3	P-9	Solid	11/01/24 10:40	11/04/24 09:05	0-0.5

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

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 508-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing
Xenco



W

880-50603 Chain of Custody

www.xenco.com Page 505

Project Manager: <u>Mason Jones</u>		Bill to: (if different)	Earth Systems R&R
Company Name: <u>Earth Systems R&R</u>		Company Name:	
Address: <u>4115 S CR 1297</u>		Address:	
City, State ZIP: <u>Odessa, Texas, 79765</u>		City, State ZIP:	
Phone: <u>432-310-4945</u>		Email: <u>kwilliams@earthsys.net, m.jones@earthsys.net</u>	

Project Name: <u>Cotton Draw Unit 604</u>		Turn Around	
Project Number: <u>12821</u>		☐ Routine ☒ Rush	
Project Location: <u>Eddy Co. New Mexico</u>		Due Date: <u>2/4/25</u>	
Sampler's Name: <u>Marvin Davis</u>		TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				Parameters		Pres. Code	
Samples Received Intact:	Yes No	Temp Blank:	Yes No	Wet Ice:	Yes No		
Cooler Custody Seals:	Yes No	Thermometer ID:		Correction Factor:			
Sample Custody Seals:	Yes No	Temperature Reading:		Corrected Temperature:			
Total Containers:							

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	PRESERVATIVE CODES	SAMPLE COMMENTS
P-7	S	11/12/24	10:30	0-0.5	G	1		None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₅ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SAPC	
P-8	↓	↓	10:33	0-0.5	↓	↓			
P-9	↓	↓	10:40	0-0.5	↓	↓			
NFE									

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	Hg: 1631 / 245.1 / 7470 / 7471		

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <u>Mason Jones</u>					
3		11/04/24 905 ²			
5					

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-50603-1
SDG Number: Eddy Co. New Mexico

Login Number: 50603
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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



Figure 7 – Soil Boring and Site Location Map

Cotton Draw Unit 604
GPS: 32.1945389°, -103.753072°
Eddy County, New Mexico

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

☐ The source of the release has been stopped.	
☐ The impacted area has been secured to protect human health and the environment.	
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
☐ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Dale Woodall</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>08/09/2022</u>

Tom Carlson

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Monday, September 26, 2022 2:21 PM
To: Mason Jones
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD; Harimon, Jocelyn, EMNRD
Subject: (Extension Approval) Cotton Draw Unit 604 spill, New Mexico, napp2216522711

RE: Incident #**NAPP2216522711**

Mason,

Your request for an extension to **December 26th, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Monday, September 26, 2022 8:12 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: Fw: [EXTERNAL] Cotton Draw Unit 604 spill, New Mexico, napp2216522711

From: Mason Jones <mjones@earthsys.net>
Sent: Friday, September 23, 2022 11:06 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kristopher Williams <kwilliams@earthsys.net>
Subject: [EXTERNAL] Cotton Draw Unit 604 spill, New Mexico, napp2216522711

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

[OCD Permitting - Incidents \(nm.gov\)](https://www.nm.gov/conservation/ocd/permits/)

Good Afternoon,

I am filling for an extension because this release is now over 90 days. We have collected numerous samples from this site and have been able to delineate and find the perimeter of the release. The reason I am asking for an extension for my client is because we are planning to drill a soil boring down to 51 feet showing that groundwater is deeper than that depth, reducing our expected clean up values by the state. Based off table 1. After we have drilled the soil boring, we will continue with excavation of this release in the areas above the table 1 recommendations. If you have any questions, please let me know.

Thank you

Mason Jones | Operations Manager
4115 South C.R. 1297 | Midland, Texas 79765
M 432-310-4945 | mjones@earthsys.net



From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Monday, June 24, 2024 11:12 AM
To: Woodall, Dale; Bratcher, Michael, EMNRD
Cc: Mason Jones; Tom Carlson
Subject: RE: [EXTERNAL] sampling notification: Cotton Draw Unit 604

Some people who received this message don't often get email from robert.hamlet@emnrd.nm.gov. [Learn why this is important](#)

Dale,

Thanks for the notification update. OCD Permitting has been down for the last few business days. Our understanding is that they are working on the issues and hope to have it back up by tomorrow. Please enter notifications into OCD Permitting website as soon as it has full functionality again. Thanks

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave. | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
<http://www.emnrd.state.nm.us/OCD/>



From: Woodall, Dale <Dale.Woodall@dvn.com>
Sent: Friday, June 21, 2024 5:55 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Mason Jones <mjones@earthsys.net>; tcarlson@earthsys.net
Subject: [EXTERNAL] sampling notification: Cotton Draw Unit 604

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

The portal page for sample notifications is not responding. I am resorting to sending this email as notification. Please let me know if you have any questions.

Question	Answer (Fill In)
location name	Cotton Draw Unit 604
OCD Incident number	NAPP2216522711
What is the sampling surface area in square feet	11,500 SQ. FT.
What is the estimated number of samples that will be gathered	59 grab confirmation samples and 8 composite sidewall c
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	June 26, 2024
Time sampling will commence	08:00 MST
Please provide any information necessary for observers to contact samplers	Tom Carlson P: 432-894-6385 E: tcarlson@earthsys.net
Please provide any information necessary for navigation to sampling site	From intersection of HWY 128 and Buck Jackson Road (32

Dale Woodall
Environmental Professional
205 E Bender Road # 150
Hobbs, New Mexico 88240
Office: 575-748-1838
Mobile: 405-318-4697
Dale.Woodall@dvn.com



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From: [Mason Jones](#)
To: [Tom Carlson](#)
Cc: [Kristopher Williams](#)
Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 365993
Date: Tuesday, July 23, 2024 10:35:36 AM

Dale sent this just to me on Monday, wanted to pass it on.

