September 18, 2023

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

Re: Closure Report
CTB 127 - Dauntless
Western Refining Pipeline LLC
Incident #: nAPP2320649763
Site Location: S7, T21S, R33E
(Lat 32.140186°, Long -103.615707°)
Lea County, New Mexico

To whom it may concern:

On behalf of Western Refining Pipeline, LLC, Earth Systems Response & Restoration (ESRR) has prepared this letter to document the CTB 127 - Dauntless (site) release assessment and remediation activities. The site is located at 32.140186°, -103.615707° within S7, T21S, R33E, in Lea County, New Mexico.

Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on July 14, 2023 and was caused due to a crack on a nipple on the thermal release line associated with a pump. It resulted in approximately seven and one half (7.5) barrels of crude oil spilling and zero (0) barrels of crude oil recovered. The spill released onto the caliche pad within the site security fence and overspray extended to the exterior of the fenced area to the northwest. A light overspray was visible on native vegetation extending to the northwest. The impacted soil area measured approximately 278 feet (ft.) long by 21 to 72 ft. wide with a total square footage of approximately 16,147 square (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 water features within a 2-mile radius of the location. The nearest identified well is located on the same location in S07, T21S, R33E. The borehole was drilled on August 29, 2023, and measured on September 1, 2023 to confirm groundwater was not present from 0 to 55 feet (ft.) below grade surface (bgs). The next closest identified well is approximately 2.13 miles northeast of the site in S05, T25S, R33E. The well has a reported depth to groundwater of 90 ft. bgs. and was drilled in 1948.

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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 criteria established in 19.15.29.12 NMAC.

Native Soil:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (Total BTEX): 50 mg/kg
- TPH: 100 mg/kg (GRO + DRO + ORO)
- Chloride: 600 mg/kg

Active Oil and Gas Facility:

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

Site Assessment

On July 19, 2023, ESRR conducted site assessment activities to assess soil impacts resulting from the release. A total of eighteen (18) soil borings were advanced to depths ranging from surface to 4.0 ft bgs within and surrounding the release area to assess potential impacts vertically and horizontally. The collected soils samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The soil samples were analyzed for total petroleum hydrocarbons (TPH) by EPA method 8015 Modified, Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA method 8012, and chloride by EPA method 300.0. The laboratory reports containing analytical methods, results, and chain-of custody documents are attached. The initial assessment soil sample analytical results are provided in Table 1.

Soils represented by soil samples collected from soil borings HA-2, HA-8, HA-9, HA-10, HA-11, P-1, P-2, and P-3 exhibited TPH concentrations exceeding NMOCD regulatory criteria at varying depths. Only soil boring HA-11 exceeded NMOCD regulatory criteria for BTEX concentrations. No analyzed soil borings exceeded NMOCD regulatory criteria for chloride concentrations.

Remediation Activities and Confirmation Sampling

ESRR was onsite from August 7 – 9, 2023 overseeing air knife and hydrovac trucks to uncover sixteen (16) buried utility lines within the release perimeter prior to conducting remediation activities. While on site, a five-point composite sample was collected for waste characterization analysis.

ESRR was onsite August 11 - 12, 2023 utilizing a backhoe and loader to excavate the saturated surface soils to a depth of 0.5 to 2 ft. bgs. The excavated soils were stockpiled onsite on top of a plastic liner to await transport to a disposal facility.

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On August 14, 2023, subsequent to excavation activities, confirmation floor samples were collected from within the excavation. A total of twenty-three (23) confirmation samples (CS-1 through CS-23) and nine (9) confirmation sidewall samples (SW-1 through SW-9) were collected every 200 square feet to ensure removal of the impacted soils. Additionally, three (3) perimeter samples were collected from the surrounding surface soils to ensure no other impacted soils were present. All collected samples were analyzed for TPH analysis by EPA method 8015 Modified. Additionally, the perimeter samples were analyzed for BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

All analyzed samples did not exceed NMOCD regulatory criteria for TPH, BTEX, or chloride concentrations. The confirmation soil sample analytical results are provided in Table 2. Additionally, copies of laboratory analysis and chain-of-custody documentation are attached. See Figure 3 for excavation depths and confirmation soil sample locations.

Subsequent to laboratory analytical data review, ESRR resumed onsite activities by utilizing a front-end loader to load the approximately 180 cubic yards of stockpiled impacted soils into belly dump trucks to be transported to the New Mexico Delaware Basin Landfill for final disposal. The excavated area within the riser security fence area was then backfilled with clean locally sourced caliche material from a depth of 2 ft. to the surrounding grade surface. The excavated area on the exterior of the riser security fence was backfilled with clean locally sourced material and leveled to the surrounding grade surface.

On August 29, 2023, ESRR drilled a 2 and 3/8-inch borehole to 58 ft. bgs. to check determine if shallow groundwater was present. The borehole was measured utilizing a Solinist Water Level Meter 100' P2 upon completion and after 72 hours utilizing a Solinist Water Level Meter 100' P2. Both tests came back negative for groundwater. Subsequent to the second measuring activities on September 1, 2023, the borehole was backfilled with the cuttings removed during drilling operations. A soil boring log was completed during drilling operations and shown in Figure 4.

Conclusions

Based on the assessment findings, onsite remediation activities, soil boring activities, and laboratory analytical results, no further actions are required at the site. The final C-141 is attached and Western Pipeline Refining, LLC formally requests closure of the spill. If you have any questions regarding this report or need additional information, please contact us at 432-894-6385.

Sincerely,

Tom Carlson
Tom Carlson, GIT
Project Manager

K. Williams
Kris Williams, CHMM, REM
Operations Manager

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Attached:

- Table 1 - Summary of Delineation Soil Analytical Data
- Table 2 - Summary of Confirmation Soil Analytical Data
- Figure 1 – Site Location Map
- Figure 2 – Delineation Soil Sample Locations and Site Map
- Figure 3 – Confirmation Soil Sample Locations and Site Map
- Figure 4 – Soil Boring Log
- Photographic Log
- Groundwater Research
- Laboratory Analytical Reports
- NMOCD Notification and Communication
- NMOCD Form C-141

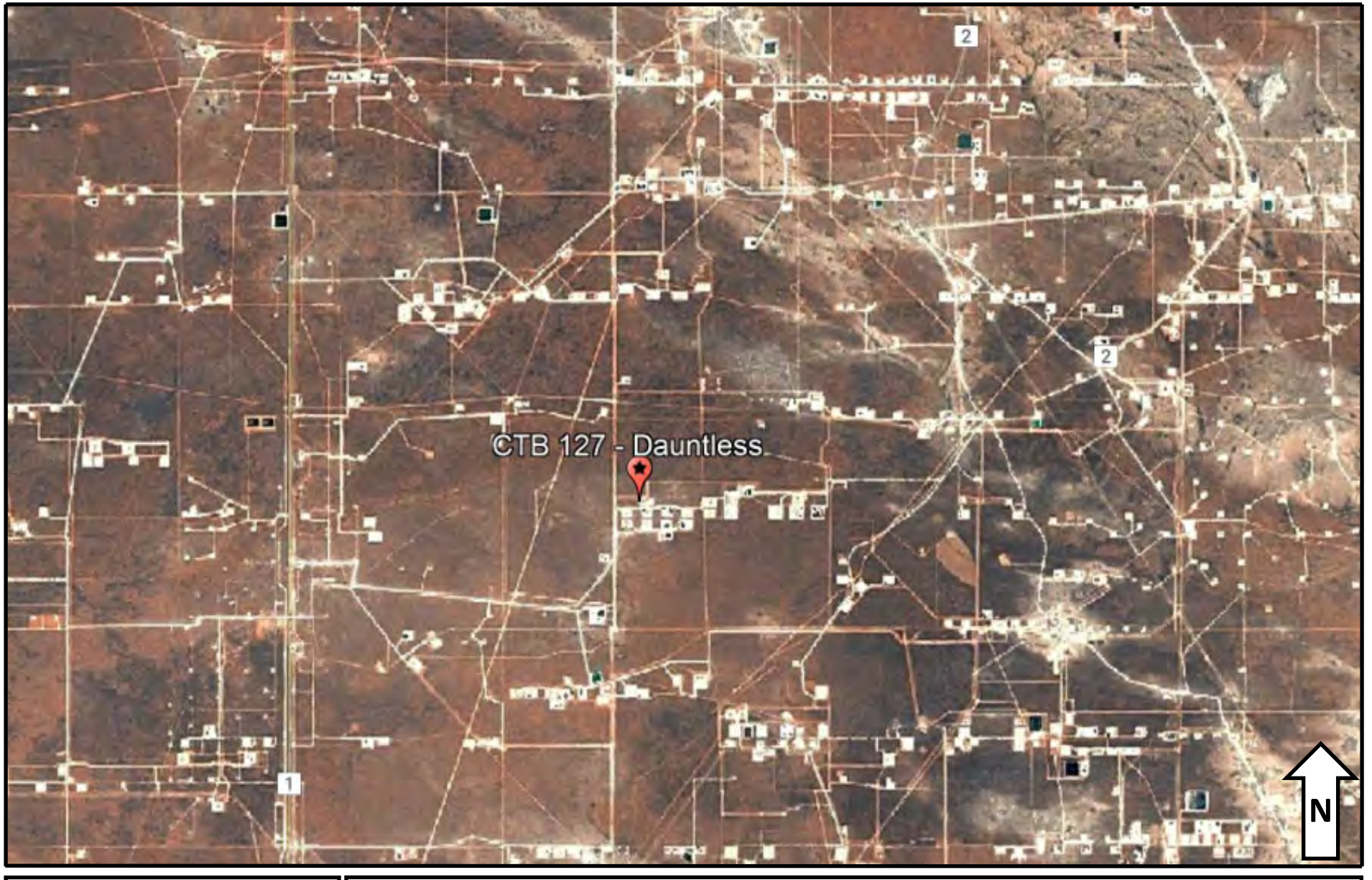

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Figure 1. Site Map

CTB 127 - Dauntless
GPS: 32.140186, -103.615707
Lea County, New Mexico

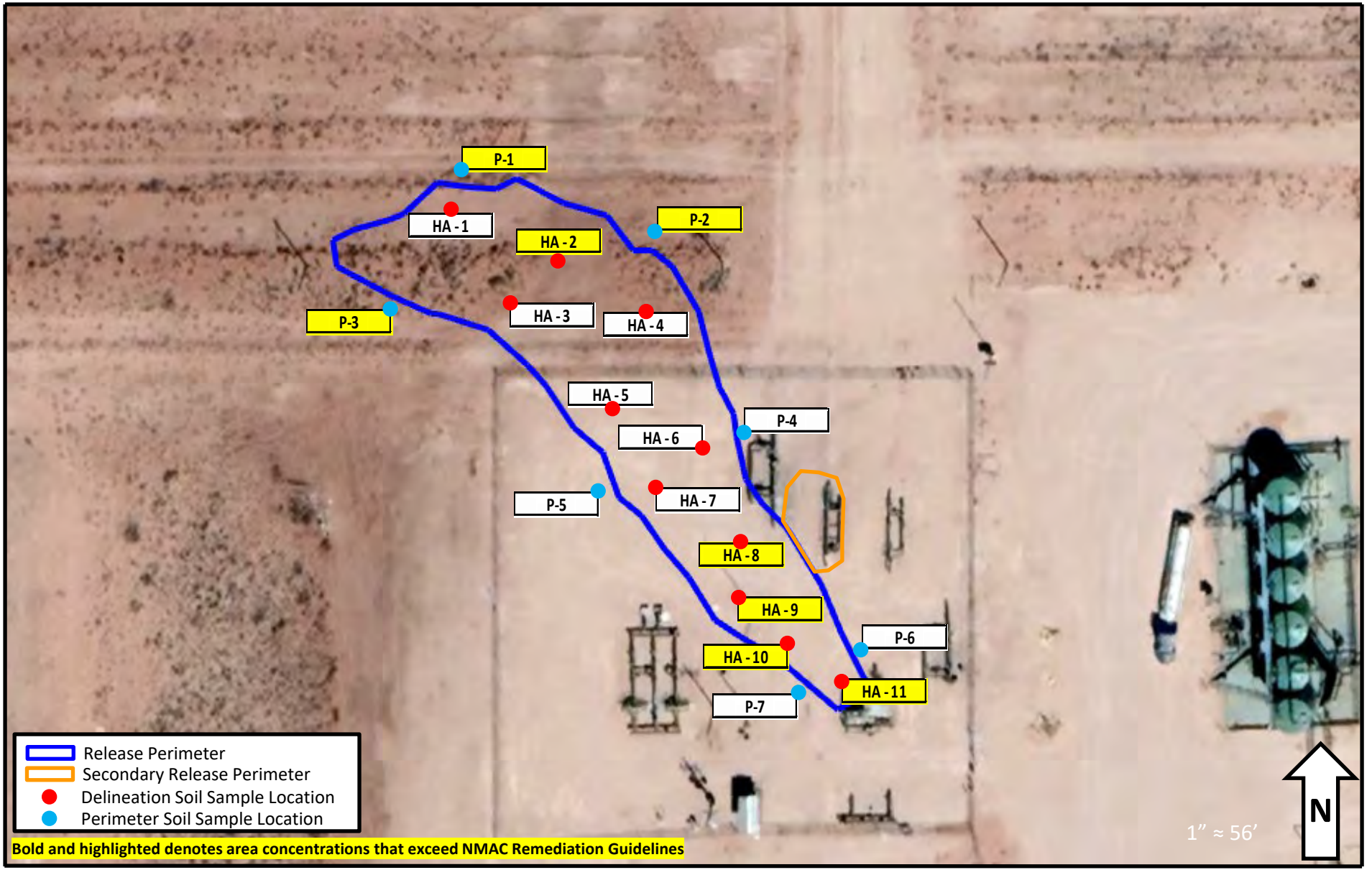

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Figure 2. Delineation Soil Sample Locations and Site Map

CTB 127 - Dauntless
GPS: 32.140186, -103.615707
Lea County, New Mexico

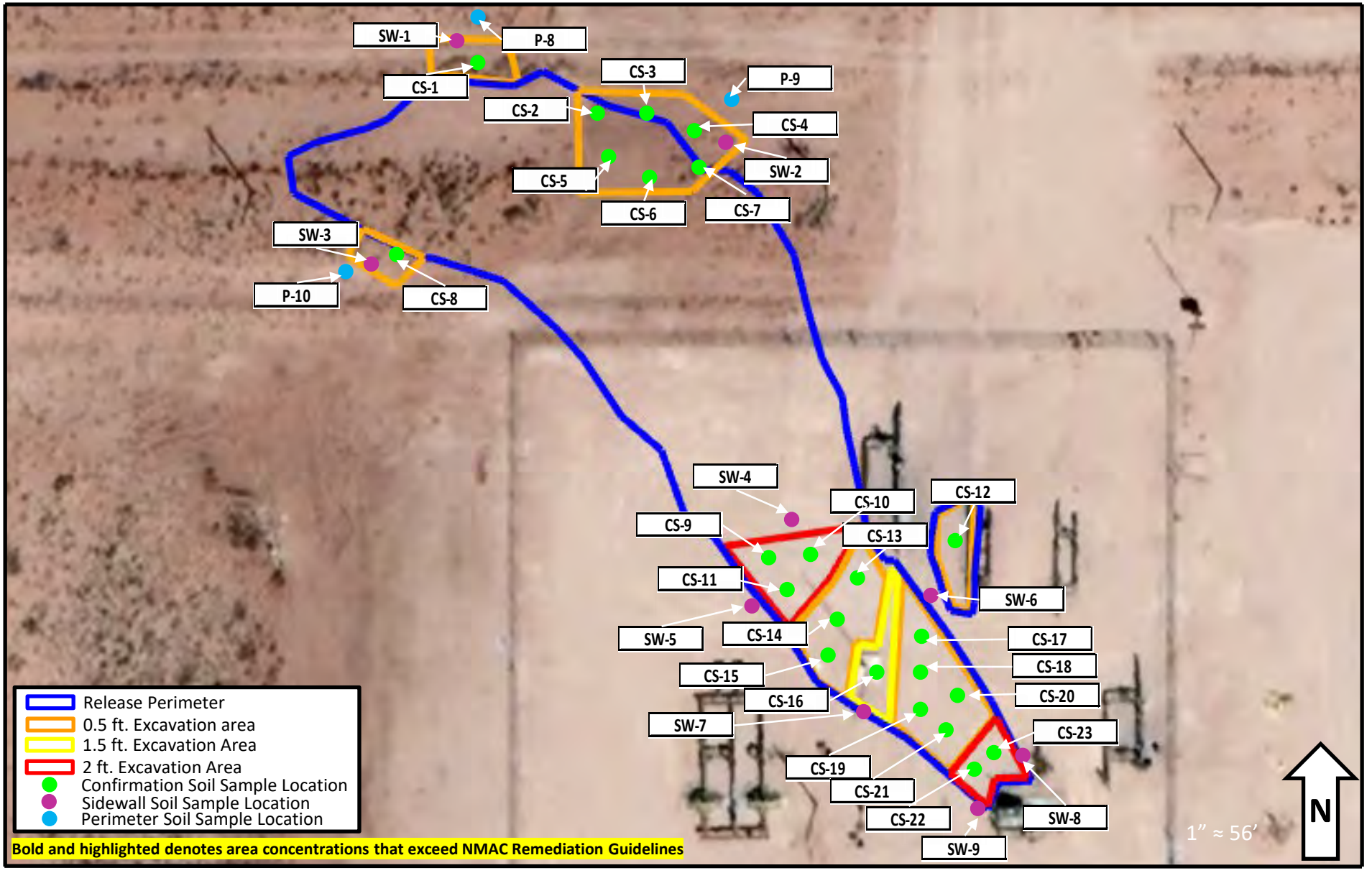

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Figure 3. Confirmation Soil Sample Locations and Site Map

CTB 127 - Dauntless
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Figure 4. SOIL BORING LOG

PROJECT: CTB 127 - Dauntless
PROJECT NUMBER: 1688
CLIENT: Marathon Petroleum
SOIL BORING 1
TOTAL DEPTH: 58 ft.
FIELD PERSONNEL: T. Carlson

DRILLING COMPANY: Hungry Horse LLC
DRILLER: NA
DRILLING METHOD: Air Rotary
BORE HOLE DIAMETER: 2.375 in.
DATE DRILLED: 8/29/2023

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 with Limestone Cobbles, Very Pale Brown, No Odor, Dry	5
10							Sand, Light Reddish Brown, No Odor, Dry	10
							Sand with Limestone Pebbles, Very Pale Brown, No Odor, Dry	
15							Sand with Limestone Pebbles, Light Reddish Brown, No Odor, Dry	15
20								20
25							Sand with Limestone Pebbles, Very Pale Brown, No Odor, Dry	25
30								30
35							Sand, Light Reddish Brown, No Odor, Dry	35
40								40
45							Sand, Light Reddish Brown, No Odor, Dry	45
50								50
55							Sand, Light Reddish Brown, No Odor, Dry	55
58								58
60								60

Table 1. Summary of Delineation Soil Analytical Results
Marathon Petroleum - CTB 127 - Dauntless
32.140186, -103.615707
Lea County, New Mexico

Surface to 4 ft. bgs. Reclamation Standards

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over 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)
19.15.29 NMAC Remediation Guidelines:			**600**				**100**	**10**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
HA - 1	7/19/2023	0 - 0.5	58.4	<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397
		0.5 - 1	54.0	<50.5	<50.5	<50.5	<50.5	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
		1.5 - 2R	48.6	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
HA - 2	7/19/2023	0 - 0.5	45.9	<49.9	**334**	<49.9	**334**	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
		0.5 - 1	43.4	<49.9	<49.9	<49.9	<49.9	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397
		1.5 - 2	60.9	<50.0	71.9	<50.0	71.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
HA - 3	7/19/2023	0 - 0.5	37.2	<49.9	89	<49.9	89	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
		0.5 - 1	40.6	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396
		1.5 - 2	39.5	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
HA - 4	7/19/2023	0 - 0.5	39.6	<49.8	74.7	<49.8	74.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403
		0.5 - 1	45.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
		1.5 - 2	36.3	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
P-1	7/19/2023	0 - 0.5	55.1	<50.2	**109**	<50.2	**109**	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
P-2	7/19/2023	0 - 0.5	47.5	<50.0	**386**	<50.0	**386**	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
P-3	7/19/2023	0 - 0.5	41.4	<49.9	**197**	<49.9	**197**	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402

Active Oil and Gas Facility Remediation Standards

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over 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)
19.15.29 NMAC Remediation Guidelines:			**10,000**	**1,000**			**2,500**	**10**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
HA - 5	7/19/2023	0 - 0.5	72.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
		0.5 - 1	46.6	<50.0	<50.0	<50.0	<50.0	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396
		1.5 - 2	48.8	<50.3	71.9	<50.3	71.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
HA - 6	7/19/2023	0 - 0.5	86.1	<50.1	239	<50.1	239	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
		0.5 - 1	59.1	<50.4	53.1	<50.4	53.1	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
		1.5 - 2R	82.7	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
HA - 7	7/19/2023	0 - 0.5	95.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
		0.5 - 1	81.2	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400
		1.5 - 2	85.3	<49.5	<49.5	<49.5	<49.5	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403
HA - 8	7/19/2023	0 - 0.5	64.3	<50.5	**7,090**	263	**7,350**	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
		0.5 - 1	73.3	<50.4	204	<50.4	204	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
		1.5 - 2R	59.8	<50.2	**1,550**	53.0	**1,600**	<0.00199	0.00209	<0.00199	<0.00398	<0.00398
HA - 9	7/19/2023	0 - 0.5	152	**1,290**	**22,300**	1,110	**24,700**	0.114	0.475	3.97	33.4	37.9
		0.5 - 1R	92.0	77.0	918	52.5	1,050	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397
HA - 10	7/19/2023	0 - 0.5	85.3	479	**5,650**	242	**6,370**	<0.00201	0.0544	0.293	20.6	21.0
		0.5 - 1R	50.7	<49.9	596	<49.9	596	<0.00202	0.00238	<0.00202	0.00985	0.0122
HA - 11	7/19/2023	0 - 0.5	180	**2,580**	**18,400**	723	**21,700**	1.13	17.2	8.4	51.9	**78.6**
		0.5 - 1	126	**3,090**	**15,900**	685	**19,700**	0.846	36.8	16.2	146	**200**
		1.5 - 2	74.6	<49.9	323	<49.9	323	0.00249	0.0156	0.00693	0.0419	0.0669
		2.5 - 3	86.2	<49.6	242	<49.6	242	<0.00201	<0.00201	<0.00201	0.0147	0.0147
		3.5 - 4	78.7	<49.6	546	<49.6	546	<0.00202	0.00425	0.00275	0.0357	0.0427
P-4	7/19/2023	0 - 0.5	48.8	<50.3	<50.3	<50.3	<50.3	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
P-5	7/19/2023	0 - 0.5	68.2	<49.8	53.7	<49.8	53.7	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
P-6	7/19/2023	0 - 0.5	73.4	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P-7	7/19/2023	0 - 0.5	54.5	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399

Bold and highlighted denotes concentrations that exceed 19.15.29 NMAC.

R = Refusal of soil boring advancement due to onsite soil lithology

Table 2. Summary of Confirmation Soil Analytical Results
Marathon Petroleum - CTB 127 - Dauntless
32.140186, -103.615707
Lea County, New Mexico

Surface to 4 ft. bgs. Reclamation Standards

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over 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)
	19.15.29 NMAC Remediation Guidelines:		**600**				**100**	**10**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
CS-1	8/14/2023	0.5 - 1	Not Analyzed	<50.3	<50.3	<50.3	<50.3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-2	8/14/2023	0.5 - 1	Not Analyzed	<50.3	<50.3	<50.3	<50.3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-3	8/14/2023	0.5 - 1	Not Analyzed	<50.4	<50.4	<50.4	<50.4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-4	8/14/2023	0.5 - 1	Not Analyzed	<50.1	<50.1	<50.1	<50.1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-5	8/14/2023	0.5 - 1	Not Analyzed	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-6	8/14/2023	0.5 - 1	Not Analyzed	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-7	8/14/2023	0.5 - 1	Not Analyzed	<50.2	<50.2	<50.2	<50.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-8	8/14/2023	0.5 - 1	Not Analyzed	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
P-8	8/14/2023	0 - 0.5	57.1	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P-9	8/14/2023	0 - 0.5	39.8	<49.7	<49.7	<49.7	<49.7	<0.0020	<0.0020	<0.0020	<0.0040	<0.0040
P-10	8/14/2023	0 - 0.5	60.8	<49.6	<49.6	<49.6	<49.6	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396
SW-1	8/14/2023	0.25'	Not Analyzed	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-2	8/14/2023	0.25'	Not Analyzed	<49.7	<49.7	<49.7	<49.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-3	8/14/2023	0.25'	Not Analyzed	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Active Oil and Gas Facility Remediation Standards

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over 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)
	19.15.29 NMAC Remediation Guidelines:		**10,000**	**1,000**			**2,500**	**10**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
CS-9	8/14/2023	2 - 2.5	Not Analyzed	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-10	8/14/2023	2 - 2.5	Not Analyzed	<50.0	<50.0	<50.0	<50.0	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-11	8/14/2023	2 - 2.5	Not Analyzed	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-12	8/14/2023	0.5 - 1	Not Analyzed	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-13	8/14/2023	0.5 - 1	Not Analyzed	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-14	8/14/2023	0.5 - 1	Not Analyzed	<49.7	<49.7	<49.7	<49.7	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-15	8/14/2023	0.5 - 1	Not Analyzed	<49.8	<49.8	<49.8	<49.8	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-16	8/14/2023	1.5 - 2	Not Analyzed	<50.3	<50.3	<50.3	<50.3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-17	8/14/2023	0.5 - 1	Not Analyzed	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-18	8/14/2023	0.5 - 1	Not Analyzed	<50.1	<50.1	<50.1	<50.1	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-19	8/14/2023	0.5 - 1	Not Analyzed	<50.0	<50.0	<50.0	<50.0	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-20	8/14/2023	0.5 - 1	Not Analyzed	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-21	8/14/2023	0.5 - 1	Not Analyzed	<50.2	<50.2	<50.2	<50.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-22	8/14/2023	2 - 2.5	Not Analyzed	<50.3	<50.3	<50.3	<50.3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
CS-23	8/14/2023	2 - 2.5	Not Analyzed	<50.4	<50.4	<50.4	<50.4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-4	8/14/2023	1'	Not Analyzed	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-5	8/14/2023	1'	Not Analyzed	<50.3	<50.3	<50.3	<50.3	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-6	8/14/2023	0.25'	Not Analyzed	<50.4	<50.4	<50.4	<50.4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-7	8/14/2023	1'	Not Analyzed	<50.5	<50.5	<50.5	<50.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-8	8/14/2023	1.25'	Not Analyzed	<49.6	<49.6	<49.6	<49.6	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
SW-9	8/14/2023	1.25'	Not Analyzed	<49.9	<49.9	<49.9	<49.9	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

Bold and highlighted denotes concentrations that exceed 19.15.29 NMAC.

R = Refusal of soil boring advancement due to onsite soil lithology

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 1: View of the impacted area facing west 7/19/23

PHOTO 2: View of the impacted area facing west. 7/19/23

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 3: View of the impacted area facing southeast. 7/19/23

PHOTO 4: View of the impacted area facing southwest. 7/19/23

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 5: View of the excavated area facing northeast 8/14/23

PHOTO 6: View of the excavated area facing south. 8/14/23

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 7: View of the borehole being drilled facing northwest. 8/29/23

PHOTO 8: View of the remediated area facing south. 8/28/23

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 9: View of the remediated area facing north. 8/28/23

PHOTO 10: View of the remediated area facing west. 8/28/23

CTB 127 – Dauntless
32.140186, -103.615707
Lea County, New Mexico

PHOTO 11: View of the remediated area facing north. 8/28/23

PHOTO 12: View of the remediated area facing southeast. 8/28/23

Groundwater Research

Depth to Groundwater Radius Map

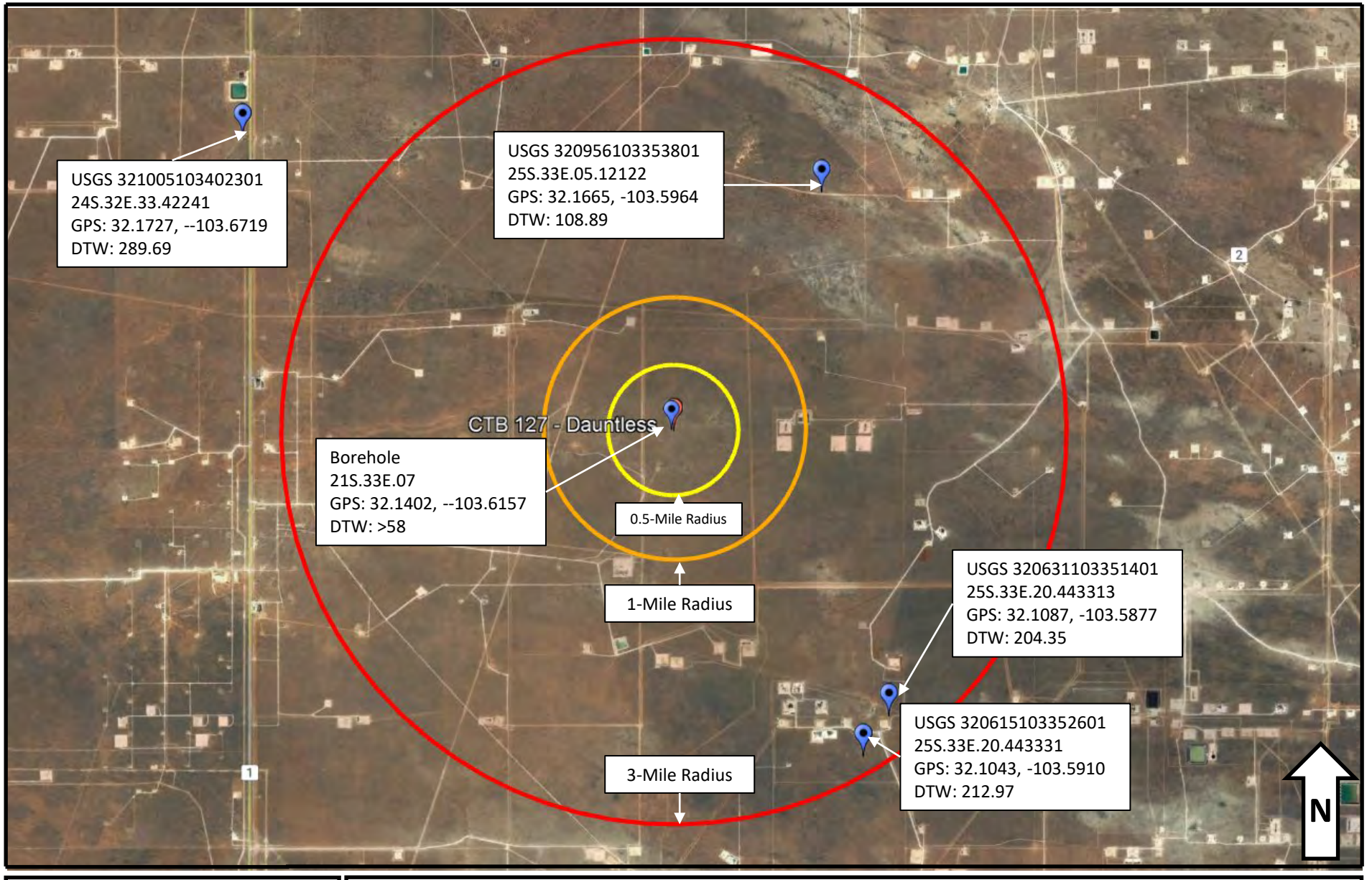
Depth to Groundwater and Water Bodies Map

Karst Potential Map

NMOSE Average Depth to Water

USGS Nation Water Information System

New Mexico NFHL Data

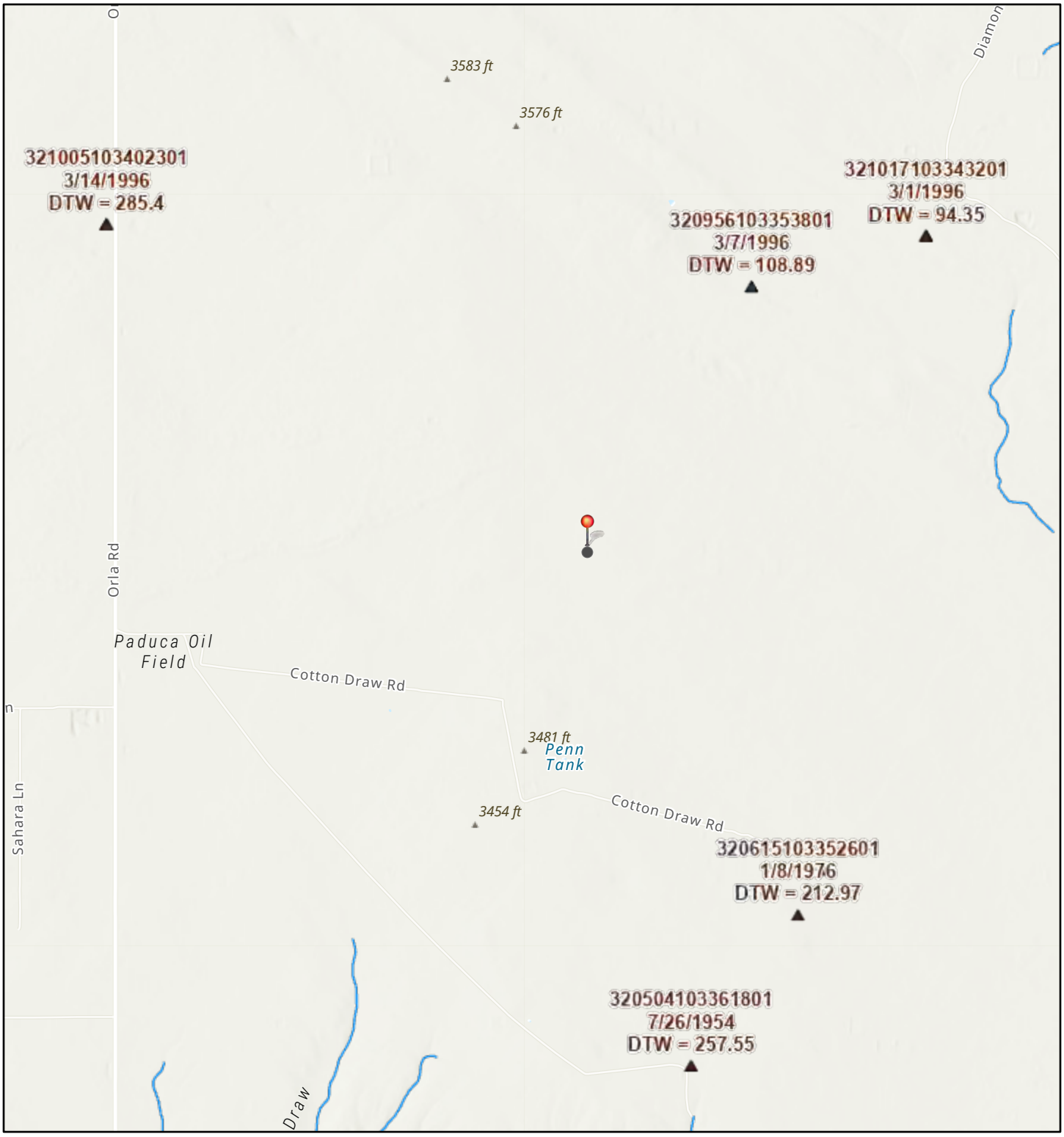


Earth Systems
Response & Restoration

Depth to Groundwater Radius Map

CTB 127 - Dauntless
GPS: 32.140186, -103.615707
Lea County, New Mexico

Depth to Groundwater and Water Bodies Map



9/17/2023, 12:50:28 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

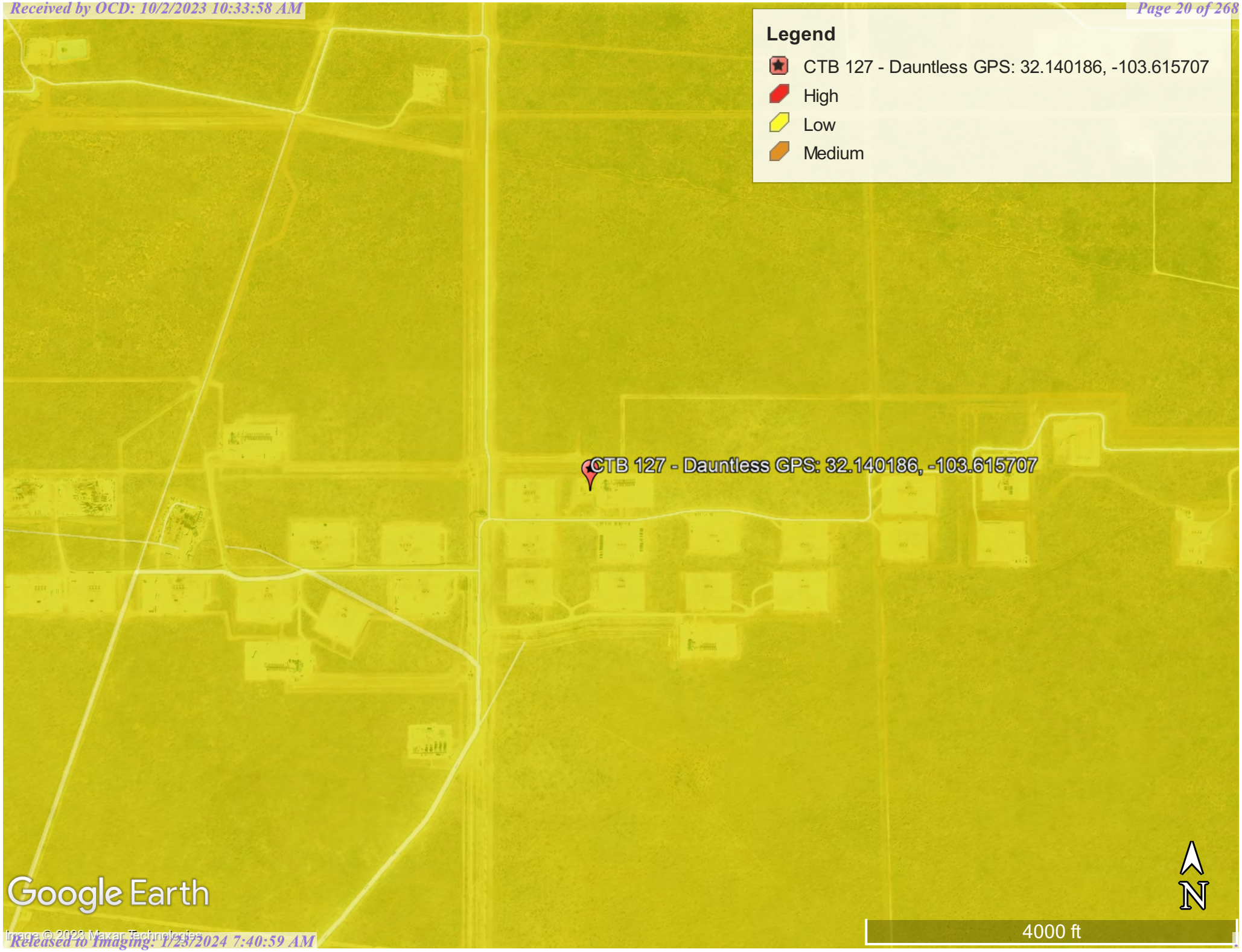
CTB 127 - Dauntless

USGS Historical GW Wells

OSE Streams

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

New Mexico Oil Conservation Division


Legend
CTB 127 - Dauntless GPS: 32.140186, -103.615707
High
Low
Medium
CTB 127 - Dauntless GPS: 32.140186, -103.615707
Google Earth
Image © 2023 Maxar Technologies
N
4000 ft

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 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 04627 POD1	CUB	LE	3	3	4	08	25S	33E	632665	3556725	2107			
C 02312	CUB	LE	1	2	1	05	25S	33E	632292	3559772	3427	150	90	60

Average Depth to Water: **90 feet**

Minimum Depth: **90 feet**

Maximum Depth: **90 feet**

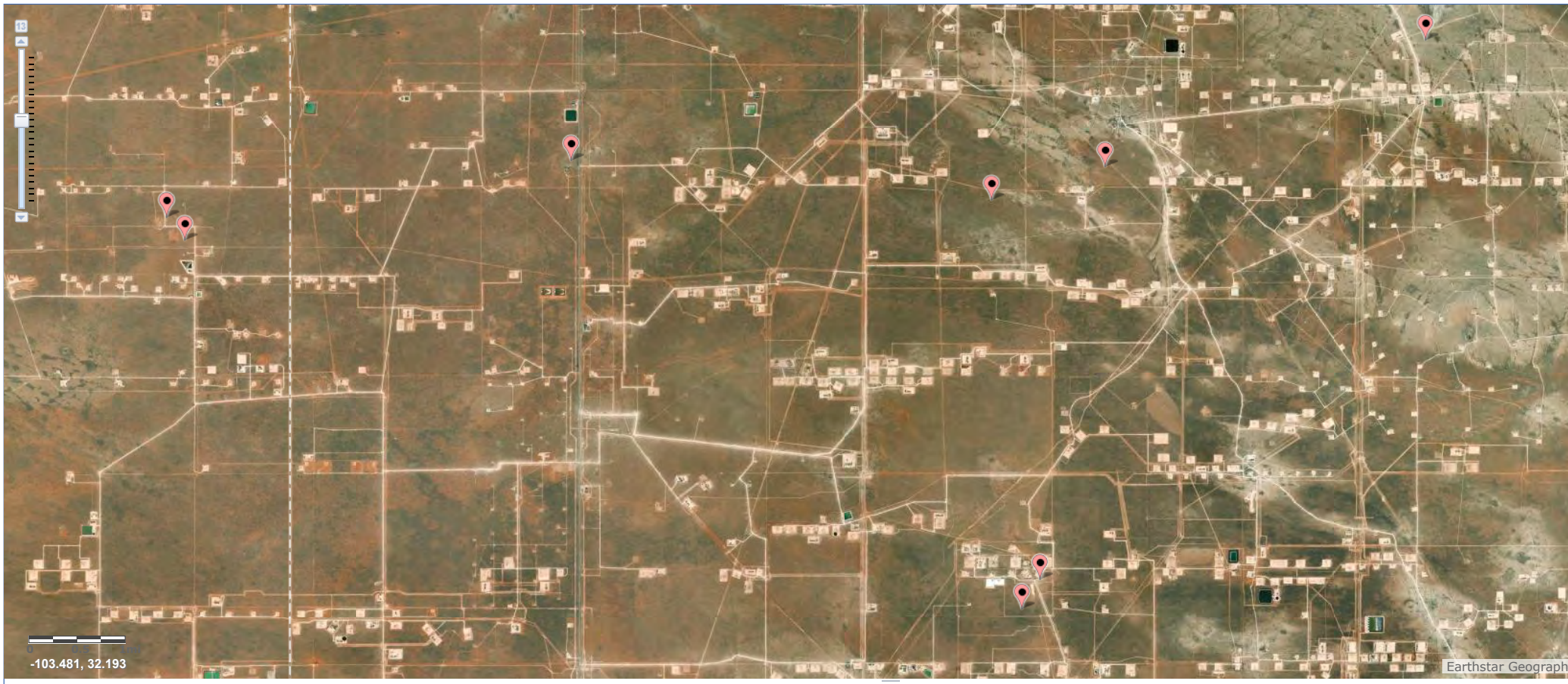
Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 630560 **Northing (Y):** 3556813.58 **Radius:** 4000

USGS science for a changing world

National Water Information System: Mapper



Site Information

National Water Information System: Web Interface

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320956103353801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320956103353801 25S.33E.05.12122

Lea County, New Mexico
Latitude 32°09'59.4", Longitude 103°35'47.2" NAD83
Land-surface elevation 3,473.00 feet above NGVD29
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Santa Rosa Sandstone (231SNRS) 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
1981-03-25		D	62610		3365.17	NGVD29	1	Z			A
1981-03-25		D	62611		3366.84	NAVD88	1	Z			A
1981-03-25		D	72019	107.83			1	Z			A
1986-03-12		D	62610		3363.66	NGVD29	1	Z			A
1986-03-12		D	62611		3365.33	NAVD88	1	Z			A
1986-03-12		D	72019	109.34			1	Z			A

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
1991-06-06		D	62610		3365.42	NGVD29	1	Z			A
1991-06-06		D	62611		3367.09	NAVD88	1	Z			A
1991-06-06		D	72019	107.58			1	Z			A
1996-03-07		D	62610		3364.11	NGVD29	P	S			A
1996-03-07		D	62611		3365.78	NAVD88	P	S			A
1996-03-07		D	72019	108.89			P	S			A
2013-01-17	16:00 UTC	m	62610		3354.19	NGVD29	P	S	USGS	S	A
2013-01-17	16:00 UTC	m	62611		3355.86	NAVD88	P	S	USGS	S	A
2013-01-17	16:00 UTC	m	72019	118.81			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
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

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- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320631103351401

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320631103351401 25S.33E.20.443313

Lea County, New Mexico
Latitude 32°06'31", Longitude 103°35'14" NAD27
Land-surface elevation 3,398 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) 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
1981-03-25		D	62610		3192.01	NGVD29	1	Z			A
1981-03-25		D	62611		3193.64	NAVD88	1	Z			A
1981-03-25		D	72019	204.36			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.

Questions or Comments
Automated retrievals

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Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320615103352601

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320615103352601 25S.33E.20.443331

Lea County, New Mexico
Latitude 32°06'15", Longitude 103°35'26" NAD27
Land-surface elevation 3,404 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) 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
1970-12-08		D	62610		3189.60	NGVD29	1	Z			A
1970-12-08		D	62611		3191.23	NAVD88	1	Z			A
1970-12-08		D	72019	212.77			1	Z			A
1976-01-08		D	62610		3189.40	NGVD29	1	Z			A
1976-01-08		D	62611		3191.03	NAVD88	1	Z			A
1976-01-08		D	72019	212.97			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.

Click to hideNews Bulletins

How are we doing? We want to hear from you. Take our quick survey to tell us what you think.

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321005103402301

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321005103402301 24S.32E.33.42241

Lea County, New Mexico
Latitude 32°10'21.6", Longitude 103°40'18.9" NAD83
Land-surface elevation 3,499.00 feet above NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

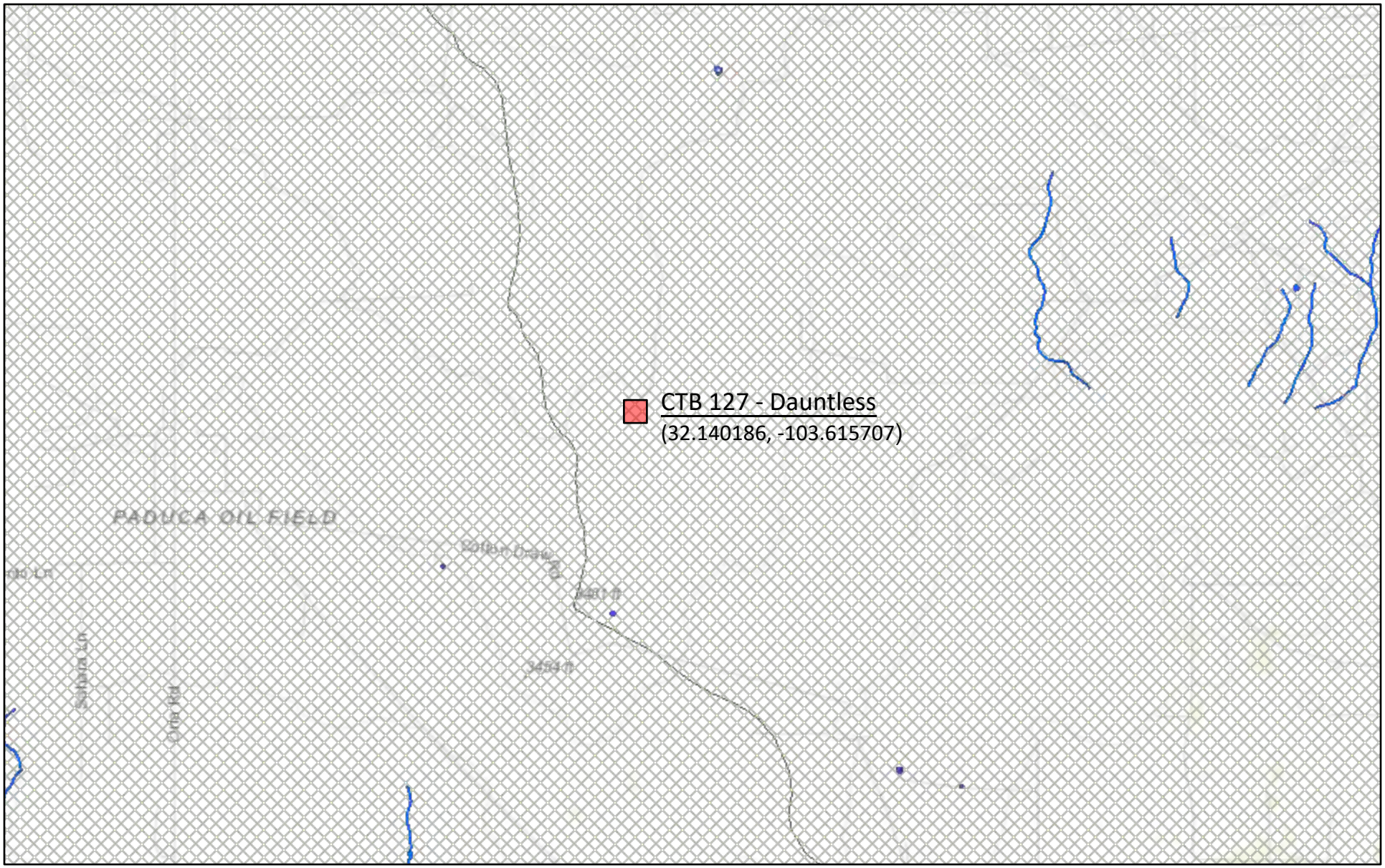
Table of data
Tab-separated data
Graph of data
Reselect period

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
1959-02-18		D	62610		3185.60	NGVD29	1	Z			A
1959-02-18		D	62611		3187.32	NAVD88	1	Z			A
1959-02-18		D	72019	313.40			1	Z			A
1981-06-12		D	62610		3194.60	NGVD29	1	Z			A
1981-06-12		D	62611		3196.32	NAVD88	1	Z			A
1981-06-12		D	72019	304.40			1	Z			A
1986-03-11		D	62610		3193.79	NGVD29	1	Z			A
1986-03-11		D	62611		3195.51	NAVD88	1	Z			A
1986-03-11		D	72019	305.21			1	Z			A
1991-05-29		D	62610		3211.55	NGVD29	1	Z			A
1991-05-29		D	62611		3213.27	NAVD88	1	Z			A
1991-05-29		D	72019	287.45			1	Z			A
1996-03-14		D	62610		3213.60	NGVD29	1	S			A
1996-03-14		D	62611		3215.32	NAVD88	1	S			A
1996-03-14		D	72019	285.40			1	S			A
2001-02-27		D	62610		3210.32	NGVD29	1	S			A
2001-02-27		D	62611		3212.04	NAVD88	1	S			A
2001-02-27		D	72019	288.68			1	S			A
2013-01-17	16:30 UTC	m	62610		3209.31	NGVD29	1	S	USGS	S	A
2013-01-17	16:30 UTC	m	62611		3211.03	NAVD88	1	S	USGS	S	A
2013-01-17	16:30 UTC	m	72019	289.69			1	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
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
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

New Mexico NFHL Data



July 20, 2023

1:72,224

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0 0.75 1.5 3 km

FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

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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 7/22/2023 9:45:27 AM

JOB DESCRIPTION

CTB 127-Dauntless
SDG NUMBER Lea County

JOB NUMBER

880-31006-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

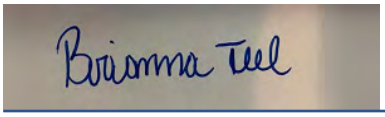
Eurofins Midland

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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7/22/2023 9:45:27 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: CTB 127-Dauntless

Laboratory Job ID: 880-31006-1
SDG: Lea County

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD 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
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: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Job ID: 880-31006-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-31006-1

Receipt
The samples were received on 7/20/2023 9:16 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 5.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: HA-1 (880-31006-1), HA-1 (880-31006-2), HA-1 (880-31006-3), HA-2 (880-31006-4), HA-2 (880-31006-5), HA-2 (880-31006-6), HA-2 (880-31006-7), HA-3 (880-31006-8), HA-3 (880-31006-9), HA-3 (880-31006-10), HA-3 (880-31006-11), HA-4 (880-31006-12), HA-4 (880-31006-13), HA-4 (880-31006-14), HA-4 (880-31006-15), HA-5 (880-31006-16), HA-5 (880-31006-17), HA-5 (880-31006-18), HA-5 (880-31006-19), HA-6 (880-31006-20), HA-6 (880-31006-21), HA-6 (880-31006-22), HA-7 (880-31006-23), HA-7 (880-31006-24), HA-7 (880-31006-25), HA-7 (880-31006-26), HA-7 (880-31006-27), HA-8 (880-31006-28), HA-8 (880-31006-29), HA-8 (880-31006-30), HA-9 (880-31006-31), HA-9 (880-31006-32), HA-10 (880-31006-33), HA-10 (880-31006-34), HA-11 (880-31006-35), HA-11 (880-31006-36), HA-11 (880-31006-37), HA-11 (880-31006-38), HA-11 (880-31006-39), P-1 (880-31006-40), P-2 (880-31006-41), P-3 (880-31006-42), P-4 (880-31006-43), P-5 (880-31006-44), P-6 (880-31006-45) and P-7 (880-31006-46).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-58088/2) and (MB 880-58142/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA-8 (880-31006-29), HA-9 (880-31006-31), HA-10 (880-31006-33), HA-11 (880-31006-35), HA-11 (880-31006-36), P-2 (880-31006-41), P-3 (880-31006-42), P-4 (880-31006-43), P-5 (880-31006-44) and P-7 (880-31006-46). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-58088 recovered above the upper control limit for m-Xylene & p-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-58088/20).