Mason Jones | Operations Manager
5114 West C.R. 128 | Midland, Texas 79706
M 432-310-4945 | mjones@earthsys.net



From: Woodall, Dale <Dale.Woodall@dvn.com>
Sent: Monday, July 22, 2024 11:03 AM
To: Mason Jones <mjones@earthsys.net>
Subject: Fwd: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 365993

Dale Woodall
Environmental Professional
Hobbs, NM
Office: 575-748-1838
Mobile: 405-318-4697
Dale.Woodall@dvn.com

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, July 22, 2024 11:01:29 AM
To: Woodall, Dale <Dale.Woodall@dvn.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 365993

To whom it may concern (c/o Dale Woodall for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2216522711.

The sampling event is expected to take place:

When: 07/24/2024 @ 12:00

Where: D-26-24S-31E 385 FNL 1255 FEL (32.1945389,-103.753072)

Additional Information: Tom Carlson 432-894-6385

Additional Instructions: 32.1945389 -103.753072

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **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.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

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

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Kristopher Williams

From: Kristopher Williams
Sent: Friday, November 15, 2024 12:08 PM
To: 'Robert.hamlet@emnrd.nm.gov'
Subject: RE: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 378331

Good Afternoon Robert,
As we discussed, on 10/4/24, we have completed the additional delineation sampling you requested, identified the horizontal extent of the release to the reclamation standard, and will be submitting the updated closure report through the portal next week.
If you have any questions, please let know.
Respectfully,
Kris

Kris Williams, CHMM, REM
Principal / Texas Operations Manager
E: kwilliams@earthsys.net
P: 325-665-3604
W: earthsys.net



From: Kristopher Williams
Sent: Thursday, October 3, 2024 2:35 PM
To: Robert.hamlet@emnrd.nm.gov
Subject: FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 378331

Good Afternoon Robert,
After review of this project, I believe this is a simple fix to bring this to closure but could I have ten minutes of your time to discuss?
I want to confirm my plan is in the right direction so I don't waste anyone's time. Please let me know if you can and I'll send a TEAMS invite so I can screenshare my visual aids.
Respectfully,
Kris

Kris Williams, CHMM, REM
Principal / Texas Operations Manager
E: kwilliams@earthsys.net
P: 325-665-3604
W: earthsys.net



From: Woodall, Dale <Dale.Woodall@dmv.com>
Sent: Wednesday, September 25, 2024 9:36 AM
To: Tom Carlson <tcarlson@earthsys.net>; Mason Jones <mjones@earthsys.net>; Kristopher Williams <kwilliams@earthsys.net>
Subject: Fw: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 378331

See the ocd comments and address them.

Dale Woodall
Environmental Professional
Hobbs, NM
Office: 575-748-1838
Mobile: 405-318-4697
Dale.Woodall@dmv.com

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, September 25, 2024 9:29:02 AM
To: Woodall, Dale <Dale.Woodall@dmv.com>
Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 378331

To whom it may concern (c/o Dale Woodall for DEVON ENERGY PRODUCTION COMPANY, LP),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2216522711, for the following reasons:

- **The Closure Report is Denied. Sidewalls must be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH. Please continue to delineate the release laterally. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 378331.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Robert Hamlet
575-748-1283
Robert.Hamlet@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

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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 404358

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2216522711
Incident Name	NAPP2216522711 COTTON DRAW UNIT 604H @ 30-015-49302
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-49302] COTTON DRAW UNIT #604H

Location of Release Source*Please answer all the questions in this group.*

Site Name	COTTON DRAW UNIT 604H
Date Release Discovered	06/09/2022
Surface Owner	Federal

Incident Details*Please answer all the questions in this group.*

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release*Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Human Error Other (Specify) Produced Water Released: 6 BBL Recovered: 5 BBL Lost: 1 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	While filling mixing plant an operator error happened. 5 bbls produced inside lined containment. 0.6 bbls released outside of containment.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	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	Unavailable.

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	Not answered.

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@dv.com Date: 11/18/2024
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Phone: (505) 476-3441

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

QUESTIONS, Page 3

Action 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
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	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	122000
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	9110
GRO+DRO (EPA SW-846 Method 8015M)	9110
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	08/10/2022
On what date will (or did) the final sampling or liner inspection occur	07/23/2024
On what date will (or was) the remediation complete(d)	08/02/2024
What is the estimated surface area (in square feet) that will be reclaimed	27500
What is the estimated volume (in cubic yards) that will be reclaimed	510
What is the estimated surface area (in square feet) that will be remediated	12834
What is the estimated volume (in cubic yards) that will be remediated	345

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 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
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.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 11/18/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	397016
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/01/2024
What was the (estimated) number of samples that were to be gathered	2
What was the sampling surface area in square feet	32249

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	12834
What was the total volume (cubic yards) remediated	345
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)	Impacted soils removed to meet remediation standards.

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@dvn.com Date: 11/18/2024
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QUESTIONS, Page 7

Action 404358

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

Action 404358

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404358
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Remediation Closure Report for Incident #NAPP2216522711 COTTON DRAW UNIT 604H, thank you. This Remediation Closure Report is approved.	3/31/2025