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-58106 and analytical batch 880-58088 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-58088 recovered above the upper control limit for Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene due to carryover. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-58088/51).

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: The surrogate recovery for the blank associated with preparation batch 880-58126 and analytical batch 880-58074 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-58074/20) and (CCV 880-58074/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-58128 and analytical batch 880-58077 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-58077/20) and (CCV 880-58077/5). Evidence of matrix interferences is not obvious.

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Job ID: 880-31006-1 (Continued)

Laboratory: Eurofins Midland (Continued)

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA-5 (880-31006-18), HA-6 (880-31006-20), HA-6 (880-31006-21), HA-6 (880-31006-22), HA-7 (880-31006-23), HA-7 (880-31006-24), HA-8 (880-31006-29), HA-8 (880-31006-30), (880-31006-A-18-C MS) and (880-31006-A-18-D MSD). 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-1 (880-31006-2), HA-1 (880-31006-3), (890-4960-A-1-E), (890-4960-A-1-F MS) and (890-4960-A-1-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-58210 and analytical batch 880-58182 were outside control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-58210 and analytical batch 880-58182 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: HA-2 (880-31006-5), HA-2 (880-31006-6), HA-4 (880-31006-14), (880-31006-A-5-E MS) and (880-31006-A-5-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-58184 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-58184/5).

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-58179/1-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

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: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-1

Lab Sample ID: 880-31006-1
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:12	07/20/23 22:37	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 22:37	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 22:37	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/20/23 10:12	07/20/23 22:37	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 22:37	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/20/23 10:12	07/20/23 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:37*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:37*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			07/21/23 10:59	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	<50.2	U	50.2		mg/Kg		07/20/23 11:33	07/20/23 17:18	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		07/20/23 11:33	07/20/23 17:18	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		07/20/23 11:33	07/20/23 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*07/20/23 11:33*	*07/20/23 17:18*	*1*
o-Terphenyl	*103*		*70 - 130*	*07/20/23 11:33*	*07/20/23 17:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**58.4**		4.99		mg/Kg			07/20/23 16:41	1

Client Sample ID: HA-1

Lab Sample ID: 880-31006-2
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:12	07/20/23 22:58	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/20/23 22:58	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/20/23 22:58	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/20/23 22:58	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/20/23 22:58	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/20/23 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:58*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-1

Lab Sample ID: 880-31006-2
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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)	*112*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:58*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			07/21/23 10:59	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	<50.5	U	50.5		mg/Kg		07/20/23 11:33	07/20/23 17:40	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		07/20/23 11:33	07/20/23 17:40	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/20/23 11:33	07/20/23 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*07/20/23 11:33*	*07/20/23 17:40*	*1*
o-Terphenyl	*117*		*70 - 130*	*07/20/23 11:33*	*07/20/23 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.0**		5.00		mg/Kg			07/20/23 16:56	1

Client Sample ID: HA-1

Lab Sample ID: 880-31006-3
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

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		07/20/23 10:12	07/20/23 23:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/20/23 23:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/20/23 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:18*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			07/21/23 10:59	1

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-1

Lab Sample ID: 880-31006-3
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

Method: SW846 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	50.5		mg/Kg		07/20/23 11:33	07/20/23 18:02	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		07/20/23 11:33	07/20/23 18:02	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/20/23 11:33	07/20/23 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*07/20/23 11:33*	*07/20/23 18:02*	*1*
o-Terphenyl	*112*		*70 - 130*	*07/20/23 11:33*	*07/20/23 18:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.6**		4.96		mg/Kg			07/20/23 17:01	1

Client Sample ID: HA-2

Lab Sample ID: 880-31006-4
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/20/23 10:12	07/20/23 23:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 23:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/20/23 10:12	07/20/23 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:39*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:39*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**334**		49.9		mg/Kg			07/21/23 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/20/23 11:33	07/21/23 06:38	1
Diesel Range Organics (Over C10-C28)	**334**		49.9		mg/Kg		07/20/23 11:33	07/21/23 06:38	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/20/23 11:33	07/21/23 06:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/20/23 11:33*	*07/21/23 06:38*	*1*
o-Terphenyl	*93*		*70 - 130*	*07/20/23 11:33*	*07/21/23 06:38*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45.9		5.01		mg/Kg			07/20/23 17:05	1

Client Sample ID: HA-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-5
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		07/20/23 10:12	07/20/23 23:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 23:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 23:59	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/20/23 10:12	07/20/23 23:59	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/20/23 23:59	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/20/23 10:12	07/20/23 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:59*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*07/20/23 10:12*	*07/20/23 23:59*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/21/23 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1 F2	49.9		mg/Kg		07/21/23 09:01	07/21/23 12:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 12:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*07/21/23 09:01*	*07/21/23 12:46*	*1*
o-Terphenyl	*146*	*S1+*	*70 - 130*	*07/21/23 09:01*	*07/21/23 12:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.4		4.99		mg/Kg			07/20/23 17:11	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-2

Lab Sample ID: 880-31006-6
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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		07/20/23 10:12	07/21/23 00:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 00:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 00:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 10:12	07/21/23 00:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 00:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 10:12	07/21/23 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/20/23 10:12*	*07/21/23 00:20*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/20/23 10:12*	*07/21/23 00:20*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**71.9**		50.0		mg/Kg			07/21/23 17:59	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 *1	50.0		mg/Kg		07/21/23 09:01	07/21/23 13:56	1
Diesel Range Organics (Over C10-C28)	**71.9**		50.0		mg/Kg		07/21/23 09:01	07/21/23 13:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*07/21/23 09:01*	*07/21/23 13:56*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*07/21/23 09:01*	*07/21/23 13:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.9**		5.05		mg/Kg			07/20/23 17:25	1

Client Sample ID: HA-3

Lab Sample ID: 880-31006-8
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 00:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 00:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 00:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/21/23 00:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 00:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/21/23 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/20/23 10:12*	*07/21/23 00:41*	*1*

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-8
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*07/20/23 10:12*	*07/21/23 00:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**89.0**		49.9		mg/Kg			07/21/23 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/21/23 09:01	07/21/23 14:18	1
Diesel Range Organics (Over C10-C28)	**89.0**		49.9		mg/Kg		07/21/23 09:01	07/21/23 14:18	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*07/21/23 09:01*	*07/21/23 14:18*	*1*
o-Terphenyl	*124*		*70 - 130*	*07/21/23 09:01*	*07/21/23 14:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.2**		5.02		mg/Kg			07/20/23 17:30	1

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-9
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		07/20/23 10:12	07/21/23 01:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 01:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 01:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/20/23 10:12	07/21/23 01:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 01:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/20/23 10:12	07/21/23 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:01*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:01*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			07/21/23 17:59	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-3
Lab Sample ID: 880-31006-9
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16
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 *1	49.8		mg/Kg		07/21/23 09:01	07/21/23 14:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/21/23 09:01	07/21/23 14:40	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/21/23 09:01	07/21/23 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*07/21/23 09:01*	*07/21/23 14:40*	*1*
o-Terphenyl	*130*		*70 - 130*	*07/21/23 09:01*	*07/21/23 14:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.6**		4.98		mg/Kg			07/20/23 17:35	1

Client Sample ID: HA-3
Lab Sample ID: 880-31006-10
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 01:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 01:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 01:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/21/23 01:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 01:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/21/23 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:22*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:22*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			07/21/23 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/21/23 09:01	07/21/23 15:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/21/23 09:01	07/21/23 15:01	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/21/23 09:01	07/21/23 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:01*	*1*
o-Terphenyl	*127*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:01*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

Lab Sample ID: 880-31006-10
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.5**		5.00		mg/Kg			07/20/23 17:40	1

Client Sample ID: HA-4
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-12
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		07/20/23 10:12	07/21/23 01:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 01:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 01:42	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/20/23 10:12	07/21/23 01:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 01:42	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/20/23 10:12	07/21/23 01:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:42*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:12*	*07/21/23 01:42*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**74.7**		49.8		mg/Kg			07/21/23 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8		mg/Kg		07/21/23 09:01	07/21/23 15:24	1
Diesel Range Organics (Over C10-C28)	**74.7**		49.8		mg/Kg		07/21/23 09:01	07/21/23 15:24	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/21/23 09:01	07/21/23 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:24*	*1*
o-Terphenyl	*116*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.6**		5.01		mg/Kg			07/20/23 17:45	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-4

Lab Sample ID: 880-31006-13
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:12	07/21/23 03:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 03:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 03:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/21/23 03:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 03:05	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 10:12	07/21/23 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:05*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/21/23 17:59	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 *1	50.0		mg/Kg		07/21/23 09:01	07/21/23 15:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 15:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:49*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/21/23 09:01*	*07/21/23 15:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.0**		5.03		mg/Kg			07/20/23 17:50	1

Client Sample ID: HA-4

Lab Sample ID: 880-31006-14
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 03:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 03:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 03:26	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/21/23 03:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 03:26	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/21/23 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:26*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-4

Lab Sample ID: 880-31006-14
Matrix: Solid

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:26*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/21/23 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/21/23 09:01	07/21/23 16:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 16:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*07/21/23 09:01*	*07/21/23 16:11*	*1*
o-Terphenyl	*132*	*S1+*	*70 - 130*	*07/21/23 09:01*	*07/21/23 16:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.3**		4.97		mg/Kg			07/20/23 18:05	1

Client Sample ID: HA-5

Lab Sample ID: 880-31006-16
Matrix: Solid

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:12	07/21/23 03:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 03:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 03:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 03:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 03:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:47*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:12*	*07/21/23 03:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/21/23 17:59	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*07/21/23 09:01*	*07/21/23 16:35*	*1*
o-Terphenyl	*122*		*70 - 130*	*07/21/23 09:01*	*07/21/23 16:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**72.0**		5.00		mg/Kg			07/20/23 18:10	1

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-17
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		07/20/23 10:12	07/21/23 04:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 04:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 04:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		07/20/23 10:12	07/21/23 04:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:12	07/21/23 04:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/20/23 10:12	07/21/23 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:07*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:07*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/21/23 17:59	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 *1	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*07/21/23 09:01*	*07/21/23 16:57*	*1*
o-Terphenyl	*127*		*70 - 130*	*07/21/23 09:01*	*07/21/23 16:57*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-17
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.6**		4.95		mg/Kg			07/20/23 18:25	1

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

Lab Sample ID: 880-31006-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 04:28	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 04:28	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 04:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 04:28	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 04:28	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 04:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:28*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:28*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**71.9**		50.3		mg/Kg			07/21/23 10:50	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	<50.3	U	50.3		mg/Kg		07/20/23 11:44	07/20/23 14:03	1
Diesel Range Organics (Over C10-C28)	**71.9**		50.3		mg/Kg		07/20/23 11:44	07/20/23 14:03	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		07/20/23 11:44	07/20/23 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 14:03*	*1*
o-Terphenyl	*163*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 14:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.8**		5.05		mg/Kg			07/20/23 18:30	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-6

Lab Sample ID: 880-31006-20
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 04:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 04:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 04:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 10:12	07/21/23 04:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:12	07/21/23 04:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 10:12	07/21/23 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:48*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*07/20/23 10:12*	*07/21/23 04:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**239**		50.1		mg/Kg			07/21/23 10:50	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	<50.1	U	50.1		mg/Kg		07/20/23 11:44	07/20/23 15:19	1
Diesel Range Organics (Over C10-C28)	**239**		50.1		mg/Kg		07/20/23 11:44	07/20/23 15:19	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		07/20/23 11:44	07/20/23 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 15:19*	*1*
o-Terphenyl	*177*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 15:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.1**		5.02		mg/Kg			07/20/23 18:35	1

Client Sample ID: HA-6

Lab Sample ID: 880-31006-21
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 05:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 05:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 05:09	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/21/23 05:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:12	07/21/23 05:09	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/20/23 10:12	07/21/23 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:09*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-6

Lab Sample ID: 880-31006-21
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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)	*105*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:09*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.1**		50.4		mg/Kg			07/21/23 10:50	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	<50.4	U	50.4		mg/Kg		07/20/23 11:44	07/20/23 15:43	1
Diesel Range Organics (Over C10-C28)	**53.1**		50.4		mg/Kg		07/20/23 11:44	07/20/23 15:43	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		07/20/23 11:44	07/20/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*07/20/23 11:44*	*07/20/23 15:43*	*1*
o-Terphenyl	*147*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 15:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**59.1**		4.99		mg/Kg			07/20/23 18:40	1

Client Sample ID: HA-6

Lab Sample ID: 880-31006-22
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

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		07/20/23 10:12	07/21/23 05:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 05:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 05:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/20/23 10:12	07/21/23 05:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 05:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/20/23 10:12	07/21/23 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:30*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:30*	*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			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			07/21/23 10:50	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-6

Lab Sample ID: 880-31006-22
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

Method: SW846 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	50.5		mg/Kg		07/20/23 11:44	07/20/23 16:04	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		07/20/23 11:44	07/20/23 16:04	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/20/23 11:44	07/20/23 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 16:04*	*1*
o-Terphenyl	*156*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 16:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**82.7**		4.95		mg/Kg			07/20/23 18:45	1

Client Sample ID: HA-7

Lab Sample ID: 880-31006-23
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:12	07/21/23 05:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 05:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 05:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 05:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:12	07/21/23 05:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 10:12	07/21/23 05:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:50*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*07/20/23 10:12*	*07/21/23 05:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			07/21/23 10:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/20/23 11:44	07/20/23 16:34	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/20/23 11:44	07/20/23 16:34	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/20/23 11:44	07/20/23 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/20/23 11:44*	*07/20/23 16:34*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 16:34*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-23
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.0		5.00		mg/Kg			07/20/23 18:50	1

Client Sample ID: HA-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-24
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 06:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 06:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 06:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/21/23 06:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/21/23 06:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/21/23 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*07/20/23 10:12*	*07/21/23 06:11*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*07/20/23 10:12*	*07/21/23 06:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			07/21/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			07/21/23 10:50	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	<49.6	U	49.6		mg/Kg		07/20/23 11:44	07/20/23 16:57	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		07/20/23 11:44	07/20/23 16:57	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/20/23 11:44	07/20/23 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*07/20/23 11:44*	*07/20/23 16:57*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 16:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.2		4.97		mg/Kg			07/20/23 18:55	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-7

Lab Sample ID: 880-31006-25
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:15	07/21/23 00:26	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:15	07/21/23 00:26	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:15	07/21/23 00:26	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403		mg/Kg		07/20/23 10:15	07/21/23 00:26	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:15	07/21/23 00:26	1
Xylenes, Total	<0.00403	U F1	0.00403		mg/Kg		07/20/23 10:15	07/21/23 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:26*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.5	U	49.5		mg/Kg			07/21/23 10:50	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		07/20/23 11:44	07/20/23 17:18	1
Diesel Range Organics (Over C10-C28)	<49.5	U	49.5		mg/Kg		07/20/23 11:44	07/20/23 17:18	1
OII Range Organics (Over C28-C36)	<49.5	U	49.5		mg/Kg		07/20/23 11:44	07/20/23 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*07/20/23 11:44*	*07/20/23 17:18*	*1*
o-Terphenyl	*130*		*70 - 130*	*07/20/23 11:44*	*07/20/23 17:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85.3**		5.01		mg/Kg			07/20/23 19:35	1

Client Sample ID: HA-8

Lab Sample ID: 880-31006-28
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 00:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 00:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 00:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 00:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 00:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:46*	*1*

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-28
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:46*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7350**		50.5		mg/Kg			07/21/23 10:50	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	<50.5	U	50.5		mg/Kg		07/20/23 11:44	07/20/23 17:40	1
Diesel Range Organics (Over C10-C28)	**7090**		50.5		mg/Kg		07/20/23 11:44	07/20/23 17:40	1
Oil Range Organics (Over C28-C36)	**263**		50.5		mg/Kg		07/20/23 11:44	07/20/23 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*113*		*70 - 130*	*07/20/23 11:44*	*07/20/23 17:40*	*1*
o-Terphenyl	*128*		*70 - 130*	*07/20/23 11:44*	*07/20/23 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**64.3**		4.98		mg/Kg			07/20/23 19:50	1

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

Lab Sample ID: 880-31006-29
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 01:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 01:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 01:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 10:15	07/21/23 01:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 01:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 10:15	07/21/23 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*07/20/23 10:15*	*07/21/23 01:07*	*1*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 01:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/21/23 10:08	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-8

Lab Sample ID: 880-31006-29
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**204**		50.4		mg/Kg			07/21/23 10:50	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	<50.4	U	50.4		mg/Kg		07/20/23 11:44	07/20/23 18:02	1
Diesel Range Organics (Over C10-C28)	**204**		50.4		mg/Kg		07/20/23 11:44	07/20/23 18:02	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		07/20/23 11:44	07/20/23 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*07/20/23 11:44*	*07/20/23 18:02*	*1*
o-Terphenyl	*141*	*S1+*	*70 - 130*	*07/20/23 11:44*	*07/20/23 18:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.3**		4.97		mg/Kg			07/20/23 19:55	1

Client Sample ID: HA-8

Lab Sample ID: 880-31006-30
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

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		07/20/23 10:15	07/21/23 01:27	1
Toluene	**0.00209**		0.00199		mg/Kg		07/20/23 10:15	07/21/23 01:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:15	07/21/23 01:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 10:15	07/21/23 01:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:15	07/21/23 01:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 10:15	07/21/23 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*07/20/23 10:15*	*07/21/23 01:27*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/20/23 10:15*	*07/21/23 01:27*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1600**		50.2		mg/Kg			07/21/23 10:50	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	<50.2	U	50.2		mg/Kg		07/20/23 11:44	07/21/23 07:21	1
Diesel Range Organics (Over C10-C28)	**1550**		50.2		mg/Kg		07/20/23 11:44	07/21/23 07:21	1
OII Range Organics (Over C28-C36)	**53.0**		50.2		mg/Kg		07/20/23 11:44	07/21/23 07:21	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-8

Lab Sample ID: 880-31006-30
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2R

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130	07/20/23 11:44	07/21/23 07:21	1
o-Terphenyl	149	S1+	70 - 130	07/20/23 11:44	07/21/23 07:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59.8		5.02		mg/Kg			07/20/23 20:00	1

Client Sample ID: HA-9

Lab Sample ID: 880-31006-31
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.114		0.0998		mg/Kg		07/20/23 10:15	07/21/23 02:49	50
Toluene	0.475		0.0998		mg/Kg		07/20/23 10:15	07/21/23 02:49	50
Ethylbenzene	3.97		0.0998		mg/Kg		07/20/23 10:15	07/21/23 02:49	50
m-Xylene & p-Xylene	23.5		0.200		mg/Kg		07/20/23 10:15	07/21/23 02:49	50
o-Xylene	9.85		0.0998		mg/Kg		07/20/23 10:15	07/21/23 02:49	50
Xylenes, Total	33.4		0.200		mg/Kg		07/20/23 10:15	07/21/23 02:49	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	360	S1+	70 - 130	07/20/23 10:15	07/21/23 02:49	50
1,4-Difluorobenzene (Surr)	77		70 - 130	07/20/23 10:15	07/21/23 02:49	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	37.9		0.200		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	24700		249		mg/Kg			07/21/23 20:19	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	1290	*1	249		mg/Kg		07/21/23 09:01	07/21/23 17:46	5
Diesel Range Organics (Over C10-C28)	22300		249		mg/Kg		07/21/23 09:01	07/21/23 17:46	5
Oil Range Organics (Over C28-C36)	1110		249		mg/Kg		07/21/23 09:01	07/21/23 17:46	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	457	S1+	70 - 130	07/21/23 09:01	07/21/23 17:46	5
o-Terphenyl	477	S1+	70 - 130	07/21/23 09:01	07/21/23 17:46	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		4.95		mg/Kg			07/20/23 20:05	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-9

Lab Sample ID: 880-31006-32
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1R

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		07/20/23 10:15	07/21/23 01:47	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:15	07/21/23 01:47	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:15	07/21/23 01:47	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		07/20/23 10:15	07/21/23 01:47	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/20/23 10:15	07/21/23 01:47	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		07/20/23 10:15	07/21/23 01:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*07/20/23 10:15*	*07/21/23 01:47*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/20/23 10:15*	*07/21/23 01:47*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1050**		49.8		mg/Kg			07/21/23 20:19	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	**77.0**	***1**	49.8		mg/Kg		07/21/23 09:01	07/21/23 18:08	1
Diesel Range Organics (Over C10-C28)	**918**		49.8		mg/Kg		07/21/23 09:01	07/21/23 18:08	1
Oil Range Organics (Over C28-C36)	**52.5**		49.8		mg/Kg		07/21/23 09:01	07/21/23 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*07/21/23 09:01*	*07/21/23 18:08*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*07/21/23 09:01*	*07/21/23 18:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.0**		5.04		mg/Kg			07/20/23 20:20	1

Client Sample ID: HA-10

Lab Sample ID: 880-31006-33
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 02:08	1
Toluene	**0.0544**		0.00201		mg/Kg		07/20/23 10:15	07/21/23 02:08	1
Ethylbenzene	**0.293**		0.00201		mg/Kg		07/20/23 10:15	07/21/23 02:08	1
m-Xylene & p-Xylene	**14.7**		0.101		mg/Kg		07/20/23 10:15	07/21/23 16:29	25
o-Xylene	**5.91**		0.0503		mg/Kg		07/20/23 10:15	07/21/23 16:29	25
Xylenes, Total	**20.6**		0.101		mg/Kg		07/20/23 10:15	07/21/23 16:29	25

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-10

Lab Sample ID: 880-31006-33
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	428	S1+	70 - 130	07/20/23 10:15	07/21/23 02:08	1
1,4-Difluorobenzene (Surr)	90		70 - 130	07/20/23 10:15	07/21/23 02:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	21.0		0.101		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	6370		49.9		mg/Kg			07/21/23 20:19	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	479	*1	49.9		mg/Kg		07/21/23 09:01	07/21/23 18:34	1
Diesel Range Organics (Over C10-C28)	5650		49.9		mg/Kg		07/21/23 09:01	07/21/23 18:34	1
Oil Range Organics (Over C28-C36)	242		49.9		mg/Kg		07/21/23 09:01	07/21/23 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	07/21/23 09:01	07/21/23 18:34	1
o-Terphenyl	125		70 - 130	07/21/23 09:01	07/21/23 18:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.3		4.99		mg/Kg			07/20/23 20:25	1

Client Sample ID: HA-10

Lab Sample ID: 880-31006-34
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1R

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		07/20/23 10:15	07/21/23 02:28	1
Toluene	0.00238		0.00202		mg/Kg		07/20/23 10:15	07/21/23 02:28	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 10:15	07/21/23 02:28	1
m-Xylene & p-Xylene	0.00715		0.00404		mg/Kg		07/20/23 10:15	07/21/23 02:28	1
o-Xylene	0.00270		0.00202		mg/Kg		07/20/23 10:15	07/21/23 02:28	1
Xylenes, Total	0.00985		0.00404		mg/Kg		07/20/23 10:15	07/21/23 02:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	07/20/23 10:15	07/21/23 02:28	1
1,4-Difluorobenzene (Surr)	98		70 - 130	07/20/23 10:15	07/21/23 02:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0122		0.00404		mg/Kg			07/21/23 10:08	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-10

Lab Sample ID: 880-31006-34
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1R

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**596**		49.9		mg/Kg			07/21/23 20:19	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		07/21/23 09:01	07/21/23 18:56	1
Diesel Range Organics (Over C10-C28)	**596**		49.9		mg/Kg		07/21/23 09:01	07/21/23 18:56	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*07/21/23 09:01*	*07/21/23 18:56*	*1*
o-Terphenyl	*127*		*70 - 130*	*07/21/23 09:01*	*07/21/23 18:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.7**		4.98		mg/Kg			07/20/23 20:30	1

Client Sample ID: HA-11

Lab Sample ID: 880-31006-35
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.13**		0.100		mg/Kg		07/20/23 10:15	07/21/23 03:09	50
Toluene	**17.2**		0.100		mg/Kg		07/20/23 10:15	07/21/23 03:09	50
Ethylbenzene	**8.40**		0.100		mg/Kg		07/20/23 10:15	07/21/23 03:09	50
m-Xylene & p-Xylene	**38.8**		0.201		mg/Kg		07/20/23 10:15	07/21/23 03:09	50
o-Xylene	**13.1**		0.100		mg/Kg		07/20/23 10:15	07/21/23 03:09	50
Xylenes, Total	**51.9**		0.201		mg/Kg		07/20/23 10:15	07/21/23 03:09	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*261*	*S1+*	*70 - 130*	*07/20/23 10:15*	*07/21/23 03:09*	*50*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*07/20/23 10:15*	*07/21/23 03:09*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**78.6**		0.201		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21700**		249		mg/Kg			07/21/23 20:19	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	**2580**	***1**	249		mg/Kg		07/21/23 09:01	07/21/23 19:18	5
Diesel Range Organics (Over C10-C28)	**18400**		249		mg/Kg		07/21/23 09:01	07/21/23 19:18	5
Oll Range Organics (Over C28-C36)	**723**		249		mg/Kg		07/21/23 09:01	07/21/23 19:18	5

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-11

Lab Sample ID: 880-31006-35
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	337	S1+	70 - 130	07/21/23 09:01	07/21/23 19:18	5
o-Terphenyl	347	S1+	70 - 130	07/21/23 09:01	07/21/23 19:18	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		4.96		mg/Kg			07/20/23 20:34	1

Client Sample ID: HA-11

Lab Sample ID: 880-31006-36
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.846		0.101		mg/Kg		07/20/23 10:15	07/21/23 03:29	50
Toluene	36.8		1.01		mg/Kg		07/20/23 10:15	07/21/23 16:49	500
Ethylbenzene	16.2		0.101		mg/Kg		07/20/23 10:15	07/21/23 03:29	50
m-Xylene & p-Xylene	112		2.02		mg/Kg		07/20/23 10:15	07/21/23 16:49	500
o-Xylene	33.7		1.01		mg/Kg		07/20/23 10:15	07/21/23 16:49	500
Xylenes, Total	146		2.02		mg/Kg		07/20/23 10:15	07/21/23 16:49	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	187	S1+	70 - 130	07/20/23 10:15	07/21/23 03:29	50
1,4-Difluorobenzene (Surr)	90		70 - 130	07/20/23 10:15	07/21/23 03:29	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	200		2.02		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19700		250		mg/Kg			07/21/23 20:19	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	3090	*1	250		mg/Kg		07/21/23 09:01	07/21/23 19:40	5
Diesel Range Organics (Over C10-C28)	15900		250		mg/Kg		07/21/23 09:01	07/21/23 19:40	5
Oil Range Organics (Over C28-C36)	685		250		mg/Kg		07/21/23 09:01	07/21/23 19:40	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	307	S1+	70 - 130	07/21/23 09:01	07/21/23 19:40	5
o-Terphenyl	299	S1+	70 - 130	07/21/23 09:01	07/21/23 19:40	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		5.02		mg/Kg			07/20/23 20:39	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-11

Lab Sample ID: 880-31006-37
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 1.5-2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00249		0.00198		mg/Kg		07/20/23 10:15	07/21/23 04:52	1
Toluene	0.0156		0.00198		mg/Kg		07/20/23 10:15	07/21/23 04:52	1
Ethylbenzene	0.00693		0.00198		mg/Kg		07/20/23 10:15	07/21/23 04:52	1
m-Xylene & p-Xylene	0.0316		0.00396		mg/Kg		07/20/23 10:15	07/21/23 04:52	1
o-Xylene	0.0103		0.00198		mg/Kg		07/20/23 10:15	07/21/23 04:52	1
Xylenes, Total	0.0419		0.00396		mg/Kg		07/20/23 10:15	07/21/23 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*07/20/23 10:15*	*07/21/23 04:52*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*07/20/23 10:15*	*07/21/23 04:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0669		0.00396		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	323		49.9		mg/Kg			07/22/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/21/23 09:01	07/21/23 20:02	1
Diesel Range Organics (Over C10-C28)	323		49.9		mg/Kg		07/21/23 09:01	07/21/23 20:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/21/23 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*07/21/23 09:01*	*07/21/23 20:02*	*1*
o-Terphenyl	*132*	*S1+*	*70 - 130*	*07/21/23 09:01*	*07/21/23 20:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.6		4.97		mg/Kg			07/20/23 20:45	1

Client Sample ID: P-1

Lab Sample ID: 880-31006-40
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/20/23 10:15	07/21/23 05:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:12	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/20/23 10:15	07/21/23 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/20/23 10:15*	*07/21/23 05:12*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-1

Lab Sample ID: 880-31006-40
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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)	*70*		*70 - 130*	*07/20/23 10:15*	*07/21/23 05:12*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**109**		50.2		mg/Kg			07/22/23 08:27	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	<50.2	U	50.2		mg/Kg		07/20/23 11:44	07/21/23 20:28	1
Diesel Range Organics (Over C10-C28)	**109**		50.2		mg/Kg		07/20/23 11:44	07/21/23 20:28	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		07/20/23 11:44	07/21/23 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*07/20/23 11:44*	*07/21/23 20:28*	*1*
o-Terphenyl	*115*		*70 - 130*	*07/20/23 11:44*	*07/21/23 20:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.1**		5.00		mg/Kg			07/20/23 21:00	1

Client Sample ID: P-2

Lab Sample ID: 880-31006-41
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:15	07/21/23 05:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 05:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:15	07/21/23 05:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*07/20/23 10:15*	*07/21/23 05:32*	*1*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 05:32*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**386**		50.0		mg/Kg			07/22/23 08:26	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-2

Lab Sample ID: 880-31006-41
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		07/21/23 09:01	07/22/23 07:16	1
Diesel Range Organics (Over C10-C28)	**386**		50.0		mg/Kg		07/21/23 09:01	07/22/23 07:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/22/23 07:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*07/21/23 09:01*	*07/22/23 07:16*	*1*
o-Terphenyl	*120*		*70 - 130*	*07/21/23 09:01*	*07/22/23 07:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**47.5**		4.99		mg/Kg			07/20/23 21:05	1

Client Sample ID: P-3

Lab Sample ID: 880-31006-42
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 05:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 05:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 05:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 05:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 05:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 05:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 10:15*	*07/21/23 05:53*	*1*
1,4-Difluorobenzene (Surr)	*50*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 05:53*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**197**		49.9		mg/Kg			07/22/23 08:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		07/21/23 09:01	07/22/23 08:00	1
Diesel Range Organics (Over C10-C28)	**197**		49.9		mg/Kg		07/21/23 09:01	07/22/23 08:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/21/23 09:01	07/22/23 08:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*07/21/23 09:01*	*07/22/23 08:00*	*1*
o-Terphenyl	*118*		*70 - 130*	*07/21/23 09:01*	*07/22/23 08:00*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-3

Lab Sample ID: 880-31006-42
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.4		5.01		mg/Kg			07/20/23 21:19	1

Client Sample ID: P-4

Lab Sample ID: 880-31006-43
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 06:13	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 06:13	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 06:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 06:13	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 10:15	07/21/23 06:13	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 10:15	07/21/23 06:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 10:15*	*07/21/23 06:13*	*1*
1,4-Difluorobenzene (Surr)	*59*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 06:13*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			07/21/23 18:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		07/20/23 17:06	07/21/23 12:46	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		07/20/23 17:06	07/21/23 12:46	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		07/20/23 17:06	07/21/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*07/20/23 17:06*	*07/21/23 12:46*	*1*
o-Terphenyl	*108*		*70 - 130*	*07/20/23 17:06*	*07/21/23 12:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.8		5.03		mg/Kg			07/20/23 21:24	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-5

Lab Sample ID: 880-31006-44
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 06:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 06:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 06:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 10:15	07/21/23 06:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 06:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 10:15	07/21/23 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*07/20/23 10:15*	*07/21/23 06:34*	*1*
1,4-Difluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 06:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.7**		49.8		mg/Kg			07/21/23 18:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/20/23 17:06	07/21/23 13:56	1
Diesel Range Organics (Over C10-C28)	**53.7**		49.8		mg/Kg		07/20/23 17:06	07/21/23 13:56	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/20/23 17:06	07/21/23 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*07/20/23 17:06*	*07/21/23 13:56*	*1*
o-Terphenyl	*105*		*70 - 130*	*07/20/23 17:06*	*07/21/23 13:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.2**		5.00		mg/Kg			07/20/23 21:29	1

Client Sample ID: P-6

Lab Sample ID: 880-31006-45
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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		07/20/23 10:15	07/21/23 06:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:15	07/21/23 06:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:15	07/21/23 06:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 10:15	07/21/23 06:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 10:15	07/21/23 06:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 10:15	07/21/23 06:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 10:15*	*07/21/23 06:54*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-6

Lab Sample ID: 880-31006-45
Matrix: Solid

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
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)	*75*		*70 - 130*	*07/20/23 10:15*	*07/21/23 06:54*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			07/21/23 18:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		07/20/23 17:06	07/21/23 14:18	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		07/20/23 17:06	07/21/23 14:18	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/20/23 17:06	07/21/23 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*07/20/23 17:06*	*07/21/23 14:18*	*1*
o-Terphenyl	*90*		*70 - 130*	*07/20/23 17:06*	*07/21/23 14:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.4**		5.01		mg/Kg			07/20/23 21:34	1

Client Sample ID: P-7

Lab Sample ID: 880-31006-46
Matrix: Solid

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 07:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 07:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 07:15	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/20/23 10:15	07/21/23 07:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 07:15	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/20/23 10:15	07/21/23 07:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*07/20/23 10:15*	*07/21/23 07:15*	*1*
1,4-Difluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*07/20/23 10:15*	*07/21/23 07:15*	*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			07/21/23 10:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			07/21/23 18:01	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 0-0.5

Lab Sample ID: 880-31006-46
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		07/20/23 17:06	07/21/23 14:40	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		07/20/23 17:06	07/21/23 14:40	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/20/23 17:06	07/21/23 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*07/20/23 17:06*	*07/21/23 14:40*	*1*
o-Terphenyl	*99*		*70 - 130*	*07/20/23 17:06*	*07/21/23 14:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.5**		4.99		mg/Kg			07/20/23 21:39	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-31006-1	HA-1	91	101										
880-31006-1 MS	HA-1	102	99										
880-31006-1 MSD	HA-1	102	104										
880-31006-2	HA-1	92	112										
880-31006-3	HA-1	99	111										
880-31006-4	HA-2	103	111										
880-31006-5	HA-2	101	110										
880-31006-6	HA-2	97	107										
880-31006-8	HA-3	103	113										
880-31006-9	HA-3	104	110										
880-31006-10	HA-3	102	111										
880-31006-12	HA-4	101	111										
880-31006-13	HA-4	96	97										
880-31006-14	HA-4	101	112										
880-31006-16	HA-5	105	111										
880-31006-17	HA-5	106	112										
880-31006-18	HA-5	95	109										
880-31006-20	HA-6	97	108										
880-31006-21	HA-6	92	105										
880-31006-22	HA-6	100	113										
880-31006-23	HA-7	107	113										
880-31006-24	HA-7	95	106										
880-31006-25	HA-7	80	83										
880-31006-25 MS	HA-7	120	106										
880-31006-25 MSD	HA-7	128	106										
880-31006-28	HA-8	111	102										
880-31006-29	HA-8	106	67 S1-										
880-31006-30	HA-8	109	97										
880-31006-31	HA-9	360 S1+	77										
880-31006-32	HA-9	103	93										
880-31006-33	HA-10	428 S1+	90										
880-31006-34	HA-10	102	98										
880-31006-35	HA-11	261 S1+	118										
880-31006-36	HA-11	187 S1+	90										
880-31006-37	HA-11	98	108										
880-31006-40	P-1	96	70										
880-31006-41	P-2	100	66 S1-										
880-31006-42	P-3	91	50 S1-										
880-31006-43	P-4	91	59 S1-										
880-31006-44	P-5	90	60 S1-										
880-31006-45	P-6	91	75										
880-31006-46	P-7	90	66 S1-										
LCS 880-58105/1-A	Lab Control Sample	123	99										
LCS 880-58106/1-A	Lab Control Sample	120	104										
LCS 880-58150/1-A	Lab Control Sample	126	93										
LCSD 880-58105/2-A	Lab Control Sample Dup	99	104										
LCSD 880-58106/2-A	Lab Control Sample Dup	128	101										
LCSD 880-58150/2-A	Lab Control Sample Dup	126	96										
MB 880-57844/5-A	Method Blank	83	95										

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
MB 880-58105/5-A	Method Blank	81	93
MB 880-58106/5-A	Method Blank	76	80
MB 880-58142/5-A	Method Blank	69 S1-	91
MB 880-58150/5-A	Method Blank	76	88

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
880-31006-1	HA-1	123	103
880-31006-2	HA-1	132 S1+	117
880-31006-3	HA-1	133 S1+	112
880-31006-4	HA-2	110	93
880-31006-5	HA-2	124	146 S1+
880-31006-5 MS	HA-2	120	145 S1+
880-31006-5 MSD	HA-2	133 S1+	156 S1+
880-31006-6	HA-2	120	136 S1+
880-31006-8	HA-3	114	124
880-31006-9	HA-3	118	130
880-31006-10	HA-3	114	127
880-31006-12	HA-4	103	116
880-31006-13	HA-4	101	119
880-31006-14	HA-4	119	132 S1+
880-31006-16	HA-5	106	122
880-31006-17	HA-5	111	127
880-31006-18	HA-5	145 S1+	163 S1+
880-31006-18 MS	HA-5	126	135 S1+
880-31006-18 MSD	HA-5	135 S1+	150 S1+
880-31006-20	HA-6	148 S1+	177 S1+
880-31006-21	HA-6	128	147 S1+
880-31006-22	HA-6	131 S1+	156 S1+
880-31006-23	HA-7	110	138 S1+
880-31006-24	HA-7	116	136 S1+
880-31006-25	HA-7	104	130
880-31006-28	HA-8	113	128
880-31006-29	HA-8	121	141 S1+
880-31006-30	HA-8	121	149 S1+
880-31006-31	HA-9	457 S1+	477 S1+
880-31006-32	HA-9	127	149 S1+
880-31006-33	HA-10	137 S1+	125
880-31006-34	HA-10	105	127
880-31006-35	HA-11	337 S1+	347 S1+
880-31006-36	HA-11	307 S1+	299 S1+
880-31006-37	HA-11	109	132 S1+
880-31006-40	P-1	105	115

Surrogate Summary

Client: Earth Systems Response and Restoration
Job ID: 880-31006-1
Project/Site: CTB 127-Dauntless
SDG: Lea County

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-31006-41	P-2	103	120										
880-31006-42	P-3	109	118										
880-31006-43	P-4	130	108										
880-31006-43 MS	P-4	104	78										
880-31006-43 MSD	P-4	108	81										
880-31006-44	P-5	124	105										
880-31006-45	P-6	110	90										
880-31006-46	P-7	127	99										
890-4960-A-1-F MS	Matrix Spike	143 S1+	110										
890-4960-A-1-G MSD	Matrix Spike Duplicate	145 S1+	111										
LCS 880-58126/2-A	Lab Control Sample	97	89										
LCS 880-58128/2-A	Lab Control Sample	84	109										
LCS 880-58179/2-A	Lab Control Sample	93	86										
LCS 880-58210/2-A	Lab Control Sample	92	120										
LCSD 880-58126/3-A	Lab Control Sample Dup	107	94										
LCSD 880-58128/3-A	Lab Control Sample Dup	86	114										
LCSD 880-58179/3-A	Lab Control Sample Dup	94	85										
LCSD 880-58210/3-A	Lab Control Sample Dup	85	110										
MB 880-58126/1-A	Method Blank	151 S1+	132 S1+										
MB 880-58128/1-A	Method Blank	135 S1+	161 S1+										
MB 880-58179/1-A	Method Blank	156 S1+	137 S1+										
MB 880-58210/1-A	Method Blank	157 S1+	195 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-57844/5-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 57844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/17/23 13:55	07/20/23 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/17/23 13:55	07/20/23 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/17/23 13:55	07/20/23 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/17/23 13:55	07/20/23 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*07/17/23 13:55*	*07/20/23 11:20*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*07/17/23 13:55*	*07/20/23 11:20*	*1*

Lab Sample ID: MB 880-58105/5-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 22:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 22:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 22:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/20/23 22:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:12	07/20/23 22:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:12	07/20/23 22:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:15*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/20/23 10:12*	*07/20/23 22:15*	*1*

Lab Sample ID: LCS 880-58105/1-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09424		mg/Kg		94	70 - 130		
Toluene			0.100	0.1144		mg/Kg		114	70 - 130		
Ethylbenzene			0.100	0.1219		mg/Kg		122	70 - 130		
m-Xylene & p-Xylene			0.200	0.2592		mg/Kg		130	70 - 130		
o-Xylene			0.100	0.1266		mg/Kg		127	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-58105/2-A
Matrix: Solid
Analysis Batch: 58089

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09821		mg/Kg		98	70 - 130	4	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-58105/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58089 — **Prep Batch: 58105**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1038		mg/Kg		104	70 - 130	10	35
Ethylbenzene			0.100	0.09576		mg/Kg		96	70 - 130	24	35
m-Xylene & p-Xylene			0.200	0.1877		mg/Kg		94	70 - 130	32	35
o-Xylene			0.100	0.09454		mg/Kg		95	70 - 130	29	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-31006-1 MS — **Client Sample ID: HA-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58089 — **Prep Batch: 58105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0994	0.07853		mg/Kg		79	70 - 130
Toluene	<0.00198	U	0.0994	0.08626		mg/Kg		87	70 - 130
Ethylbenzene	<0.00198	U	0.0994	0.08062		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.199	0.1561		mg/Kg		79	70 - 130
o-Xylene	<0.00198	U	0.0994	0.07863		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-31006-1 MSD — **Client Sample ID: HA-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58089 — **Prep Batch: 58105**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0996	0.07996		mg/Kg		80	70 - 130	2	35
Toluene	<0.00198	U	0.0996	0.08456		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00198	U	0.0996	0.07887		mg/Kg		79	70 - 130	2	35
m-Xylene & p-Xylene	<0.00397	U	0.199	0.1517		mg/Kg		76	70 - 130	3	35
o-Xylene	<0.00198	U	0.0996	0.07748		mg/Kg		78	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-58106/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58088 — **Prep Batch: 58106**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 00:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 00:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 00:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:15	07/21/23 00:04	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: MB 880-58106/5-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:15	07/21/23 00:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:15	07/21/23 00:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:04*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*07/20/23 10:15*	*07/21/23 00:04*	*1*

Lab Sample ID: LCS 880-58106/1-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1125		mg/Kg		112	70 - 130
Toluene	0.100	0.1020		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1232		mg/Kg		123	70 - 130
m-Xylene & p-Xylene	0.200	0.2581		mg/Kg		129	70 - 130
o-Xylene	0.100	0.1272		mg/Kg		127	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-58106/2-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58106

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1047		mg/Kg		105	70 - 130	7	35
Toluene	0.100	0.09674		mg/Kg		97	70 - 130	5	35
Ethylbenzene	0.100	0.1172		mg/Kg		117	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2452		mg/Kg		123	70 - 130	5	35
o-Xylene	0.100	0.1212		mg/Kg		121	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-31006-25 MS
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: HA-7
Prep Type: Total/NA
Prep Batch: 58106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.1006		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.0996	0.08855		mg/Kg		89	70 - 130
Ethylbenzene	<0.00202	U	0.0996	0.1046		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.199	0.2157		mg/Kg		108	70 - 130
o-Xylene	<0.00202	U	0.0996	0.1065		mg/Kg		106	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: 880-31006-25 MS
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: HA-7
Prep Type: Total/NA
Prep Batch: 58106

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 880-31006-25 MSD
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: HA-7
Prep Type: Total/NA
Prep Batch: 58106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0990	0.1157		mg/Kg		117	70 - 130	14	35
Toluene	<0.00202	U	0.0990	0.1039		mg/Kg		105	70 - 130	16	35
Ethylbenzene	<0.00202	U	0.0990	0.1255		mg/Kg		127	70 - 130	18	35
m-Xylene & p-Xylene	<0.00403	U F1	0.198	0.2608	F1	mg/Kg		131	70 - 130	19	35
o-Xylene	<0.00202	U	0.0990	0.1286		mg/Kg		129	70 - 130	19	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: MB 880-58142/5-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:00	07/20/23 12:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:00	07/20/23 12:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:00	07/20/23 12:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 10:00	07/20/23 12:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 10:00	07/20/23 12:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 10:00	07/20/23 12:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*07/20/23 10:00*	*07/20/23 12:50*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 10:00*	*07/20/23 12:50*	*1*

Lab Sample ID: MB 880-58150/5-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 13:48	07/21/23 10:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 13:48	07/21/23 10:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 13:48	07/21/23 10:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 13:48	07/21/23 10:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 13:48	07/21/23 10:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 13:48	07/21/23 10:38	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: MB 880-58150/5-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58150

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	07/20/23 13:48	07/21/23 10:38	1
1,4-Difluorobenzene (Surr)	88		70 - 130	07/20/23 13:48	07/21/23 10:38	1

Lab Sample ID: LCS 880-58150/1-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58150

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1135		mg/Kg		114	70 - 130		
Toluene			0.100	0.1072		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.1290		mg/Kg		129	70 - 130		
m-Xylene & p-Xylene			0.200	0.2381		mg/Kg		119	70 - 130		
o-Xylene			0.100	0.1266		mg/Kg		127	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: LCSD 880-58150/2-A
Matrix: Solid
Analysis Batch: 58088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58150

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	7	35
Toluene			0.100	0.09939		mg/Kg		99	70 - 130	8	35
Ethylbenzene			0.100	0.1182		mg/Kg		118	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2454		mg/Kg		123	70 - 130	3	35
o-Xylene			0.100	0.1233		mg/Kg		123	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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

Lab Sample ID: MB 880-58126/1-A
Matrix: Solid
Analysis Batch: 58074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58126

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		07/20/23 10:00	07/20/23 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/20/23 10:00	07/20/23 11:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/20/23 10:00	07/20/23 11:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	151	S1+	70 - 130	07/20/23 10:00	07/20/23 11:04	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: MB 880-58126/1-A
Matrix: Solid
Analysis Batch: 58074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58126

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	132	S1+	70 - 130	07/20/23 10:00	07/20/23 11:04	1

Lab Sample ID: LCS 880-58126/2-A
Matrix: Solid
Analysis Batch: 58074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58126

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	938.7		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	836.6		mg/Kg		84	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-58126/3-A
Matrix: Solid
Analysis Batch: 58074

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58126

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	941.5		mg/Kg		94	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	896.2		mg/Kg		90	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-4960-A-1-F MS
Matrix: Solid
Analysis Batch: 58074

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58126

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	998	880.1		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	63.6		998	1191		mg/Kg		113	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	143	S1+	70 - 130
o-Terphenyl	110		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: 890-4960-A-1-G MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58074 — **Prep Batch: 58126**

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	<50.2	U	998	884.8		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	63.6		998	1197		mg/Kg		114	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*145*	*S1+*	*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: MB 880-58128/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58077 — **Prep Batch: 58128**

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		07/20/23 11:00	07/20/23 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/20/23 11:00	07/20/23 11:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/20/23 11:00	07/20/23 11:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*07/20/23 11:00*	*07/20/23 11:04*	*1*
o-Terphenyl	*161*	*S1+*	*70 - 130*	*07/20/23 11:00*	*07/20/23 11:04*	*1*

Lab Sample ID: LCS 880-58128/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58077 — **Prep Batch: 58128**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1130		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	956.6		mg/Kg		96	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: LCSD 880-58128/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 58077 — **Prep Batch: 58128**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1159		mg/Kg		116	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	989.0		mg/Kg		99	70 - 130	3	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: LCSD 880-58128/3-A
Matrix: Solid
Analysis Batch: 58077

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58128

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: 880-31006-18 MS
Matrix: Solid
Analysis Batch: 58077

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 58128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	998	1005		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	71.9		998	1046		mg/Kg		98	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	135	S1+	70 - 130

Lab Sample ID: 880-31006-18 MSD
Matrix: Solid
Analysis Batch: 58077

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 58128

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	998	1049		mg/Kg		103	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	71.9		998	1159		mg/Kg		109	70 - 130	10	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	150	S1+	70 - 130

Lab Sample ID: MB 880-58179/1-A
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58179

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		07/20/23 17:06	07/21/23 09:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/20/23 17:06	07/21/23 09:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/20/23 17:06	07/21/23 09:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130	07/20/23 17:06	07/21/23 09:35	1
o-Terphenyl	137	S1+	70 - 130	07/20/23 17:06	07/21/23 09:35	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: LCS 880-58179/2-A
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58179

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	891.9		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	807.3		mg/Kg		81	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Lab Sample ID: LCSD 880-58179/3-A
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58179

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	845.5		mg/Kg		85	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	784.4		mg/Kg		78	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 880-31006-43 MS
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: P-4
Prep Type: Total/NA
Prep Batch: 58179

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	1010	1090		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1017		mg/Kg		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*78*		*70 - 130*

Lab Sample ID: 880-31006-43 MSD
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: P-4
Prep Type: Total/NA
Prep Batch: 58179

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	1010	1087		mg/Kg		108	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.3	U	1010	1061		mg/Kg		101	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: 880-31006-43 MSD
Matrix: Solid
Analysis Batch: 58184

Client Sample ID: P-4
Prep Type: Total/NA
Prep Batch: 58179

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	81		70 - 130

Lab Sample ID: MB 880-58210/1-A
Matrix: Solid
Analysis Batch: 58182

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58210

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		07/21/23 09:01	07/21/23 09:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 09:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/21/23 09:01	07/21/23 09:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	157	S1+	70 - 130	07/21/23 09:01	07/21/23 09:35	1
o-Terphenyl	195	S1+	70 - 130	07/21/23 09:01	07/21/23 09:35	1

Lab Sample ID: LCS 880-58210/2-A
Matrix: Solid
Analysis Batch: 58182

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58210

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	862.2		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: LCSD 880-58210/3-A
Matrix: Solid
Analysis Batch: 58182

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58210

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	699.9	*1	mg/Kg		70	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	977.3		mg/Kg		98	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	110		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Lab Sample ID: 880-31006-5 MS
Matrix: Solid
Analysis Batch: 58182

Client Sample ID: HA-2
Prep Type: Total/NA
Prep Batch: 58210

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 F2	996	870.1		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1051		mg/Kg		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*145*	*S1+*	*70 - 130*

Lab Sample ID: 880-31006-5 MSD
Matrix: Solid
Analysis Batch: 58182

Client Sample ID: HA-2
Prep Type: Total/NA
Prep Batch: 58210

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 F2	996	1269	F2	mg/Kg		124	70 - 130	37	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1145		mg/Kg		112	70 - 130	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*133*	*S1+*	*70 - 130*
o-Terphenyl	*156*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-58140/1-A
Matrix: Solid
Analysis Batch: 58156

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			07/20/23 16:26	1

Lab Sample ID: LCS 880-58140/2-A
Matrix: Solid
Analysis Batch: 58156

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.9		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-58140/3-A
Matrix: Solid
Analysis Batch: 58156

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	244.3		mg/Kg		98	90 - 110	0	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-31006-1 MS
Matrix: Solid
Analysis Batch: 58156

Client Sample ID: HA-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	58.4		250	292.7		mg/Kg		94	90 - 110

Lab Sample ID: 880-31006-1 MSD
Matrix: Solid
Analysis Batch: 58156

Client Sample ID: HA-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	58.4		250	293.3		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-31006-13 MS
Matrix: Solid
Analysis Batch: 58156

Client Sample ID: HA-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	45.0		252	291.0		mg/Kg		98	90 - 110

Lab Sample ID: 880-31006-13 MSD
Matrix: Solid
Analysis Batch: 58156

Client Sample ID: HA-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	45.0		252	291.4		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-58141/1-A
Matrix: Solid
Analysis Batch: 58158

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			07/20/23 19:20	1

Lab Sample ID: LCS 880-58141/2-A
Matrix: Solid
Analysis Batch: 58158

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 880-58141/3-A
Matrix: Solid
Analysis Batch: 58158

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	245.9		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-31006-25 MS
Matrix: Solid
Analysis Batch: 58158

Client Sample ID: HA-7
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	85.3		251	333.8		mg/Kg		99	90 - 110

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-31006-25 MSD
Matrix: Solid
Analysis Batch: 58158

Client Sample ID: HA-7
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	85.3		251	334.2		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-31006-37 MS
Matrix: Solid
Analysis Batch: 58158

Client Sample ID: HA-11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	74.6		249	325.2		mg/Kg		101	90 - 110

Lab Sample ID: 880-31006-37 MSD
Matrix: Solid
Analysis Batch: 58158

Client Sample ID: HA-11
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	74.6		249	325.8		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC VOA

Prep Batch: 57844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-57844/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 58088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-25	HA-7	Total/NA	Solid	8021B	58106
880-31006-28	HA-8	Total/NA	Solid	8021B	58106
880-31006-29	HA-8	Total/NA	Solid	8021B	58106
880-31006-30	HA-8	Total/NA	Solid	8021B	58106
880-31006-31	HA-9	Total/NA	Solid	8021B	58106
880-31006-32	HA-9	Total/NA	Solid	8021B	58106
880-31006-33	HA-10	Total/NA	Solid	8021B	58106
880-31006-33	HA-10	Total/NA	Solid	8021B	58106
880-31006-34	HA-10	Total/NA	Solid	8021B	58106
880-31006-35	HA-11	Total/NA	Solid	8021B	58106
880-31006-36	HA-11	Total/NA	Solid	8021B	58106
880-31006-36	HA-11	Total/NA	Solid	8021B	58106
880-31006-37	HA-11	Total/NA	Solid	8021B	58106
880-31006-40	P-1	Total/NA	Solid	8021B	58106
880-31006-41	P-2	Total/NA	Solid	8021B	58106
880-31006-42	P-3	Total/NA	Solid	8021B	58106
880-31006-43	P-4	Total/NA	Solid	8021B	58106
880-31006-44	P-5	Total/NA	Solid	8021B	58106
880-31006-45	P-6	Total/NA	Solid	8021B	58106
880-31006-46	P-7	Total/NA	Solid	8021B	58106
MB 880-58106/5-A	Method Blank	Total/NA	Solid	8021B	58106
MB 880-58142/5-A	Method Blank	Total/NA	Solid	8021B	58142
MB 880-58150/5-A	Method Blank	Total/NA	Solid	8021B	58150
LCS 880-58106/1-A	Lab Control Sample	Total/NA	Solid	8021B	58106
LCS 880-58150/1-A	Lab Control Sample	Total/NA	Solid	8021B	58150
LCSD 880-58106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58106
LCSD 880-58150/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58150
880-31006-25 MS	HA-7	Total/NA	Solid	8021B	58106
880-31006-25 MSD	HA-7	Total/NA	Solid	8021B	58106

Analysis Batch: 58089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	8021B	58105
880-31006-2	HA-1	Total/NA	Solid	8021B	58105
880-31006-3	HA-1	Total/NA	Solid	8021B	58105
880-31006-4	HA-2	Total/NA	Solid	8021B	58105
880-31006-5	HA-2	Total/NA	Solid	8021B	58105
880-31006-6	HA-2	Total/NA	Solid	8021B	58105
880-31006-8	HA-3	Total/NA	Solid	8021B	58105
880-31006-9	HA-3	Total/NA	Solid	8021B	58105
880-31006-10	HA-3	Total/NA	Solid	8021B	58105
880-31006-12	HA-4	Total/NA	Solid	8021B	58105
880-31006-13	HA-4	Total/NA	Solid	8021B	58105
880-31006-14	HA-4	Total/NA	Solid	8021B	58105
880-31006-16	HA-5	Total/NA	Solid	8021B	58105
880-31006-17	HA-5	Total/NA	Solid	8021B	58105
880-31006-18	HA-5	Total/NA	Solid	8021B	58105

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC VOA (Continued)

Analysis Batch: 58089 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-20	HA-6	Total/NA	Solid	8021B	58105
880-31006-21	HA-6	Total/NA	Solid	8021B	58105
880-31006-22	HA-6	Total/NA	Solid	8021B	58105
880-31006-23	HA-7	Total/NA	Solid	8021B	58105
880-31006-24	HA-7	Total/NA	Solid	8021B	58105
MB 880-57844/5-A	Method Blank	Total/NA	Solid	8021B	57844
MB 880-58105/5-A	Method Blank	Total/NA	Solid	8021B	58105
LCS 880-58105/1-A	Lab Control Sample	Total/NA	Solid	8021B	58105
LCSD 880-58105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58105
880-31006-1 MS	HA-1	Total/NA	Solid	8021B	58105
880-31006-1 MSD	HA-1	Total/NA	Solid	8021B	58105

Prep Batch: 58105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	5035	
880-31006-2	HA-1	Total/NA	Solid	5035	
880-31006-3	HA-1	Total/NA	Solid	5035	
880-31006-4	HA-2	Total/NA	Solid	5035	
880-31006-5	HA-2	Total/NA	Solid	5035	
880-31006-6	HA-2	Total/NA	Solid	5035	
880-31006-8	HA-3	Total/NA	Solid	5035	
880-31006-9	HA-3	Total/NA	Solid	5035	
880-31006-10	HA-3	Total/NA	Solid	5035	
880-31006-12	HA-4	Total/NA	Solid	5035	
880-31006-13	HA-4	Total/NA	Solid	5035	
880-31006-14	HA-4	Total/NA	Solid	5035	
880-31006-16	HA-5	Total/NA	Solid	5035	
880-31006-17	HA-5	Total/NA	Solid	5035	
880-31006-18	HA-5	Total/NA	Solid	5035	
880-31006-20	HA-6	Total/NA	Solid	5035	
880-31006-21	HA-6	Total/NA	Solid	5035	
880-31006-22	HA-6	Total/NA	Solid	5035	
880-31006-23	HA-7	Total/NA	Solid	5035	
880-31006-24	HA-7	Total/NA	Solid	5035	
MB 880-58105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31006-1 MS	HA-1	Total/NA	Solid	5035	
880-31006-1 MSD	HA-1	Total/NA	Solid	5035	

Prep Batch: 58106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-25	HA-7	Total/NA	Solid	5035	
880-31006-28	HA-8	Total/NA	Solid	5035	
880-31006-29	HA-8	Total/NA	Solid	5035	
880-31006-30	HA-8	Total/NA	Solid	5035	
880-31006-31	HA-9	Total/NA	Solid	5035	
880-31006-32	HA-9	Total/NA	Solid	5035	
880-31006-33	HA-10	Total/NA	Solid	5035	
880-31006-34	HA-10	Total/NA	Solid	5035	
880-31006-35	HA-11	Total/NA	Solid	5035	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC VOA (Continued)

Prep Batch: 58106 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-36	HA-11	Total/NA	Solid	5035	
880-31006-37	HA-11	Total/NA	Solid	5035	
880-31006-40	P-1	Total/NA	Solid	5035	
880-31006-41	P-2	Total/NA	Solid	5035	
880-31006-42	P-3	Total/NA	Solid	5035	
880-31006-43	P-4	Total/NA	Solid	5035	
880-31006-44	P-5	Total/NA	Solid	5035	
880-31006-45	P-6	Total/NA	Solid	5035	
880-31006-46	P-7	Total/NA	Solid	5035	
MB 880-58106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31006-25 MS	HA-7	Total/NA	Solid	5035	
880-31006-25 MSD	HA-7	Total/NA	Solid	5035	

Prep Batch: 58142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58142/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 58150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58150/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58150/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58150/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 58194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	Total BTEX	
880-31006-2	HA-1	Total/NA	Solid	Total BTEX	
880-31006-3	HA-1	Total/NA	Solid	Total BTEX	
880-31006-4	HA-2	Total/NA	Solid	Total BTEX	
880-31006-5	HA-2	Total/NA	Solid	Total BTEX	
880-31006-6	HA-2	Total/NA	Solid	Total BTEX	
880-31006-8	HA-3	Total/NA	Solid	Total BTEX	
880-31006-9	HA-3	Total/NA	Solid	Total BTEX	
880-31006-10	HA-3	Total/NA	Solid	Total BTEX	
880-31006-12	HA-4	Total/NA	Solid	Total BTEX	
880-31006-13	HA-4	Total/NA	Solid	Total BTEX	
880-31006-14	HA-4	Total/NA	Solid	Total BTEX	
880-31006-16	HA-5	Total/NA	Solid	Total BTEX	
880-31006-17	HA-5	Total/NA	Solid	Total BTEX	
880-31006-18	HA-5	Total/NA	Solid	Total BTEX	
880-31006-20	HA-6	Total/NA	Solid	Total BTEX	
880-31006-21	HA-6	Total/NA	Solid	Total BTEX	
880-31006-22	HA-6	Total/NA	Solid	Total BTEX	
880-31006-23	HA-7	Total/NA	Solid	Total BTEX	
880-31006-24	HA-7	Total/NA	Solid	Total BTEX	
880-31006-25	HA-7	Total/NA	Solid	Total BTEX	
880-31006-28	HA-8	Total/NA	Solid	Total BTEX	
880-31006-29	HA-8	Total/NA	Solid	Total BTEX	
880-31006-30	HA-8	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC VOA (Continued)

Analysis Batch: 58194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-31	HA-9	Total/NA	Solid	Total BTEX	
880-31006-32	HA-9	Total/NA	Solid	Total BTEX	
880-31006-33	HA-10	Total/NA	Solid	Total BTEX	
880-31006-34	HA-10	Total/NA	Solid	Total BTEX	
880-31006-35	HA-11	Total/NA	Solid	Total BTEX	
880-31006-36	HA-11	Total/NA	Solid	Total BTEX	
880-31006-37	HA-11	Total/NA	Solid	Total BTEX	
880-31006-40	P-1	Total/NA	Solid	Total BTEX	
880-31006-41	P-2	Total/NA	Solid	Total BTEX	
880-31006-42	P-3	Total/NA	Solid	Total BTEX	
880-31006-43	P-4	Total/NA	Solid	Total BTEX	
880-31006-44	P-5	Total/NA	Solid	Total BTEX	
880-31006-45	P-6	Total/NA	Solid	Total BTEX	
880-31006-46	P-7	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 58074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	8015B NM	58126
880-31006-2	HA-1	Total/NA	Solid	8015B NM	58126
880-31006-3	HA-1	Total/NA	Solid	8015B NM	58126
880-31006-4	HA-2	Total/NA	Solid	8015B NM	58126
MB 880-58126/1-A	Method Blank	Total/NA	Solid	8015B NM	58126
LCS 880-58126/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58126
LCSD 880-58126/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58126
890-4960-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	58126
890-4960-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	58126

Analysis Batch: 58077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-18	HA-5	Total/NA	Solid	8015B NM	58128
880-31006-20	HA-6	Total/NA	Solid	8015B NM	58128
880-31006-21	HA-6	Total/NA	Solid	8015B NM	58128
880-31006-22	HA-6	Total/NA	Solid	8015B NM	58128
880-31006-23	HA-7	Total/NA	Solid	8015B NM	58128
880-31006-24	HA-7	Total/NA	Solid	8015B NM	58128
880-31006-25	HA-7	Total/NA	Solid	8015B NM	58128
880-31006-28	HA-8	Total/NA	Solid	8015B NM	58128
880-31006-29	HA-8	Total/NA	Solid	8015B NM	58128
880-31006-30	HA-8	Total/NA	Solid	8015B NM	58128
MB 880-58128/1-A	Method Blank	Total/NA	Solid	8015B NM	58128
LCS 880-58128/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58128
LCSD 880-58128/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58128
880-31006-18 MS	HA-5	Total/NA	Solid	8015B NM	58128
880-31006-18 MSD	HA-5	Total/NA	Solid	8015B NM	58128

Prep Batch: 58126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	8015NM Prep	
880-31006-2	HA-1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 58126 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-3	HA-1	Total/NA	Solid	8015NM Prep	
880-31006-4	HA-2	Total/NA	Solid	8015NM Prep	
MB 880-58126/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58126/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-58126/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4960-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4960-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 58128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-18	HA-5	Total/NA	Solid	8015NM Prep	
880-31006-20	HA-6	Total/NA	Solid	8015NM Prep	
880-31006-21	HA-6	Total/NA	Solid	8015NM Prep	
880-31006-22	HA-6	Total/NA	Solid	8015NM Prep	
880-31006-23	HA-7	Total/NA	Solid	8015NM Prep	
880-31006-24	HA-7	Total/NA	Solid	8015NM Prep	
880-31006-25	HA-7	Total/NA	Solid	8015NM Prep	
880-31006-28	HA-8	Total/NA	Solid	8015NM Prep	
880-31006-29	HA-8	Total/NA	Solid	8015NM Prep	
880-31006-30	HA-8	Total/NA	Solid	8015NM Prep	
880-31006-40	P-1	Total/NA	Solid	8015NM Prep	
MB 880-58128/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58128/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-58128/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31006-18 MS	HA-5	Total/NA	Solid	8015NM Prep	
880-31006-18 MSD	HA-5	Total/NA	Solid	8015NM Prep	

Prep Batch: 58179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-43	P-4	Total/NA	Solid	8015NM Prep	
880-31006-44	P-5	Total/NA	Solid	8015NM Prep	
880-31006-45	P-6	Total/NA	Solid	8015NM Prep	
880-31006-46	P-7	Total/NA	Solid	8015NM Prep	
MB 880-58179/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58179/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-58179/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31006-43 MS	P-4	Total/NA	Solid	8015NM Prep	
880-31006-43 MSD	P-4	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-5	HA-2	Total/NA	Solid	8015B NM	58210
880-31006-6	HA-2	Total/NA	Solid	8015B NM	58210
880-31006-8	HA-3	Total/NA	Solid	8015B NM	58210
880-31006-9	HA-3	Total/NA	Solid	8015B NM	58210
880-31006-10	HA-3	Total/NA	Solid	8015B NM	58210
880-31006-12	HA-4	Total/NA	Solid	8015B NM	58210
880-31006-13	HA-4	Total/NA	Solid	8015B NM	58210
880-31006-14	HA-4	Total/NA	Solid	8015B NM	58210
880-31006-16	HA-5	Total/NA	Solid	8015B NM	58210
880-31006-17	HA-5	Total/NA	Solid	8015B NM	58210

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC Semi VOA (Continued)

Analysis Batch: 58182 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-31	HA-9	Total/NA	Solid	8015B NM	58210
880-31006-32	HA-9	Total/NA	Solid	8015B NM	58210
880-31006-33	HA-10	Total/NA	Solid	8015B NM	58210
880-31006-34	HA-10	Total/NA	Solid	8015B NM	58210
880-31006-35	HA-11	Total/NA	Solid	8015B NM	58210
880-31006-36	HA-11	Total/NA	Solid	8015B NM	58210
880-31006-37	HA-11	Total/NA	Solid	8015B NM	58210
880-31006-40	P-1	Total/NA	Solid	8015B NM	58128
880-31006-41	P-2	Total/NA	Solid	8015B NM	58210
880-31006-42	P-3	Total/NA	Solid	8015B NM	58210
MB 880-58210/1-A	Method Blank	Total/NA	Solid	8015B NM	58210
LCS 880-58210/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58210
LCSD 880-58210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58210
880-31006-5 MS	HA-2	Total/NA	Solid	8015B NM	58210
880-31006-5 MSD	HA-2	Total/NA	Solid	8015B NM	58210

Analysis Batch: 58184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-43	P-4	Total/NA	Solid	8015B NM	58179
880-31006-44	P-5	Total/NA	Solid	8015B NM	58179
880-31006-45	P-6	Total/NA	Solid	8015B NM	58179
880-31006-46	P-7	Total/NA	Solid	8015B NM	58179
MB 880-58179/1-A	Method Blank	Total/NA	Solid	8015B NM	58179
LCS 880-58179/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58179
LCSD 880-58179/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58179
880-31006-43 MS	P-4	Total/NA	Solid	8015B NM	58179
880-31006-43 MSD	P-4	Total/NA	Solid	8015B NM	58179

Prep Batch: 58210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-5	HA-2	Total/NA	Solid	8015NM Prep	
880-31006-6	HA-2	Total/NA	Solid	8015NM Prep	
880-31006-8	HA-3	Total/NA	Solid	8015NM Prep	
880-31006-9	HA-3	Total/NA	Solid	8015NM Prep	
880-31006-10	HA-3	Total/NA	Solid	8015NM Prep	
880-31006-12	HA-4	Total/NA	Solid	8015NM Prep	
880-31006-13	HA-4	Total/NA	Solid	8015NM Prep	
880-31006-14	HA-4	Total/NA	Solid	8015NM Prep	
880-31006-16	HA-5	Total/NA	Solid	8015NM Prep	
880-31006-17	HA-5	Total/NA	Solid	8015NM Prep	
880-31006-31	HA-9	Total/NA	Solid	8015NM Prep	
880-31006-32	HA-9	Total/NA	Solid	8015NM Prep	
880-31006-33	HA-10	Total/NA	Solid	8015NM Prep	
880-31006-34	HA-10	Total/NA	Solid	8015NM Prep	
880-31006-35	HA-11	Total/NA	Solid	8015NM Prep	
880-31006-36	HA-11	Total/NA	Solid	8015NM Prep	
880-31006-37	HA-11	Total/NA	Solid	8015NM Prep	
880-31006-41	P-2	Total/NA	Solid	8015NM Prep	
880-31006-42	P-3	Total/NA	Solid	8015NM Prep	
MB 880-58210/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58210/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

GC Semi VOA (Continued)

Prep Batch: 58210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-58210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31006-5 MS	HA-2	Total/NA	Solid	8015NM Prep	
880-31006-5 MSD	HA-2	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Total/NA	Solid	8015 NM	
880-31006-2	HA-1	Total/NA	Solid	8015 NM	
880-31006-3	HA-1	Total/NA	Solid	8015 NM	
880-31006-4	HA-2	Total/NA	Solid	8015 NM	
880-31006-5	HA-2	Total/NA	Solid	8015 NM	
880-31006-6	HA-2	Total/NA	Solid	8015 NM	
880-31006-8	HA-3	Total/NA	Solid	8015 NM	
880-31006-9	HA-3	Total/NA	Solid	8015 NM	
880-31006-10	HA-3	Total/NA	Solid	8015 NM	
880-31006-12	HA-4	Total/NA	Solid	8015 NM	
880-31006-13	HA-4	Total/NA	Solid	8015 NM	
880-31006-14	HA-4	Total/NA	Solid	8015 NM	
880-31006-16	HA-5	Total/NA	Solid	8015 NM	
880-31006-17	HA-5	Total/NA	Solid	8015 NM	
880-31006-18	HA-5	Total/NA	Solid	8015 NM	
880-31006-20	HA-6	Total/NA	Solid	8015 NM	
880-31006-21	HA-6	Total/NA	Solid	8015 NM	
880-31006-22	HA-6	Total/NA	Solid	8015 NM	
880-31006-23	HA-7	Total/NA	Solid	8015 NM	
880-31006-24	HA-7	Total/NA	Solid	8015 NM	
880-31006-25	HA-7	Total/NA	Solid	8015 NM	
880-31006-28	HA-8	Total/NA	Solid	8015 NM	
880-31006-29	HA-8	Total/NA	Solid	8015 NM	
880-31006-30	HA-8	Total/NA	Solid	8015 NM	
880-31006-31	HA-9	Total/NA	Solid	8015 NM	
880-31006-32	HA-9	Total/NA	Solid	8015 NM	
880-31006-33	HA-10	Total/NA	Solid	8015 NM	
880-31006-34	HA-10	Total/NA	Solid	8015 NM	
880-31006-35	HA-11	Total/NA	Solid	8015 NM	
880-31006-36	HA-11	Total/NA	Solid	8015 NM	
880-31006-37	HA-11	Total/NA	Solid	8015 NM	
880-31006-40	P-1	Total/NA	Solid	8015 NM	
880-31006-41	P-2	Total/NA	Solid	8015 NM	
880-31006-42	P-3	Total/NA	Solid	8015 NM	
880-31006-43	P-4	Total/NA	Solid	8015 NM	
880-31006-44	P-5	Total/NA	Solid	8015 NM	
880-31006-45	P-6	Total/NA	Solid	8015 NM	
880-31006-46	P-7	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 58140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Soluble	Solid	DI Leach	
880-31006-2	HA-1	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

HPLC/IC (Continued)

Leach Batch: 58140 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-3	HA-1	Soluble	Solid	DI Leach	
880-31006-4	HA-2	Soluble	Solid	DI Leach	
880-31006-5	HA-2	Soluble	Solid	DI Leach	
880-31006-6	HA-2	Soluble	Solid	DI Leach	
880-31006-8	HA-3	Soluble	Solid	DI Leach	
880-31006-9	HA-3	Soluble	Solid	DI Leach	
880-31006-10	HA-3	Soluble	Solid	DI Leach	
880-31006-12	HA-4	Soluble	Solid	DI Leach	
880-31006-13	HA-4	Soluble	Solid	DI Leach	
880-31006-14	HA-4	Soluble	Solid	DI Leach	
880-31006-16	HA-5	Soluble	Solid	DI Leach	
880-31006-17	HA-5	Soluble	Solid	DI Leach	
880-31006-18	HA-5	Soluble	Solid	DI Leach	
880-31006-20	HA-6	Soluble	Solid	DI Leach	
880-31006-21	HA-6	Soluble	Solid	DI Leach	
880-31006-22	HA-6	Soluble	Solid	DI Leach	
880-31006-23	HA-7	Soluble	Solid	DI Leach	
880-31006-24	HA-7	Soluble	Solid	DI Leach	
MB 880-58140/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-58140/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-58140/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-31006-1 MS	HA-1	Soluble	Solid	DI Leach	
880-31006-1 MSD	HA-1	Soluble	Solid	DI Leach	
880-31006-13 MS	HA-4	Soluble	Solid	DI Leach	
880-31006-13 MSD	HA-4	Soluble	Solid	DI Leach	

Leach Batch: 58141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-25	HA-7	Soluble	Solid	DI Leach	
880-31006-28	HA-8	Soluble	Solid	DI Leach	
880-31006-29	HA-8	Soluble	Solid	DI Leach	
880-31006-30	HA-8	Soluble	Solid	DI Leach	
880-31006-31	HA-9	Soluble	Solid	DI Leach	
880-31006-32	HA-9	Soluble	Solid	DI Leach	
880-31006-33	HA-10	Soluble	Solid	DI Leach	
880-31006-34	HA-10	Soluble	Solid	DI Leach	
880-31006-35	HA-11	Soluble	Solid	DI Leach	
880-31006-36	HA-11	Soluble	Solid	DI Leach	
880-31006-37	HA-11	Soluble	Solid	DI Leach	
880-31006-40	P-1	Soluble	Solid	DI Leach	
880-31006-41	P-2	Soluble	Solid	DI Leach	
880-31006-42	P-3	Soluble	Solid	DI Leach	
880-31006-43	P-4	Soluble	Solid	DI Leach	
880-31006-44	P-5	Soluble	Solid	DI Leach	
880-31006-45	P-6	Soluble	Solid	DI Leach	
880-31006-46	P-7	Soluble	Solid	DI Leach	
MB 880-58141/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-58141/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-58141/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-31006-25 MS	HA-7	Soluble	Solid	DI Leach	
880-31006-25 MSD	HA-7	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

HPLC/IC (Continued)

Leach Batch: 58141 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-37 MS	HA-11	Soluble	Solid	DI Leach	
880-31006-37 MSD	HA-11	Soluble	Solid	DI Leach	

Analysis Batch: 58156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-1	HA-1	Soluble	Solid	300.0	58140
880-31006-2	HA-1	Soluble	Solid	300.0	58140
880-31006-3	HA-1	Soluble	Solid	300.0	58140
880-31006-4	HA-2	Soluble	Solid	300.0	58140
880-31006-5	HA-2	Soluble	Solid	300.0	58140
880-31006-6	HA-2	Soluble	Solid	300.0	58140
880-31006-8	HA-3	Soluble	Solid	300.0	58140
880-31006-9	HA-3	Soluble	Solid	300.0	58140
880-31006-10	HA-3	Soluble	Solid	300.0	58140
880-31006-12	HA-4	Soluble	Solid	300.0	58140
880-31006-13	HA-4	Soluble	Solid	300.0	58140
880-31006-14	HA-4	Soluble	Solid	300.0	58140
880-31006-16	HA-5	Soluble	Solid	300.0	58140
880-31006-17	HA-5	Soluble	Solid	300.0	58140
880-31006-18	HA-5	Soluble	Solid	300.0	58140
880-31006-20	HA-6	Soluble	Solid	300.0	58140
880-31006-21	HA-6	Soluble	Solid	300.0	58140
880-31006-22	HA-6	Soluble	Solid	300.0	58140
880-31006-23	HA-7	Soluble	Solid	300.0	58140
880-31006-24	HA-7	Soluble	Solid	300.0	58140
MB 880-58140/1-A	Method Blank	Soluble	Solid	300.0	58140
LCS 880-58140/2-A	Lab Control Sample	Soluble	Solid	300.0	58140
LCSD 880-58140/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	58140
880-31006-1 MS	HA-1	Soluble	Solid	300.0	58140
880-31006-1 MSD	HA-1	Soluble	Solid	300.0	58140
880-31006-13 MS	HA-4	Soluble	Solid	300.0	58140
880-31006-13 MSD	HA-4	Soluble	Solid	300.0	58140

Analysis Batch: 58158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-25	HA-7	Soluble	Solid	300.0	58141
880-31006-28	HA-8	Soluble	Solid	300.0	58141
880-31006-29	HA-8	Soluble	Solid	300.0	58141
880-31006-30	HA-8	Soluble	Solid	300.0	58141
880-31006-31	HA-9	Soluble	Solid	300.0	58141
880-31006-32	HA-9	Soluble	Solid	300.0	58141
880-31006-33	HA-10	Soluble	Solid	300.0	58141
880-31006-34	HA-10	Soluble	Solid	300.0	58141
880-31006-35	HA-11	Soluble	Solid	300.0	58141
880-31006-36	HA-11	Soluble	Solid	300.0	58141
880-31006-37	HA-11	Soluble	Solid	300.0	58141
880-31006-40	P-1	Soluble	Solid	300.0	58141
880-31006-41	P-2	Soluble	Solid	300.0	58141
880-31006-42	P-3	Soluble	Solid	300.0	58141
880-31006-43	P-4	Soluble	Solid	300.0	58141
880-31006-44	P-5	Soluble	Solid	300.0	58141

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

HPLC/IC (Continued)

Analysis Batch: 58158 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-45	P-6	Soluble	Solid	300.0	58141
880-31006-46	P-7	Soluble	Solid	300.0	58141
MB 880-58141/1-A	Method Blank	Soluble	Solid	300.0	58141
LCS 880-58141/2-A	Lab Control Sample	Soluble	Solid	300.0	58141
LCSD 880-58141/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	58141
880-31006-25 MS	HA-7	Soluble	Solid	300.0	58141
880-31006-25 MSD	HA-7	Soluble	Solid	300.0	58141
880-31006-37 MS	HA-11	Soluble	Solid	300.0	58141
880-31006-37 MSD	HA-11	Soluble	Solid	300.0	58141

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-31006-1
Project/Site: CTB 127-Dauntless
SDG: Lea County

Client Sample ID: HA-1
Lab Sample ID: 880-31006-1
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16

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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 22:37	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	58126	07/20/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58074	07/20/23 17:18	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 16:41	CH	EET MID

Client Sample ID: HA-1
Lab Sample ID: 880-31006-2
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16

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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 22:58	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	58126	07/20/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58074	07/20/23 17:40	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 16:56	CH	EET MID

Client Sample ID: HA-1
Lab Sample ID: 880-31006-3
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16

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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 23:18	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	58126	07/20/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58074	07/20/23 18:02	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:01	CH	EET MID

Client Sample ID: HA-2
Lab Sample ID: 880-31006-4
Date Collected: 07/19/23 00:00
Matrix: Solid
Date Received: 07/20/23 09:16

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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 23:39	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-4
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			58228	07/21/23 10:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58126	07/20/23 11:33	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58074	07/21/23 06:38	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:05	CH	EET MID

Client Sample ID: HA-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/20/23 23:59	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 12:46	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:11	CH	EET MID

Client Sample ID: HA-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 00:20	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 13:56	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:25	CH	EET MID

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-8
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			4.99 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 00:41	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 14:18	AJ	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-8
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	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:30	CH	EET MID

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-9
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			5.05 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 01:01	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 14:40	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:35	CH	EET MID

Client Sample ID: HA-3
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 01:22	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 15:01	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:40	CH	EET MID

Client Sample ID: HA-4
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 01:42	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 15:24	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:45	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-4
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 03:05	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 15:49	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 17:50	CH	EET MID

Client Sample ID: HA-4
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 03:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 16:11	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:05	CH	EET MID

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-16
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			5.03 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 03:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 16:35	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:10	CH	EET MID

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 04:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-17
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			58228	07/21/23 17:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 16:57	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:25	CH	EET MID

Client Sample ID: HA-5
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-18
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			5.02 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 04:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 14:03	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:30	CH	EET MID

Client Sample ID: HA-6
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-20
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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 04:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 15:19	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:35	CH	EET MID

Client Sample ID: HA-6
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-21
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	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 05:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 15:43	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-6
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-21
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	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:40	CH	EET MID

Client Sample ID: HA-6
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 05:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 16:04	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:45	CH	EET MID

Client Sample ID: HA-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-23
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			5.02 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 05:50	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 16:34	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:50	CH	EET MID

Client Sample ID: HA-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-24
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			5.00 g	5 mL	58105	07/20/23 10:12	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58089	07/21/23 06:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 08:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 16:57	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58140	07/20/23 12:15	KS	EET MID
Soluble	Analysis	300.0		1			58156	07/20/23 18:55	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-7
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 00:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 17:18	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 19:35	CH	EET MID

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-28
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			4.97 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 00:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 17:40	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 19:50	CH	EET MID

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-29
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			4.99 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 01:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/20/23 18:02	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 19:55	CH	EET MID

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-30
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			5.03 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 01:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-8
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			58228	07/21/23 10:50	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58077	07/21/23 07:21	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:00	CH	EET MID

Client Sample ID: HA-9
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-31
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	58088	07/21/23 02:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	58182	07/21/23 17:46	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:05	CH	EET MID

Client Sample ID: HA-9
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-32
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			5.04 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 01:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 18:08	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:20	CH	EET MID

Client Sample ID: HA-10
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 02:08	SM	EET MID
Total/NA	Prep	5035			4.97 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	58088	07/21/23 16:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-10
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-33
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	8015NM Prep			10.02 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 18:34	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:25	CH	EET MID

Client Sample ID: HA-10
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-34
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			4.95 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 02:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 18:56	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:30	CH	EET MID

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-35
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	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	58088	07/21/23 03:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	58182	07/21/23 19:18	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:34	CH	EET MID

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-36
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			4.96 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	58088	07/21/23 03:29	SM	EET MID
Total/NA	Prep	5035			4.96 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		500	5 mL	5 mL	58088	07/21/23 16:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 20:19	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-36
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	8015NM Prep			10.01 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	58182	07/21/23 19:40	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:39	CH	EET MID

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-37
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			5.05 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 04:52	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/22/23 08:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 20:02	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 20:45	CH	EET MID

Client Sample ID: P-1
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-40
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	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 05:12	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/22/23 08:27	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	58128	07/20/23 11:44	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/21/23 20:28	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:00	CH	EET MID

Client Sample ID: P-2
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-41
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			5.00 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 05:32	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/22/23 08:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/22/23 07:16	AJ	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-2

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-41
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	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:05	CH	EET MID

Client Sample ID: P-3

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-42
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			4.98 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 05:53	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/22/23 08:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	58210	07/21/23 09:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58182	07/22/23 08:00	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:19	CH	EET MID

Client Sample ID: P-4

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-43
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			4.97 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 06:13	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 18:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	58179	07/20/23 17:06	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58184	07/21/23 12:46	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:24	CH	EET MID

Client Sample ID: P-5

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-44
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			4.99 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 06:34	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 18:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	58179	07/20/23 17:06	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58184	07/21/23 13:56	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:29	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Client Sample ID: P-6

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-45

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			5.03 g	5 mL	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 06:54	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 18:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	58179	07/20/23 17:06	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58184	07/21/23 14:18	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:34	CH	EET MID

Client Sample ID: P-7

Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-46

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	58106	07/20/23 10:15	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58088	07/21/23 07:15	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58194	07/21/23 10:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			58228	07/21/23 18:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	58179	07/20/23 17:06	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58184	07/21/23 14:40	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58141	07/20/23 12:17	KS	EET MID
Soluble	Analysis	300.0		1			58158	07/20/23 21:39	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
Job ID: 880-31006-1
Project/Site: CTB 127-Dauntless
SDG: Lea County

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	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: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-1
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-31006-1	HA-1	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-2	HA-1	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-3	HA-1	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2R
880-31006-4	HA-2	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-5	HA-2	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-6	HA-2	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-8	HA-3	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-9	HA-3	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-10	HA-3	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-12	HA-4	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-13	HA-4	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-14	HA-4	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-16	HA-5	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-17	HA-5	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-18	HA-5	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-20	HA-6	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-21	HA-6	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-22	HA-6	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2R
880-31006-23	HA-7	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-24	HA-7	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-25	HA-7	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-28	HA-8	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-29	HA-8	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-30	HA-8	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2R
880-31006-31	HA-9	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-32	HA-9	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1R
880-31006-33	HA-10	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-34	HA-10	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1R
880-31006-35	HA-11	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-36	HA-11	Solid	07/19/23 00:00	07/20/23 09:16	0.5-1
880-31006-37	HA-11	Solid	07/19/23 00:00	07/20/23 09:16	1.5-2
880-31006-40	P-1	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-41	P-2	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-42	P-3	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-43	P-4	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-44	P-5	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-45	P-6	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5
880-31006-46	P-7	Solid	07/19/23 00:00	07/20/23 09:16	0-0.5

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Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

880-31006 Chain of Custody

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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.	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller JM McLeod	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank.	Yes (No)	Wet Ice	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID	IR2	
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.2	
Sample Custody Seals.	Yes No (N/A)	Temperature Reading	5.3	
Total Containers.		Corrected Temperature	5.0	

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold	Sample Comments
HA-1	S	7 19 23	X	0-0.5	G	1		X	X	X		
HA-1	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-1	S	7 19 23	X	1.5-2R	G	1		X	X	X		
HA-2	S	7 19 23	X	0-0.5	G	1		X	X	X		
HA-2	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-2	S	7 19 23	X	1.5-2	G	1		X	X	X		
HA-2	S	7 19 23	X	2.5-3R	G	1		X	X	X	X	
HA-3	S	7 19 24	X	0-0.5	G	1		X	X	X		
HA-3	S	7 19 25	X	0.5-1	G	1		X	X	X		
HA-3	S	7 19 26	X	1.5-2	G	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 Tl 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 Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 D.M. MI		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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Hobbs, NM (575) 392 7550 Carlsbad NM (575) 988-3199

Work Order No: 31004

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name.	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name.	Jonathan Miller	TAT starts the day received by the lab if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015	Chlorides	BTEX 8021	Hold
HA-3	S	7 19 23	X	2.5-3R	G	1		X	X	X	X
HA-4	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-4	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-4	S	7 19 23	X	1.5-2	G	1		X	X	X	
HA-4	S	7 19 23	X	2.5-3R	G	1		X	X	X	X
HA-5	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-5	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-5	S	7 19 24	X	1.5-2	G	1		X	X	X	
HA-5	S	7 19 25	X	2.5-3R	G	1		X	X	X	X
HA-6	S	7 19 26	X	0-0.5	G	1		X	X	X	

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl 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
1		7/20/23	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Work Order No: 31006

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address.	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas 79765	City, State ZIP	
Phone	325-665-3604 Email	kwilliams@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	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller JM	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold												Sample Comments
HA-6	S	7 19 23	X	0.5-1	G	1		X	X	X													
HA-6	S	7 19 23	X	1.5-2R	G	1		X	X	X													
HA-7	S	7 19 23	X	0-0.5	G	1		X	X	X													
HA-7	S	7 19 23	X	0.5-1	G	1		X	X	X													
HA-7	S	7 19 23	X	1.5-2	G	1		X	X	X													
HA-7	S	7 19 23	X	2.5-3	G	1		X	X	X	X												
HA-7	S	7 19 23	X	3.5-4	G	1		X	X	X	X												
HA-8	S	7 19 24	X	0-0.5	G	1		X	X	X													
HA-8	S	7 19 25	X	0.5-1	G	1		X	X	X													
HA-8	S	7 19 26	X	1.5-2R	G	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 Tl 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 Tl 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
1			2		
3		7/20/23 916	4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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Work Order No: 310006

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas, 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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.	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine	☑ Rush
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold
HA-9	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-9	S	7 19 23	X	0.5-1R	G	1		X	X	X	
HA-10	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-10	S	7 19 23	X	0.5-1R	G	1		X	X	X	
HA-11	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-11	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-11	S	7 19 23	X	1.5-2	G	1		X	X	X	
HA-11	S	7 19 24	X	2.5-3	G	1		X	X	X	X
HA-11	S	7 19 25	X	3.5-4	G	1		X	X	X	X
	S	7 19 26	X		G	1		X	X	X	

Preservative Codes

None. NO — DI Water H_2O
Cool Cool — MeOH Me
HCL HC — HNO_3 HN
H_2SO_4 H_2 — NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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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

Loc: 880
31006

Work Order No: _____

www.xenco.com Page 5 of 5

Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address.	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name.	Jonathan Miller	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank.	Yes No	Wet 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	

Preservative Codes

None NO | DI Water H_2O
Cool Cool | MeOH Me
HCL HC | HNO_3 HN
H_2S0_4 H_2 | NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Sample Comments
P-1	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-2	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-3	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-4	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-5	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-6	S	7 19 23	X	0-0.5	G	1		X	X	X	
P-7	S	7 19 23	X	0-0.5	G	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 Tl 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 Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-31006-1
SDG Number: Lea County

Login Number: 31006
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	

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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 7/27/2023 6:18:46 PM

JOB DESCRIPTION

CTB 127-Dauntless
SDG NUMBER Lea County

JOB NUMBER

880-31006-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

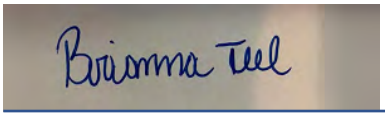
Eurofins Midland

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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7/27/2023 6:18:46 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: CTB 127-Dauntless

Laboratory Job ID: 880-31006-2
SDG: Lea County

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
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: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Job ID: 880-31006-2

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-31006-2

Receipt
The samples were received on 7/20/2023 9:16 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 5.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: HA-1 (880-31006-1), HA-1 (880-31006-2), HA-1 (880-31006-3), HA-2 (880-31006-4), HA-2 (880-31006-5), HA-2 (880-31006-6), HA-2 (880-31006-7), HA-3 (880-31006-8), HA-3 (880-31006-9), HA-3 (880-31006-10), HA-3 (880-31006-11), HA-4 (880-31006-12), HA-4 (880-31006-13), HA-4 (880-31006-14), HA-4 (880-31006-15), HA-5 (880-31006-16), HA-5 (880-31006-17), HA-5 (880-31006-18), HA-5 (880-31006-19), HA-6 (880-31006-20), HA-6 (880-31006-21), HA-6 (880-31006-22), HA-7 (880-31006-23), HA-7 (880-31006-24), HA-7 (880-31006-25), HA-7 (880-31006-26), HA-7 (880-31006-27), HA-8 (880-31006-28), HA-8 (880-31006-29), HA-8 (880-31006-30), HA-9 (880-31006-31), HA-9 (880-31006-32), HA-10 (880-31006-33), HA-10 (880-31006-34), HA-11 (880-31006-35), HA-11 (880-31006-36), HA-11 (880-31006-37), HA-11 (880-31006-38), HA-11 (880-31006-39), P-1 (880-31006-40), P-2 (880-31006-41), P-3 (880-31006-42), P-4 (880-31006-43), P-5 (880-31006-44), P-6 (880-31006-45) and P-7 (880-31006-46).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-58407 and analytical batch 880-58347 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.

GC Semi VOA
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 880-58340 and analytical batch 880-58387 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: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Client Sample ID: HA-11

Lab Sample ID: 880-31006-38
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 2.5-3

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		07/24/23 17:46	07/25/23 03:47	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/24/23 17:46	07/25/23 03:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/24/23 17:46	07/25/23 03:47	1
m-Xylene & p-Xylene	**0.0106**		0.00402		mg/Kg		07/24/23 17:46	07/25/23 03:47	1
o-Xylene	**0.00412**		0.00201		mg/Kg		07/24/23 17:46	07/25/23 03:47	1
Xylenes, Total	**0.0147**		0.00402		mg/Kg		07/24/23 17:46	07/25/23 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*07/24/23 17:46*	*07/25/23 03:47*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*07/24/23 17:46*	*07/25/23 03:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0147**		0.00402		mg/Kg			07/25/23 11:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**242**		49.6		mg/Kg			07/27/23 19:12	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	<49.6	U	49.6		mg/Kg		07/24/23 11:35	07/27/23 17:40	1
Diesel Range Organics (Over C10-C28)	**242**		49.6		mg/Kg		07/24/23 11:35	07/27/23 17:40	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/24/23 11:35	07/27/23 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*07/24/23 11:35*	*07/27/23 17:40*	*1*
o-Terphenyl	*96*		*70 - 130*	*07/24/23 11:35*	*07/27/23 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.2**		4.96		mg/Kg			07/25/23 01:04	1

Client Sample ID: HA-11

Lab Sample ID: 880-31006-39
Matrix: Solid
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 3.5-4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/24/23 17:46	07/25/23 04:07	1
Toluene	**0.00425**		0.00202		mg/Kg		07/24/23 17:46	07/25/23 04:07	1
Ethylbenzene	**0.00275**		0.00202		mg/Kg		07/24/23 17:46	07/25/23 04:07	1
m-Xylene & p-Xylene	**0.0281**		0.00404		mg/Kg		07/24/23 17:46	07/25/23 04:07	1
o-Xylene	**0.00764**		0.00202		mg/Kg		07/24/23 17:46	07/25/23 04:07	1
Xylenes, Total	**0.0357**		0.00404		mg/Kg		07/24/23 17:46	07/25/23 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*07/24/23 17:46*	*07/25/23 04:07*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16
Sample Depth: 3.5-4

Lab Sample ID: 880-31006-39
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*07/24/23 17:46*	*07/25/23 04:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0427**		0.00404		mg/Kg			07/25/23 11:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**546**		49.6		mg/Kg			07/27/23 19:12	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	<49.6	U	49.6		mg/Kg		07/24/23 11:35	07/27/23 18:02	1
Diesel Range Organics (Over C10-C28)	**546**		49.6		mg/Kg		07/24/23 11:35	07/27/23 18:02	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/24/23 11:35	07/27/23 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*07/24/23 11:35*	*07/27/23 18:02*	*1*
o-Terphenyl	*119*		*70 - 130*	*07/24/23 11:35*	*07/27/23 18:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.7**		4.97		mg/Kg			07/25/23 01:09	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-30749-A-1-C MS	Matrix Spike	90	97
880-30749-A-1-D MSD	Matrix Spike Duplicate	86	124
880-31006-38	HA-11	93	104
880-31006-39	HA-11	88	101
LCS 880-58407/1-A	Lab Control Sample	104	98
LCSD 880-58407/2-A	Lab Control Sample Dup	96	99
MB 880-58305/5-A	Method Blank	93	105
MB 880-58407/5-A	Method Blank	93	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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-31006-38	HA-11	78	96
880-31006-39	HA-11	97	119

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58305/5-A
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/24/23 08:56	07/24/23 13:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/24/23 08:56	07/24/23 13:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/24/23 08:56	07/24/23 13:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/24/23 08:56	07/24/23 13:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/24/23 08:56	07/24/23 13:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/24/23 08:56	07/24/23 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*07/24/23 08:56*	*07/24/23 13:58*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*07/24/23 08:56*	*07/24/23 13:58*	*1*

Lab Sample ID: MB 880-58407/5-A
Matrix: Solid
Analysis Batch: 58347

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			07/25/23 01:36	1
Toluene	<0.00200	U	0.00200		mg/Kg			07/25/23 01:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			07/25/23 01:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			07/25/23 01:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			07/25/23 01:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			07/25/23 01:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/25/23 01:36*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*		*07/25/23 01:36*	*1*

Lab Sample ID: LCS 880-58407/1-A
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58407

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1110		mg/Kg		111	70 - 130
Toluene	0.100	0.1041		mg/Kg		104	70 - 130
Ethylbenzene	0.100	0.1018		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2248		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1083		mg/Kg		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-58407/2-A
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58407

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1104		mg/Kg		110	70 - 130	0	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

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

Lab Sample ID: LCSD 880-58407/2-A
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58407

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1015		mg/Kg		101	70 - 130	3	35
Ethylbenzene			0.100	0.1005		mg/Kg		101	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2131		mg/Kg		107	70 - 130	5	35
o-Xylene			0.100	0.1014		mg/Kg		101	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-30749-A-1-C MS
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58407

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0994	0.08101		mg/Kg		81	70 - 130
Toluene	<0.00198	U F1	0.0994	0.07726		mg/Kg		78	70 - 130
Ethylbenzene	<0.00198	U F1	0.0994	0.06019	F1	mg/Kg		61	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.199	0.1293	F1	mg/Kg		65	70 - 130
o-Xylene	<0.00198	U F1	0.0994	0.07050		mg/Kg		71	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-30749-A-1-D MSD
Matrix: Solid
Analysis Batch: 58347

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 58407

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.0992	0.08268		mg/Kg		83	70 - 130	2	35
Toluene	<0.00198	U F1	0.0992	0.05680	F1	mg/Kg		57	70 - 130	31	35
Ethylbenzene	<0.00198	U F1	0.0992	0.04895	F1	mg/Kg		49	70 - 130	21	35
m-Xylene & p-Xylene	<0.00396	U F1	0.198	0.1317	F1	mg/Kg		66	70 - 130	2	35
o-Xylene	<0.00198	U F1	0.0992	0.06187	F1	mg/Kg		62	70 - 130	13	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*124*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-58340/1-A
Matrix: Solid
Analysis Batch: 58387

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			07/24/23 22:35	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-58340/2-A
Matrix: Solid
Analysis Batch: 58387

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-58340/3-A
Matrix: Solid
Analysis Batch: 58387

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	232.3		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-31084-A-31-B MS
Matrix: Solid
Analysis Batch: 58387

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	724	F1	252	943.2	F1	mg/Kg		87	90 - 110		

Lab Sample ID: 880-31084-A-31-C MSD
Matrix: Solid
Analysis Batch: 58387

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	724	F1	252	943.5	F1	mg/Kg		87	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

GC VOA

Prep Batch: 58305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-58305/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 58347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	8021B	58407
880-31006-39	HA-11	Total/NA	Solid	8021B	58407
MB 880-58305/5-A	Method Blank	Total/NA	Solid	8021B	58305
MB 880-58407/5-A	Method Blank	Total/NA	Solid	8021B	
LCS 880-58407/1-A	Lab Control Sample	Total/NA	Solid	8021B	58407
LCSD 880-58407/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58407
880-30749-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	58407
880-30749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	58407

Prep Batch: 58407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	5035	
880-31006-39	HA-11	Total/NA	Solid	5035	
LCS 880-58407/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58407/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30749-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-30749-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 58476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	Total BTEX	
880-31006-39	HA-11	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 58344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	8015NM Prep	
880-31006-39	HA-11	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	8015B NM	58344
880-31006-39	HA-11	Total/NA	Solid	8015B NM	58344

Analysis Batch: 58679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Total/NA	Solid	8015 NM	
880-31006-39	HA-11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 58340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Soluble	Solid	DI Leach	
880-31006-39	HA-11	Soluble	Solid	DI Leach	
MB 880-58340/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-58340/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

HPLC/IC (Continued)

Leach Batch: 58340 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-58340/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-31084-A-31-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-31084-A-31-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 58387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31006-38	HA-11	Soluble	Solid	300.0	58340
880-31006-39	HA-11	Soluble	Solid	300.0	58340
MB 880-58340/1-A	Method Blank	Soluble	Solid	300.0	58340
LCS 880-58340/2-A	Lab Control Sample	Soluble	Solid	300.0	58340
LCSD 880-58340/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	58340
880-31084-A-31-B MS	Matrix Spike	Soluble	Solid	300.0	58340
880-31084-A-31-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	58340

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-38
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	58407	07/24/23 17:46	AJ	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58347	07/25/23 03:47	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58476	07/25/23 11:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			58679	07/27/23 19:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	58344	07/24/23 11:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58605	07/27/23 17:40	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	58340	07/24/23 10:03	KS	EET MID
Soluble	Analysis	300.0		1			58387	07/25/23 01:04	CH	EET MID

Client Sample ID: HA-11
Date Collected: 07/19/23 00:00
Date Received: 07/20/23 09:16

Lab Sample ID: 880-31006-39
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	58407	07/24/23 17:46	AJ	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58347	07/25/23 04:07	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58476	07/25/23 11:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			58679	07/27/23 19:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	58344	07/24/23 11:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58605	07/27/23 18:02	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58340	07/24/23 10:03	KS	EET MID
Soluble	Analysis	300.0		1			58387	07/25/23 01:09	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
Job ID: 880-31006-2
Project/Site: CTB 127-Dauntless
SDG: Lea County

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	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: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31006-2
SDG: Lea County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-31006-38	HA-11	Solid	07/19/23 00:00	07/20/23 09:16	2.5-3
880-31006-39	HA-11	Solid	07/19/23 00:00	07/20/23 09:16	3.5-4

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Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

880-31006 Chain of Custody

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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.	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller JD McLeod	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank.	Yes (No)	Wet Ice	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID	IR2	
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.2	
Sample Custody Seals.	Yes No (N/A)	Temperature Reading	5.3	
Total Containers.		Corrected Temperature	5.0	

Preservative Codes

None NO; DI Water H_2O; Cool Cool; MeOH Me; HCL HC; HNO_3 HN; H_2SO_4 H_2; NaOH Na; H_3PO_4 HP; $NaHSO_4$ NABIS; $Na_2S_2O_3$ $NaSO_3$; Zn Acetate+NaOH Zn; NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold	Sample Comments
HA-1	S	7 19 23	X	0-0.5	G	1		X	X	X		
HA-1	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-1	S	7 19 23	X	1.5-2R	G	1		X	X	X		
HA-2	S	7 19 23	X	0-0.5	G	1		X	X	X		
HA-2	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-2	S	7 19 23	X	1.5-2	G	1		X	X	X		
HA-2	S	7 19 23	X	2.5-3R	G	1		X	X	X	X	
HA-3	S	7 19 24	X	0-0.5	G	1		X	X	X		
HA-3	S	7 19 25	X	0.5-1	G	1		X	X	X		
HA-3	S	7 19 26	X	1.5-2	G	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 Tl 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 Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 D.M. MI		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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Work Order No: 31004

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name.	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name.	Jonathan Miller	TAT starts the day received by the lab if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold
HA-3	S	7 19 23	X	2.5-3R	G	1		X	X	X	X
HA-4	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-4	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-4	S	7 19 23	X	1.5-2	G	1		X	X	X	
HA-4	S	7 19 23	X	2.5-3R	G	1		X	X	X	X
HA-5	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-5	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-5	S	7 19 24	X	1.5-2	G	1		X	X	X	
HA-5	S	7 19 25	X	2.5-3R	G	1		X	X	X	X
HA-6	S	7 19 26	X	0-0.5	G	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 Tl 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 Tl 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
1		7/20/23	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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Work Order No: 31006

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Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address.	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas 79765	City, State ZIP	
Phone	325-665-3604 Email	kwilliams@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	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller JM	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold	Sample Comments
HA-6	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-6	S	7 19 23	X	1.5-2R	G	1		X	X	X		
HA-7	S	7 19 23	X	0-0.5	G	1		X	X	X		
HA-7	S	7 19 23	X	0.5-1	G	1		X	X	X		
HA-7	S	7 19 23	X	1.5-2	G	1		X	X	X		
HA-7	S	7 19 23	X	2.5-3	G	1		X	X	X	X	
HA-7	S	7 19 23	X	3.5-4	G	1		X	X	X	X	
HA-8	S	7 19 24	X	0-0.5	G	1		X	X	X		
HA-8	S	7 19 25	X	0.5-1	G	1		X	X	X		
HA-8	S	7 19 26	X	1.5-2R	G	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 Tl 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 Tl U Hg 1631 / 245 1 / 7470 / 7471

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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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

Work Order No: 310006

www.xenco.com Page 4 of 5

Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa Texas, 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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.	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine	☑ Rush
Project Location	Lea County	Due Date	24 TAT
Sampler's Name	Jonathan Miller	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet 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		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021	Hold
HA-9	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-9	S	7 19 23	X	0.5-1R	G	1		X	X	X	
HA-10	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-10	S	7 19 23	X	0.5-1R	G	1		X	X	X	
HA-11	S	7 19 23	X	0-0.5	G	1		X	X	X	
HA-11	S	7 19 23	X	0.5-1	G	1		X	X	X	
HA-11	S	7 19 23	X	1.5-2	G	1		X	X	X	
HA-11	S	7 19 24	X	2.5-3	G	1		X	X	X	X
HA-11	S	7 19 25	X	3.5-4	G	1		X	X	X	X
	S	7 19 26	X		G	1		X	X	X	

Preservative Codes

None. NO — DI Water H_2O
Cool Cool — MeOH Me
HCL HC — HNO_3 HN
H_2SO_4 H_2 — NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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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

Loc: 880
31006

Work Order No: _____

www.xenco.com Page 5 of 5

Project Manager	Kris Williams	Bill to (if different)	Earth Systems R&R
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address.	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	325-665-3604	Email	kwilliams@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	CTB 127 - Dauntless
Project Number	1688
Project Location	Lea County
Sampler's Name.	Jonathan Miller
PO #:	

Turn Around
☐ Routine ☑ Rush
Due Date: 24 TAT
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	
Cooler Custody Seals.	Yes No N/A		Correction Factor	
Sample Custody Seals	Yes No N/A		Temperature Reading	
Total Containers.			Corrected Temperature	

Preservative Codes

None NO; DI Water H_2O
Cool Cool; MeOH Me
HCL HC; HNO_3 HN
H_2SO_4 H_2; NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	Chlorides	BTEX 8021
P-1	S	7 19 23	X	0-0.5	G	1		X	X	X
P-2	S	7 19 23	X	0-0.5	G	1		X	X	X
P-3	S	7 19 23	X	0-0.5	G	1		X	X	X
P-4	S	7 19 23	X	0-0.5	G	1		X	X	X
P-5	S	7 19 23	X	0-0.5	G	1		X	X	X
P-6	S	7 19 23	X	0-0.5	G	1		X	X	X
P-7	S	7 19 23	X	0-0.5	G	1		X	X	X

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		7/20/23 916	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-31006-2
SDG Number: Lea County

Login Number: 31006
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	

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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 8/9/2023 9:18:29 PM

JOB DESCRIPTION

CTB 127-Dauntless

JOB NUMBER

880-31770-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

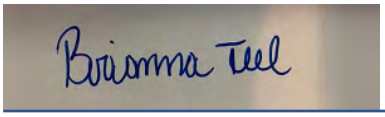
Eurofins Midland

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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8/9/2023 9:18:29 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: CTB 127-Dauntless

Laboratory Job ID: 880-31770-1

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration Job ID: 880-31770-1
Project/Site: CTB 127-Dauntless

Qualifiers

GC VOA

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

GC Semi VOA

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

General Chemistry

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: CTB 127-Dauntless

Job ID: 880-31770-1

Job ID: 880-31770-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-31770-1

Receipt
The sample was received on 8/7/2023 5:04 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.0°C

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-59611 and analytical batch 880-59605 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: Surrogate recovery for the following sample was outside control limits: WC-1 (880-31770-1). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-59656 and analytical batch 880-59691 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: WC-1 (880-31770-1). 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: (CCV 880-59691/20), (CCV 880-59691/31) and (CCV 880-59691/5). 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.

General Chemistry
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: CTB 127-Dauntless

Job ID: 880-31770-1

Client Sample ID: WC-1

Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1

Matrix: Solid
Percent Solids: 97.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00203	U *+	0.00203		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1
Toluene	**0.0876**		0.00203		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1
Ethylbenzene	**0.0550**	*+	0.00203		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1
m-Xylene & p-Xylene	**0.262**	*+	0.00407		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1
o-Xylene	**0.0857**	*+	0.00203		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1
Xylenes, Total	**0.348**	*+	0.00407		mg/Kg	☼	08/08/23 09:38	08/08/23 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*08/08/23 09:38*	*08/08/23 14:10*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*08/08/23 09:38*	*08/08/23 14:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.490**		0.00407		mg/Kg			08/09/23 16:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5000**		51.3		mg/Kg			08/09/23 22:11	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	**164**		51.3		mg/Kg	☼	08/08/23 16:35	08/09/23 19:17	1
Diesel Range Organics (Over C10-C28)	**4550**		51.3		mg/Kg	☼	08/08/23 16:35	08/09/23 19:17	1
Oil Range Organics (Over C28-C36)	**283**		51.3		mg/Kg	☼	08/08/23 16:35	08/09/23 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*08/08/23 16:35*	*08/09/23 19:17*	*1*
o-Terphenyl	*128*		*70 - 130*	*08/08/23 16:35*	*08/09/23 19:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (ASTM D2216)	**2.40**		0.100		%			08/09/23 15:57	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-31760-A-1-D MS	Matrix Spike	122	98										
880-31760-A-1-E MSD	Matrix Spike Duplicate	119	119										
880-31770-1	WC-1	145 S1+	114										
LCS 880-59611/1-A	Lab Control Sample	118	118										
LCSD 880-59611/2-A	Lab Control Sample Dup	111	116										
MB 880-59611/5-A	Method Blank	73	79										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-31770-1	WC-1	151 S1+	128										
880-31820-A-21-B MS	Matrix Spike	130	129										
880-31820-A-21-C MSD	Matrix Spike Duplicate	113	111										
LCS 880-59656/2-A	Lab Control Sample	96	107										
LCSD 880-59656/3-A	Lab Control Sample Dup	94	107										
MB 880-59656/1-A	Method Blank	123	137 S1+										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-59611/5-A
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 59611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/08/23 09:38	08/08/23 11:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/08/23 09:38	08/08/23 11:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/08/23 09:38	08/08/23 11:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/08/23 09:38	08/08/23 11:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/08/23 09:38	08/08/23 11:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/08/23 09:38	08/08/23 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/08/23 09:38*	*08/08/23 11:45*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*08/08/23 09:38*	*08/08/23 11:45*	*1*

Lab Sample ID: LCS 880-59611/1-A
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 59611

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1357	*+	mg/Kg		136	70 - 130		
Toluene			0.100	0.1209		mg/Kg		121	70 - 130		
Ethylbenzene			0.100	0.1336	*+	mg/Kg		134	70 - 130		
m-Xylene & p-Xylene			0.200	0.2911	*+	mg/Kg		146	70 - 130		
o-Xylene			0.100	0.1396	*+	mg/Kg		140	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-59611/2-A
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 59611

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1237		mg/Kg		124	70 - 130	9	35
Toluene			0.100	0.1104		mg/Kg		110	70 - 130	9	35
Ethylbenzene			0.100	0.1185		mg/Kg		119	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.2571		mg/Kg		129	70 - 130	12	35
o-Xylene			0.100	0.1236		mg/Kg		124	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: 880-31760-A-1-D MS
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 59611

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U *+	0.0994	0.1147		mg/Kg		115	70 - 130		
Toluene	<0.00198	U	0.0994	0.1059		mg/Kg		105	70 - 130		

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-1

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

Lab Sample ID: 880-31760-A-1-D MS
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 59611

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U *+	0.0994	0.1136		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	<0.00397	U *+	0.199	0.2426		mg/Kg		122	70 - 130
o-Xylene	<0.00198	U *+	0.0994	0.1164		mg/Kg		117	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-31760-A-1-E MSD
Matrix: Solid
Analysis Batch: 59605

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 59611

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U *+	0.101	0.1115		mg/Kg		111	70 - 130	3	35
Toluene	<0.00198	U	0.101	0.09490		mg/Kg		93	70 - 130	11	35
Ethylbenzene	<0.00198	U *+	0.101	0.1042		mg/Kg		103	70 - 130	9	35
m-Xylene & p-Xylene	<0.00397	U *+	0.202	0.2213		mg/Kg		110	70 - 130	9	35
o-Xylene	<0.00198	U *+	0.101	0.1096		mg/Kg		109	70 - 130	6	35

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

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

Lab Sample ID: MB 880-59656/1-A
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 59656

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		08/08/23 16:35	08/09/23 07:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/08/23 16:35	08/09/23 07:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/08/23 16:35	08/09/23 07:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*08/08/23 16:35*	*08/09/23 07:42*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*08/08/23 16:35*	*08/09/23 07:42*	*1*

Lab Sample ID: LCS 880-59656/2-A
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 59656

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	896.7		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	869.0		mg/Kg		87	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-1

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

Lab Sample ID: LCS 880-59656/2-A
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 59656

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: LCSD 880-59656/3-A
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 59656

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	873.7		mg/Kg		87	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	852.4		mg/Kg		85	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-31820-A-21-B MS
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 59656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	994	1046		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<50.4	U	994	1178		mg/Kg		118	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	130		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: 880-31820-A-21-C MSD
Matrix: Solid
Analysis Batch: 59691

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 59656

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	<50.4	U	994	929.1		mg/Kg		91	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	<50.4	U	994	1026		mg/Kg		103	70 - 130	14	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	111		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Job ID: 880-31770-1
Project/Site: CTB 127-Dauntless

Method: D2216 - Percent Moisture

Lab Sample ID: MB 880-59781/1
Matrix: Solid
Analysis Batch: 59781

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	<0.100	U	0.100		%			08/09/23 15:57	1

Lab Sample ID: 880-31770-1 DU
Matrix: Solid
Analysis Batch: 59781

Client Sample ID: WC-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	2.40			2.41		%				0.2	20

QC Association Summary

Client: Earth Systems Response and Restoration
Job ID: 880-31770-1
Project/Site: CTB 127-Dauntless

GC VOA

Analysis Batch: 59605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8021B	59611
MB 880-59611/5-A	Method Blank	Total/NA	Solid	8021B	59611
LCS 880-59611/1-A	Lab Control Sample	Total/NA	Solid	8021B	59611
LCSD 880-59611/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	59611
880-31760-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	59611
880-31760-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	59611

Prep Batch: 59611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	5035	
MB 880-59611/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-59611/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-59611/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-31760-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-31760-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 59783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 59656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8015NM Prep	
MB 880-59656/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-59656/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-59656/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31820-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31820-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 59691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8015B NM	59656
MB 880-59656/1-A	Method Blank	Total/NA	Solid	8015B NM	59656
LCS 880-59656/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	59656
LCSD 880-59656/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	59656
880-31820-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	59656
880-31820-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	59656

Analysis Batch: 59802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8015 NM	

General Chemistry

Analysis Batch: 59781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	D2216	
MB 880-59781/1	Method Blank	Total/NA	Solid	D2216	
880-31770-1 DU	WC-1	Total/NA	Solid	D2216	

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-31770-1
Project/Site: CTB 127-Dauntless

Client Sample ID: WC-1 **Lab Sample ID: 880-31770-1**
Date Collected: 08/07/23 00:00 **Matrix: Solid**
Date Received: 08/07/23 17:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Total BTEX		1			59783	08/09/23 16:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			59802	08/09/23 22:11	SM	EET MID
Total/NA	Analysis	D2216		1			59781	08/09/23 15:57	KS	EET MID

Client Sample ID: WC-1 **Lab Sample ID: 880-31770-1**
Date Collected: 08/07/23 00:00 **Matrix: Solid**
Date Received: 08/07/23 17:04 **Percent Solids: 97.6**

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	59611	08/08/23 09:38	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	59605	08/08/23 14:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	59656	08/08/23 16:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	59691	08/09/23 19:17	SM	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
Job ID: 880-31770-1
Project/Site: CTB 127-Dauntless

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	T104704400-23-26	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: CTB 127-Dauntless

Job ID: 880-31770-1

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
D2216	Percent Moisture	ASTM	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID

Protocol References:

ASTM = ASTM International

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: CTB 127-Dauntless

Job ID: 880-31770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31770-1	WC-1	Solid	08/07/23 00:00	08/07/23 17:04

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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

V 880-31770 Chain of Custody

www.xenco.com Page _____ of _____

Project Manager	Tom Carlson	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address.	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-894-6385	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:

Project Name	CTB 127 - Dauntless	Turn Around	
Project Number	1688	☐ Routine ☑ Rush	
Project Location		Due Date	24 HOURS
Sampler's Name		TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet Ice	Yes No	
Samples Received Intact:	Yes No	Thermometer ID	IR9	
Cooler Custody Seals	Yes No N/A	Correction Factor	-.3	
Sample Custody Seals	Yes No N/A	Temperature Reading	10.3	
Total Containers.		Corrected Temperature	10.0	

ANALYSIS REQUEST

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: TPH 8015	BTEX 8021	VOC	SEMI VOC	RCRA 11 Metals	RCI	% Moisture	Sample Comments
WC-1	S	8/7/2023		0 - 0 5	Comp	6	X	X	X	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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1			2		8-7-23 5:04 PM
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration Job Number: 880-31770-1

Login Number: 31770 **List Source: Eurofins Midland**
List Number: 1
Creator: Rodriguez, Leticia

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

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/11/2023 2:59:04 PM

JOB DESCRIPTION

CTB 127-Dauntless
SDG NUMBER 1688

JOB NUMBER

880-31770-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

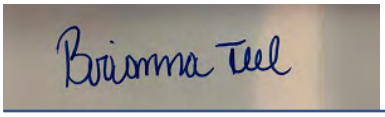
Eurofins Midland

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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8/11/2023 2:59:04 PM

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

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration Job ID: 880-31770-2
Project/Site: CTB 127-Dauntless SDG: 1688

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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)

Definitions/Glossary

Client: Earth Systems Response and Restoration
Job ID: 880-31770-2
Project/Site: CTB 127-Dauntless
SDG: 1688

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Job ID: 880-31770-2

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-31770-2

Receipt
The sample was received on 8/7/2023 5:04 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 10.0°C

GC/MS VOA
Method 8260C: The following samples were diluted due to the nature of the sample matrix: WC-1 (880-31770-1) and (880-31770-C-1-B MS). Elevated reporting limits (RLs) are provided. Sample prepped with methanol from a bulk jar.

Method 8260C: The continuing calibration verification (CCV) associated with batch 860-116525 recovered above the upper control limit for 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 2,2-Dichloropropane, Bromodichloromethane and Carbon tetrachloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 860-116525 recovered outside control limits for the following analytes: 1,1,1,2-Tetrachloroethane and Bromodichloromethane. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 860-116525 recovered outside control limits for the following analytes: 1,1-Dichloroethane

Method 8260C: The matrix spike (MS) recoveries for preparation batch 860-116457 and analytical batch 860-116525 were outside control limits. Sample matrix interference is suspected.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 860-116463 and analytical batch 860-116533 recovered outside control limits for the following analytes: 2-Chloronaphthalene and Hexachlorocyclopentadiene.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 860-116463 and analytical batch 860-116533 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: WC-1 (880-31770-1). Elevated reporting limits (RLs) are provided.

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

Metals
Method 6020A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 860-116633 and analytical batch 860-116865 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 / laboratory control sample duplicate (LCS/LCSD) recoveries are within acceptance limits.

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

General Chemistry
Method 1010: Due to the nature of the sample matrix, sample WC-1 (880-31770-1), (870-19409-A-1) and (870-19409-A-1 DU) could not be stirred during the testing which is a modification to the method. For regulatory compliance samples, method modification is not allowed. The results should be considered to be estimated.

Case Narrative

Client: Earth Systems Response and Restoration
Job ID: 880-31770-2
Project/Site: CTB 127-Dauntless
SDG: 1688

Job ID: 880-31770-2 (Continued)

Laboratory: Eurofins Midland (Continued)

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: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Client Sample ID: WC-1
Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1
Matrix: Solid

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**8.23**		0.101		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
cis-1,2-Dichloroethene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
cis-1,3-Dichloropropene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Isopropylbenzene	**0.461**		0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
m,p-Xylenes	**6.12**	**F1**	0.101		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
n-Butylbenzene	**1.06**		0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
N-Propylbenzene	**0.837**	**F1**	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
o-Xylene	**2.11**		0.0504		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
p-Cymene (p-Isopropyltoluene)	**0.430**		0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
tert-Butylbenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
trans-1,2-Dichloroethene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
trans-1,3-Dichloropropene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Vinyl chloride	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1,1,2-Tetrachloroethane	<0.252	U *+	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1,1-Trichloroethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1,2,2-Tetrachloroethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1,2-Trichloroethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1-Dichloroethane	<0.252	U *1	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1-Dichloroethene	<0.252	U F1	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,1-Dichloropropene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2,3-Trichlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2,3-Trichloropropane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2,4-Trichlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2,4-Trimethylbenzene	**6.57**	**F1**	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2-Dibromo-3-Chloropropane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2-Dibromoethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2-Dichlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2-Dichloroethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,2-Dichloropropane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,3,5-Trimethylbenzene	**2.72**		0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,3-Dichlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,3-Dichloropropane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
1,4-Dichlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
2,2-Dichloropropane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
2-Butanone	<2.52	U	2.52		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
4-Chlorotoluene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Benzene	<0.0504	U	0.0504		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Bromobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Bromochloromethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Bromodichloromethane	<0.252	U *+	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Bromoform	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Bromomethane	<0.252	U F1	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Carbon tetrachloride	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Chlorobenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Chloroethane	<0.504	U F1	0.504		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Chloroform	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Chloromethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Dibromochloromethane	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Dichlorodifluoromethane	<0.252	U F1	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Client Sample ID: WC-1
Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1
Matrix: Solid

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**0.852**		0.0504		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Hexachlorobutadiene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
MTBE	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Methylene Chloride	<1.01	U	1.01		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Naphthalene	**0.687**		0.504		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
sec-Butylbenzene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Styrene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Tetrachloroethene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Toluene	**1.02**		0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Trichloroethene	<0.252	U	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50
Trichlorofluoromethane	<0.252	U F1	0.252		mg/Kg		08/09/23 15:11	08/10/23 13:05	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*56 - 150*	*08/09/23 15:11*	*08/10/23 13:05*	*50*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*	*08/09/23 15:11*	*08/10/23 13:05*	*50*
Dibromofluoromethane (Surr)	*94*		*53 - 142*	*08/09/23 15:11*	*08/10/23 13:05*	*50*
Toluene-d8 (Surr)	*105*		*70 - 130*	*08/09/23 15:11*	*08/10/23 13:05*	*50*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
1,2-Dichlorobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
1,3-Dichlorobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
1,4-Dichlorobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4,5-Trichlorophenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4,6-Trichlorophenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4-Dichlorophenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4-Dimethylphenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4-Dinitrophenol	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,4-Dinitrotoluene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2,6-Dinitrotoluene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Chloronaphthalene	<1.66	U *1	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Chlorophenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Methylnaphthalene	**1.69**		1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Methylphenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Nitroaniline	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
2-Nitrophenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
3 & 4 Methylphenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
3,3'-Dichlorobenzidine	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
3-Nitroaniline	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4,6-Dinitro-2-methylphenol	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Bromophenyl phenyl ether	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Chloro-3-methylphenol	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Chloroaniline	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Chlorophenyl phenyl ether	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Nitroaniline	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
4-Nitrophenol	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Acenaphthene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Acenaphthylene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Aniline (Phenylamine, Aminobenzene)	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Client Sample ID: WC-1
Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1
Matrix: Solid

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzo[a]anthracene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzo[a]pyrene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzo[b]fluoranthene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzo[g,h,i]perylene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzo[k]fluoranthene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Benzoic acid	<9.98	U	9.98		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Butyl benzyl phthalate	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Bis(2-chloroethoxy)methane	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Bis(2-chloroethyl)ether	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
bis (2-chloroisopropyl) ether	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Bis(2-ethylhexyl) phthalate	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Chrysene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Dibenz(a,h)anthracene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Dibenzofuran	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Diethyl phthalate	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Dimethyl phthalate	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Di-n-butyl phthalate	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Di-n-octyl phthalate	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Fluoranthene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Fluorene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Hexachlorobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Hexachlorobutadiene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Hexachlorocyclopentadiene	<1.66	U *1	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Hexachloroethane	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Indeno[1,2,3-cd]pyrene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Isophorone	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Naphthalene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Nitrobenzene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
N-Nitrosodi-n-propylamine	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
N-Nitrosodiphenylamine	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Pentachlorophenol	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Phenanthrene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Phenol	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Pyrene	<1.66	U	1.66		mg/Kg		08/09/23 15:49	08/10/23 12:25	10
Pyridine	<3.33	U	3.33		mg/Kg		08/09/23 15:49	08/10/23 12:25	10

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
1,2-Dichlorobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
1,3-Dichlorobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
1,4-Dichlorobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4,5-Trichlorophenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4,6-Trichlorophenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4-Dichlorophenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4-Dimethylphenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4-Dinitrophenol	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,4-Dinitrotoluene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2,6-Dinitrotoluene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2-Chloronaphthalene	<1.66	U *1	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Client Sample ID: WC-1
Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1
Matrix: Solid

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2-Methylnaphthalene	**1.69**		1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2-Methylphenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
2-Nitroaniline	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
2-Nitrophenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
3 & 4 Methylphenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
3,3'-Dichlorobenzidine	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
3-Nitroaniline	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
4,6-Dinitro-2-methylphenol	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Bromophenyl phenyl ether	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Chloro-3-methylphenol	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Chloroaniline	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Chlorophenyl phenyl ether	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Nitroaniline	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
4-Nitrophenol	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
Acenaphthene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Acenaphthylene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Aniline (Phenylamine, Aminobenzene)	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
Anthracene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzo[a]anthracene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzo[a]pyrene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzo[b]fluoranthene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzo[g,h,i]perylene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzo[k]fluoranthene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Benzoic acid	<9.98	U	9.98		mg/L		08/09/23 15:49	08/10/23 12:25	10
Butyl benzyl phthalate	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Bis(2-chloroethoxy)methane	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Bis(2-chloroethyl)ether	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
bis (2-chloroisopropyl) ether	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Bis(2-ethylhexyl) phthalate	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
Chrysene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Dibenz(a,h)anthracene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Dibenzofuran	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Diethyl phthalate	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Dimethyl phthalate	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Di-n-butyl phthalate	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Di-n-octyl phthalate	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Fluoranthene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Fluorene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Hexachlorobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Hexachlorobutadiene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Hexachlorocyclopentadiene	<1.66	U *1	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Hexachloroethane	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Indeno[1,2,3-cd]pyrene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Isophorone	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Naphthalene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Nitrobenzene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
N-Nitrosodi-n-propylamine	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
N-Nitrosodiphenylamine	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Client Sample ID: WC-1
Date Collected: 08/07/23 00:00
Date Received: 08/07/23 17:04

Lab Sample ID: 880-31770-1
Matrix: Solid

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
Phenanthrene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Phenol	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10
Pyrene	<1.66	U	1.66		mg/L		08/09/23 15:49	08/10/23 12:25	10
Pyridine	<3.33	U	3.33		mg/L		08/09/23 15:49	08/10/23 12:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*19 - 122*	*08/09/23 15:49*	*08/10/23 12:25*	*10*
2-Fluorobiphenyl (Surr)	*92*		*30 - 115*	*08/09/23 15:49*	*08/10/23 12:25*	*10*
2-Fluorophenol (Surr)	*65*		*25 - 121*	*08/09/23 15:49*	*08/10/23 12:25*	*10*
Nitrobenzene-d5 (Surr)	*67*		*23 - 129*	*08/09/23 15:49*	*08/10/23 12:25*	*10*
p-Terphenyl-d14 (Surr)	*87*		*18 - 137*	*08/09/23 15:49*	*08/10/23 12:25*	*10*
Phenol-d5 (Surr)	*59*		*24 - 113*	*08/09/23 15:49*	*08/10/23 12:25*	*10*

Method: SW846 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<3.77	U	3.77		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Antimony	<3.77	U	3.77		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Barium	**86.5**		3.77		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Cadmium	<1.89	U	1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Chromium	**5.35**		3.77		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Beryllium	<1.89	U	1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Lead	**3.36**		1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Nickel	**3.65**		1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Selenium	<1.89	U	1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10
Silver	<1.89	U	1.89		mg/Kg		08/10/23 12:46	08/11/23 00:05	10

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0172	U	0.0172		mg/Kg		08/09/23 23:47	08/10/23 18:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint (SW846 1010)	**>180**		1.00		Degrees F			08/09/23 17:13	1
Cyanide, Reactive (SW846 9012)	<0.0250	U	0.0250		mg/Kg		08/09/23 16:59	08/10/23 12:28	1
Sulfide, Reactive (SW846 9034)	<6.25	U	6.25		mg/Kg		08/09/23 16:57	08/09/23 16:58	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	**9.5**	**HF**			SU			08/10/23 18:31	1
Temperature (SW846 9045D)	**22.0**	**HF**			Deg. C			08/10/23 18:31	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(56-150)	(68-152)	(53-142)	(70-130)
880-31770-1	WC-1	103	100	94	105
880-31770-1 MS	WC-1	101	100	101	103
LCSD 860-116525/4	Lab Control Sample Dup	107	97	104	95
MB 860-116525/9	Method Blank	108	95	97	93

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPHd14	PHL
Lab Sample ID	Client Sample ID	(19-122)	(30-115)	(25-121)	(23-129)	(18-137)	(24-113)
870-19506-A-4-C MS	Matrix Spike	93	62	49	55	84	51
870-19506-A-4-D MSD	Matrix Spike Duplicate	102	91	75	78	106	74
880-31770-1	WC-1	77	92	65	67	87	59
LCS 860-116463/2-A	Lab Control Sample	92	85	72	74	82	79
LCSD 860-116463/3-A	Lab Control Sample Dup	88	65	57	62	98	59
MB 860-116463/1-A	Method Blank	109	108	101	110	117	105

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: 880-31770-1 MS
Matrix: Solid
Analysis Batch: 116525

Client Sample ID: WC-1
Prep Type: Total/NA
Prep Batch: 116457

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	<0.252	U	2.52	2.223		mg/Kg		88	72 - 131
cis-1,3-Dichloropropene	<0.252	U	2.52	2.528		mg/Kg		100	74 - 135
Isopropylbenzene	0.461		2.52	2.812		mg/Kg		93	55 - 155
n-Butylbenzene	1.06		2.52	3.420		mg/Kg		93	82 - 127
N-Propylbenzene	0.837	F1	2.52	2.852	F1	mg/Kg		80	84 - 131
o-Xylene	2.11		2.52	4.241		mg/Kg		85	79 - 125
p-Cymene (p-Isopropyltoluene)	0.430		2.52	2.800		mg/Kg		94	84 - 130
tert-Butylbenzene	<0.252	U	2.52	2.369		mg/Kg		94	83 - 132
trans-1,2-Dichloroethene	<0.252	U	2.52	1.935		mg/Kg		77	63 - 110
trans-1,3-Dichloropropene	<0.252	U	2.52	2.235		mg/Kg		89	73 - 125
Vinyl chloride	<0.252	U	2.52	1.656		mg/Kg		66	60 - 123
1,1,1,2-Tetrachloroethane	<0.252	U *+	2.52	2.646		mg/Kg		105	81 - 127
1,1,1-Trichloroethane	<0.252	U	2.52	2.096		mg/Kg		83	71 - 124
1,1,2,2-Tetrachloroethane	<0.252	U	2.52	2.480		mg/Kg		98	75 - 133
1,1,2-Trichloroethane	<0.252	U	2.52	2.995		mg/Kg		119	75 - 131
1,1-Dichloroethane	<0.252	U *1	2.52	2.014		mg/Kg		80	73 - 124
1,1-Dichloroethene	<0.252	U F1	2.52	1.648	F1	mg/Kg		65	68 - 119
1,1-Dichloropropene	<0.252	U	2.52	1.875		mg/Kg		74	72 - 118
1,2,3-Trichlorobenzene	<0.252	U	2.52	2.752		mg/Kg		109	75 - 131
1,2,3-Trichloropropane	<0.252	U	2.52	2.255		mg/Kg		89	75 - 131
1,2,4-Trichlorobenzene	<0.252	U	2.52	2.802		mg/Kg		111	79 - 128
1,2-Dibromo-3-Chloropropane	<0.252	U	2.52	2.123		mg/Kg		84	58 - 133
1,2-Dibromoethane	<0.252	U	2.52	2.498		mg/Kg		99	73 - 125
1,2-Dichlorobenzene	<0.252	U	2.52	2.487		mg/Kg		99	84 - 121
1,2-Dichloroethane	<0.252	U	2.52	2.427		mg/Kg		96	70 - 123
1,2-Dichloropropane	<0.252	U	2.52	2.433		mg/Kg		97	75 - 122
1,3,5-Trimethylbenzene	2.72		2.52	4.517		mg/Kg		71	61 - 160
1,3-Dichlorobenzene	<0.252	U	2.52	2.459		mg/Kg		98	84 - 124
1,3-Dichloropropane	<0.252	U	2.52	2.433		mg/Kg		97	82 - 131
1,4-Dichlorobenzene	<0.252	U	2.52	2.378		mg/Kg		94	82 - 120
2,2-Dichloropropane	<0.252	U	2.52	2.181		mg/Kg		87	67 - 137
2-Butanone	<2.52	U	12.6	10.91		mg/Kg		87	75 - 125
4-Chlorotoluene	<0.252	U	2.52	2.482		mg/Kg		98	83 - 125
Benzene	<0.0504	U	2.52	2.131		mg/Kg		85	71 - 119
Bromobenzene	<0.252	U	2.52	2.393		mg/Kg		95	84 - 123
Bromochloromethane	<0.252	U	2.52	2.423		mg/Kg		96	71 - 120
Bromodichloromethane	<0.252	U *+	2.52	2.581		mg/Kg		102	78 - 126
Bromoform	<0.252	U	2.52	2.144		mg/Kg		85	63 - 136
Bromomethane	<0.252	U F1	2.52	0.7813	F1	mg/Kg		31	73 - 126
Carbon tetrachloride	<0.252	U	2.52	2.102		mg/Kg		83	63 - 135
Chlorobenzene	<0.252	U	2.52	2.296		mg/Kg		91	83 - 121
Chloroethane	<0.504	U F1	2.52	0.5946	F1	mg/Kg		24	57 - 122
Chloroform	<0.252	U	2.52	2.279		mg/Kg		90	74 - 118
Chloromethane	<0.252	U	2.52	1.763		mg/Kg		70	58 - 110
Dibromochloromethane	<0.252	U	2.52	2.310		mg/Kg		92	77 - 130
Dichlorodifluoromethane	<0.252	U F1	2.52	1.040	F1	mg/Kg		41	54 - 122
Ethylbenzene	0.852		2.52	3.000		mg/Kg		85	80 - 123
Hexachlorobutadiene	<0.252	U	2.52	2.517		mg/Kg		100	77 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 880-31770-1 MS
Matrix: Solid
Analysis Batch: 116525

Client Sample ID: WC-1
Prep Type: Total/NA
Prep Batch: 116457

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
MTBE	<0.252	U	2.52	2.441		mg/Kg		97	64 - 148
Methylene Chloride	<1.01	U	2.52	2.167		mg/Kg		86	57 - 134
Naphthalene	0.687		2.52	3.644		mg/Kg		117	53 - 162
sec-Butylbenzene	<0.252	U	2.52	2.875		mg/Kg		114	84 - 131
Styrene	<0.252	U	2.52	2.515		mg/Kg		100	80 - 126
Tetrachloroethene	<0.252	U	2.52	2.005		mg/Kg		80	79 - 124
Toluene	1.02		2.52	2.955		mg/Kg		77	74 - 122
Trichloroethene	<0.252	U	2.52	2.223		mg/Kg		88	78 - 119
Trichlorofluoromethane	<0.252	U F1	2.52	1.633	F1	mg/Kg		65	71 - 148

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*56 - 150*
4-Bromofluorobenzene (Surr)	*100*		*68 - 152*
Dibromofluoromethane (Surr)	*101*		*53 - 142*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: MB 860-116525/9
Matrix: Solid
Analysis Batch: 116525

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00200	U	0.00200		mg/Kg			08/10/23 12:23	1
cis-1,2-Dichloroethene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
cis-1,3-Dichloropropene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Isopropylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
m,p-Xylenes	<0.00200	U	0.00200		mg/Kg			08/10/23 12:23	1
n-Butylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
N-Propylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
o-Xylene	<0.00100	U	0.00100		mg/Kg			08/10/23 12:23	1
p-Cymene (p-Isopropyltoluene)	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
tert-Butylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
trans-1,2-Dichloroethene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
trans-1,3-Dichloropropene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Vinyl chloride	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1,1,2-Tetrachloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1,1-Trichloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1,2,2-Tetrachloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1,2-Trichloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1-Dichloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1-Dichloroethene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,1-Dichloropropene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2,3-Trichlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2,3-Trichloropropane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2,4-Trichlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2,4-Trimethylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2-Dibromo-3-Chloropropane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2-Dibromoethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2-Dichlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-116525/9
Matrix: Solid
Analysis Batch: 116525

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,2-Dichloropropane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,3,5-Trimethylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,3-Dichlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,3-Dichloropropane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
1,4-Dichlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
2,2-Dichloropropane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
2-Butanone	<0.0500	U	0.0500		mg/Kg			08/10/23 12:23	1
4-Chlorotoluene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Benzene	<0.00100	U	0.00100		mg/Kg			08/10/23 12:23	1
Bromobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Bromochloromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Bromodichloromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Bromoform	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Bromomethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Carbon tetrachloride	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Chlorobenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Chloroethane	<0.0100	U	0.0100		mg/Kg			08/10/23 12:23	1
Chloroform	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Chloromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Dibromochloromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Dichlorodifluoromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Ethylbenzene	<0.00100	U	0.00100		mg/Kg			08/10/23 12:23	1
Hexachlorobutadiene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
MTBE	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Methylene Chloride	<0.0200	U	0.0200		mg/Kg			08/10/23 12:23	1
Naphthalene	<0.0100	U	0.0100		mg/Kg			08/10/23 12:23	1
sec-Butylbenzene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Styrene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Tetrachloroethene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Toluene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Trichloroethene	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1
Trichlorofluoromethane	<0.00500	U	0.00500		mg/Kg			08/10/23 12:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*56 - 150*		*08/10/23 12:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*68 - 152*		*08/10/23 12:23*	*1*
Dibromofluoromethane (Surr)	*97*		*53 - 142*		*08/10/23 12:23*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*08/10/23 12:23*	*1*

Lab Sample ID: LCSD 860-116525/4
Matrix: Solid
Analysis Batch: 116525

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,2-Dichloroethene			0.0500	0.05928		mg/Kg		119	72 - 131	22	25
cis-1,3-Dichloropropene			0.0500	0.06193		mg/Kg		124	74 - 135	23	25
Isopropylbenzene			0.0500	0.06495		mg/Kg		130	55 - 155	23	25

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-116525/4
Matrix: Solid
Analysis Batch: 116525

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m,p-Xylenes	0.0500	0.06233		mg/Kg		125	78 - 130	24	25
n-Butylbenzene	0.0500	0.06258		mg/Kg		125	82 - 130	19	25
N-Propylbenzene	0.0500	0.05620		mg/Kg		112	84 - 131	19	25
o-Xylene	0.0500	0.06054		mg/Kg		121	79 - 130	23	25
p-Cymene (p-Isopropyltoluene)	0.0500	0.06162		mg/Kg		123	84 - 130	19	25
tert-Butylbenzene	0.0500	0.06060		mg/Kg		121	83 - 132	19	25
trans-1,2-Dichloroethene	0.0500	0.05269		mg/Kg		105	63 - 130	19	25
trans-1,3-Dichloropropene	0.0500	0.05414		mg/Kg		108	73 - 130	20	25
Vinyl chloride	0.0500	0.04370		mg/Kg		87	60 - 130	5	25
1,1,1,2-Tetrachloroethane	0.0500	0.06817	*+	mg/Kg		136	81 - 130	22	25
1,1,1-Trichloroethane	0.0500	0.06440		mg/Kg		129	71 - 130	22	25
1,1,2,2-Tetrachloroethane	0.0500	0.05374		mg/Kg		107	75 - 133	9	25
1,1,2-Trichloroethane	0.0500	0.05862		mg/Kg		117	75 - 131	15	25
1,1-Dichloroethane	0.0500	0.05907	*1	mg/Kg		118	73 - 130	26	25
1,1-Dichloroethene	0.0500	0.05144		mg/Kg		103	68 - 130	17	25
1,1-Dichloropropene	0.0500	0.05624		mg/Kg		112	72 - 130	23	25
1,2,3-Trichlorobenzene	0.0500	0.06152		mg/Kg		123	75 - 131	13	25
1,2,3-Trichloropropane	0.0500	0.04976		mg/Kg		100	75 - 131	3	25
1,2,4-Trichlorobenzene	0.0500	0.06234		mg/Kg		125	79 - 130	17	25
1,2,4-Trimethylbenzene	0.0500	0.06131		mg/Kg		123	60 - 159	20	25
1,2-Dibromo-3-Chloropropane	0.0500	0.04688		mg/Kg		94	58 - 133	0	25
1,2-Dibromoethane	0.0500	0.05704		mg/Kg		114	73 - 130	11	25
1,2-Dichlorobenzene	0.0500	0.06016		mg/Kg		120	84 - 130	17	25
1,2-Dichloroethane	0.0500	0.05869		mg/Kg		117	70 - 130	20	25
1,2-Dichloropropane	0.0500	0.06000		mg/Kg		120	75 - 130	22	25
1,3,5-Trimethylbenzene	0.0500	0.05564		mg/Kg		111	61 - 160	19	25
1,3-Dichlorobenzene	0.0500	0.06022		mg/Kg		120	84 - 130	20	25
1,3-Dichloropropane	0.0500	0.05611		mg/Kg		112	82 - 131	15	25
1,4-Dichlorobenzene	0.0500	0.05747		mg/Kg		115	82 - 130	17	25
2,2-Dichloropropane	0.0500	0.06531		mg/Kg		131	67 - 137	20	25
2-Butanone	0.250	0.2338		mg/Kg		94	75 - 130	5	25
4-Chlorotoluene	0.0500	0.05718		mg/Kg		114	83 - 130	18	25
Benzene	0.0500	0.05684		mg/Kg		114	66 - 142	24	25
Bromobenzene	0.0500	0.05736		mg/Kg		115	75 - 130	18	25
Bromochloromethane	0.0500	0.05983		mg/Kg		120	71 - 130	17	25
Bromodichloromethane	0.0500	0.06774	*+	mg/Kg		135	78 - 130	25	25
Bromoform	0.0500	0.05522		mg/Kg		110	63 - 136	12	25
Bromomethane	0.0500	0.04436		mg/Kg		89	60 - 140	3	25
Carbon tetrachloride	0.0500	0.06587		mg/Kg		132	63 - 135	20	25
Chlorobenzene	0.0500	0.05867		mg/Kg		117	83 - 130	21	25
Chloroethane	0.0500	0.04536		mg/Kg		91	57 - 130	4	25
Chloroform	0.0500	0.05993		mg/Kg		120	74 - 130	21	25
Chloromethane	0.0500	0.04206		mg/Kg		84	58 - 130	3	25
Dibromochloromethane	0.0500	0.05755		mg/Kg		115	77 - 130	15	25
Dichlorodifluoromethane	0.0500	0.04669		mg/Kg		93	54 - 130	2	25
Ethylbenzene	0.0500	0.05970		mg/Kg		119	80 - 130	21	25
Hexachlorobutadiene	0.0500	0.06512		mg/Kg		130	77 - 130	19	25
MTBE	0.0500	0.05508		mg/Kg		110	64 - 148	14	25
Methylene Chloride	0.0500	0.05344		mg/Kg		107	57 - 134	22	25

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 860-116525/4
Matrix: Solid
Analysis Batch: 116525

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Naphthalene			0.0500	0.06042		mg/Kg		121	53 - 150	10	25
sec-Butylbenzene			0.0500	0.06197		mg/Kg		124	84 - 131	19	25
Styrene			0.0500	0.06186		mg/Kg		124	80 - 130	22	25
Tetrachloroethene			0.0500	0.05816		mg/Kg		116	79 - 130	22	25
Toluene			0.0500	0.05450		mg/Kg		109	74 - 130	22	25
Trichloroethene			0.0500	0.05993		mg/Kg		120	78 - 130	23	25
Trichlorofluoromethane			0.0500	0.05154		mg/Kg		103	71 - 148	8	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*56 - 150*
4-Bromofluorobenzene (Surr)	*97*		*68 - 152*
Dibromofluoromethane (Surr)	*104*		*53 - 142*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 860-116463/1-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
1,2-Dichlorobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
1,3-Dichlorobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
1,4-Dichlorobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4,5-Trichlorophenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4,6-Trichlorophenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4-Dichlorophenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4-Dimethylphenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4-Dinitrophenol	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,4-Dinitrotoluene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2,6-Dinitrotoluene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Chloronaphthalene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Chlorophenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Methylnaphthalene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Methylphenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Nitroaniline	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
2-Nitrophenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
3 & 4 Methylphenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
3,3'-Dichlorobenzidine	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
3-Nitroaniline	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4,6-Dinitro-2-methylphenol	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Bromophenyl phenyl ether	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Chloro-3-methylphenol	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Chloroaniline	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Chlorophenyl phenyl ether	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Nitroaniline	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
4-Nitrophenol	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Acenaphthene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 860-116463/1-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Aniline (Phenylamine, Aminobenzene)	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Anthracene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzo[a]anthracene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzo[a]pyrene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzo[b]fluoranthene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzo[g,h,i]perylene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzo[k]fluoranthene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Benzoic acid	<1.00	U	1.00		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Butyl benzyl phthalate	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Bis(2-chloroethoxy)methane	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Bis(2-chloroethyl)ether	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
bis (2-chloroisopropyl) ether	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Bis(2-ethylhexyl) phthalate	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Chrysene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Dibenz(a,h)anthracene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Dibenzofuran	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Diethyl phthalate	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Dimethyl phthalate	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Di-n-butyl phthalate	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Di-n-octyl phthalate	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Fluoranthene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Fluorene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Hexachlorobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Hexachlorobutadiene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Hexachlorocyclopentadiene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Hexachloroethane	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Indeno[1,2,3-cd]pyrene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Isophorone	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Naphthalene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Nitrobenzene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
N-Nitrosodi-n-propylamine	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
N-Nitrosodiphenylamine	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Pentachlorophenol	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Phenanthrene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Phenol	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Pyrene	<0.167	U	0.167		mg/Kg		08/09/23 15:49	08/10/23 11:06	1
Pyridine	<0.333	U	0.333		mg/Kg		08/09/23 15:49	08/10/23 11:06	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
1,2-Dichlorobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
1,3-Dichlorobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
1,4-Dichlorobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,4,5-Trichlorophenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,4,6-Trichlorophenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,4-Dichlorophenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,4-Dimethylphenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,4-Dinitrophenol	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 860-116463/1-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2,6-Dinitrotoluene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Chloronaphthalene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Chlorophenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Methylnaphthalene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Methylphenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Nitroaniline	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
2-Nitrophenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
3 & 4 Methylphenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
3,3'-Dichlorobenzidine	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
3-Nitroaniline	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
4,6-Dinitro-2-methylphenol	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Bromophenyl phenyl ether	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Chloro-3-methylphenol	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Chloroaniline	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Chlorophenyl phenyl ether	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Nitroaniline	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
4-Nitrophenol	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
Acenaphthene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Acenaphthylene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Aniline (Phenylamine, Aminobenzene)	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
Anthracene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzo[a]anthracene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzo[a]pyrene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzo[b]fluoranthene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzo[g,h,i]perylene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzo[k]fluoranthene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Benzoic acid	<1.00	U	1.00		mg/L		08/09/23 15:49	08/10/23 11:06	1
Butyl benzyl phthalate	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Bis(2-chloroethoxy)methane	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Bis(2-chloroethyl)ether	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
bis (2-chloroisopropyl) ether	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Bis(2-ethylhexyl) phthalate	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
Chrysene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Dibenz(a,h)anthracene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Dibenzofuran	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Diethyl phthalate	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Dimethyl phthalate	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Di-n-butyl phthalate	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Di-n-octyl phthalate	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Fluoranthene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Fluorene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Hexachlorobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Hexachlorobutadiene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Hexachlorocyclopentadiene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Hexachloroethane	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Indeno[1,2,3-cd]pyrene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Isophorone	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Naphthalene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 860-116463/1-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116463

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
N-Nitrosodi-n-propylamine	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
N-Nitrosodiphenylamine	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Pentachlorophenol	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
Phenanthrene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Phenol	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1
Pyrene	<0.167	U	0.167		mg/L		08/09/23 15:49	08/10/23 11:06	1
Pyridine	<0.333	U	0.333		mg/L		08/09/23 15:49	08/10/23 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*109*		*19 - 122*	*08/09/23 15:49*	*08/10/23 11:06*	*1*
2-Fluorobiphenyl (Surr)	*108*		*30 - 115*	*08/09/23 15:49*	*08/10/23 11:06*	*1*
2-Fluorophenol (Surr)	*101*		*25 - 121*	*08/09/23 15:49*	*08/10/23 11:06*	*1*
Nitrobenzene-d5 (Surr)	*110*		*23 - 129*	*08/09/23 15:49*	*08/10/23 11:06*	*1*
p-Terphenyl-d14 (Surr)	*117*		*18 - 137*	*08/09/23 15:49*	*08/10/23 11:06*	*1*
Phenol-d5 (Surr)	*105*		*24 - 113*	*08/09/23 15:49*	*08/10/23 11:06*	*1*

Lab Sample ID: LCS 860-116463/2-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	1.33	0.9328		mg/Kg		70	35 - 129
1,2-Dichlorobenzene	1.33	0.8643		mg/Kg		65	38 - 122
1,3-Dichlorobenzene	1.33	0.8232		mg/Kg		62	38 - 120
1,4-Dichlorobenzene	1.33	0.8442		mg/Kg		63	37 - 121
2,4,5-Trichlorophenol	1.33	1.097		mg/Kg		82	40 - 135
2,4,6-Trichlorophenol	1.33	1.076		mg/Kg		81	39 - 139
2,4-Dichlorophenol	1.33	1.006		mg/Kg		75	36 - 135
2,4-Dimethylphenol	1.33	1.166		mg/Kg		87	38 - 133
2,4-Dinitrophenol	1.33	0.7804		mg/Kg		59	19 - 131
2,4-Dinitrotoluene	1.33	1.066		mg/Kg		80	48 - 131
2,6-Dinitrotoluene	1.33	1.001		mg/Kg		75	42 - 136
2-Chloronaphthalene	1.33	1.077		mg/Kg		81	32 - 138
2-Chlorophenol	1.33	0.9678		mg/Kg		73	38 - 125
2-Methylnaphthalene	1.33	1.074		mg/Kg		81	36 - 126
2-Methylphenol	1.33	0.9458		mg/Kg		71	37 - 128
2-Nitroaniline	1.33	0.9971		mg/Kg		75	30 - 133
2-Nitrophenol	1.33	1.004		mg/Kg		75	33 - 142
3 & 4 Methylphenol	1.33	1.018		mg/Kg		76	38 - 126
3,3'-Dichlorobenzidine	1.33	0.9073		mg/Kg		68	35 - 134
3-Nitroaniline	1.33	0.9568		mg/Kg		72	41 - 135
4,6-Dinitro-2-methylphenol	1.33	1.145		mg/Kg		86	30 - 146
4-Bromophenyl phenyl ether	1.33	1.112		mg/Kg		83	37 - 140
4-Chloro-3-methylphenol	1.33	1.012		mg/Kg		76	40 - 134
4-Chloroaniline	1.33	0.8909		mg/Kg		67	34 - 124
4-Chlorophenyl phenyl ether	1.33	1.091		mg/Kg		82	41 - 131
4-Nitroaniline	1.33	0.9228		mg/Kg		69	46 - 132

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-116463/2-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitrophenol	1.33	0.6224		mg/Kg		47	21 - 152
Acenaphthene	1.33	1.023		mg/Kg		77	37 - 131
Acenaphthylene	1.33	1.027		mg/Kg		77	39 - 129
Aniline (Phenylamine, Aminobenzene)	1.33	0.9437		mg/Kg		71	33 - 117
Anthracene	1.33	1.058		mg/Kg		79	39 - 139
Benzo[a]anthracene	1.33	1.053		mg/Kg		79	44 - 135
Benzo[a]pyrene	1.33	1.116		mg/Kg		84	43 - 153
Benzo[b]fluoranthene	1.33	1.079		mg/Kg		81	40 - 153
Benzo[g,h,i]perylene	1.33	1.115		mg/Kg		84	40 - 153
Benzo[k]fluoranthene	1.33	1.162		mg/Kg		87	33 - 156
Benzoic acid	4.00	1.877		mg/Kg		47	31 - 165
Butyl benzyl phthalate	1.33	1.057		mg/Kg		79	43 - 145
Bis(2-chloroethoxy)methane	1.33	1.008		mg/Kg		76	30 - 129
Bis(2-chloroethyl)ether	1.33	0.9312		mg/Kg		70	33 - 127
bis (2-chloroisopropyl) ether	1.33	0.9459		mg/Kg		71	25 - 124
Bis(2-ethylhexyl) phthalate	1.33	1.061		mg/Kg		80	46 - 145
Chrysene	1.33	1.065		mg/Kg		80	42 - 135
Dibenz(a,h)anthracene	1.33	1.101		mg/Kg		83	41 - 155
Dibenzofuran	1.33	1.076		mg/Kg		81	39 - 132
Diethyl phthalate	1.33	1.006		mg/Kg		75	45 - 131
Dimethyl phthalate	1.33	0.9513		mg/Kg		71	43 - 132
Di-n-butyl phthalate	1.33	1.049		mg/Kg		79	43 - 142
Di-n-octyl phthalate	1.33	1.134		mg/Kg		85	34 - 166
Fluoranthene	1.33	1.084		mg/Kg		81	41 - 138
Fluorene	1.33	1.064		mg/Kg		80	41 - 131
Hexachlorobenzene	1.33	1.180		mg/Kg		88	36 - 142
Hexachlorobutadiene	1.33	0.9803		mg/Kg		74	35 - 129
Hexachlorocyclopentadiene	1.33	0.8911		mg/Kg		67	16 - 106
Hexachloroethane	1.33	0.8476		mg/Kg		64	36 - 121
Indeno[1,2,3-cd]pyrene	1.33	1.093		mg/Kg		82	39 - 154
Isophorone	1.33	0.9717		mg/Kg		73	36 - 128
Naphthalene	1.33	0.9712		mg/Kg		73	35 - 128
Nitrobenzene	1.33	0.9273		mg/Kg		70	32 - 129
N-Nitrosodi-n-propylamine	1.33	0.9428		mg/Kg		71	34 - 129
N-Nitrosodiphenylamine	1.33	1.165		mg/Kg		87	27 - 155
Pentachlorophenol	1.33	0.8871		mg/Kg		67	14 - 148
Phenanthrene	1.33	1.074		mg/Kg		81	37 - 139
Phenol	1.33	1.009		mg/Kg		76	34 - 127
Pyrene	1.33	1.108		mg/Kg		83	42 - 138
Pyridine	1.33	0.7710		mg/Kg		58	30 - 113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	1.33	0.9328		mg/L		70	35 - 129
1,2-Dichlorobenzene	1.33	0.8643		mg/L		65	38 - 122
1,3-Dichlorobenzene	1.33	0.8232		mg/L		62	38 - 120
1,4-Dichlorobenzene	1.33	0.8442		mg/L		63	37 - 121
2,4,5-Trichlorophenol	1.33	1.097		mg/L		82	40 - 135
2,4,6-Trichlorophenol	1.33	1.076		mg/L		81	39 - 139

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-116463/2-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dichlorophenol	1.33	1.006		mg/L		75	36 - 135
2,4-Dimethylphenol	1.33	1.166		mg/L		87	38 - 133
2,4-Dinitrophenol	1.33	0.7804		mg/L		59	19 - 131
2,4-Dinitrotoluene	1.33	1.066		mg/L		80	48 - 131
2,6-Dinitrotoluene	1.33	1.001		mg/L		75	42 - 136
2-Chloronaphthalene	1.33	1.077		mg/L		81	32 - 138
2-Chlorophenol	1.33	0.9678		mg/L		73	38 - 125
2-Methylnaphthalene	1.33	1.074		mg/L		81	36 - 126
2-Methylphenol	1.33	0.9458		mg/L		71	37 - 128
2-Nitroaniline	1.33	0.9971		mg/L		75	30 - 133
2-Nitrophenol	1.33	1.004		mg/L		75	33 - 142
3 & 4 Methylphenol	1.33	1.018		mg/L		76	38 - 126
3,3'-Dichlorobenzidine	1.33	0.9073		mg/L		68	35 - 134
3-Nitroaniline	1.33	0.9568		mg/L		72	41 - 135
4,6-Dinitro-2-methylphenol	1.33	1.145		mg/L		86	30 - 146
4-Bromophenyl phenyl ether	1.33	1.112		mg/L		83	37 - 140
4-Chloro-3-methylphenol	1.33	1.012		mg/L		76	40 - 134
4-Chloroaniline	1.33	0.8909		mg/L		67	34 - 124
4-Chlorophenyl phenyl ether	1.33	1.091		mg/L		82	41 - 131
4-Nitroaniline	1.33	0.9228		mg/L		69	46 - 132
4-Nitrophenol	1.33	0.6224		mg/L		47	21 - 152
Acenaphthene	1.33	1.023		mg/L		77	37 - 131
Acenaphthylene	1.33	1.027		mg/L		77	39 - 129
Aniline (Phenylamine, Aminobenzene)	1.33	0.9437		mg/L		71	33 - 117
Anthracene	1.33	1.058		mg/L		79	39 - 139
Benzo[a]anthracene	1.33	1.053		mg/L		79	44 - 135
Benzo[a]pyrene	1.33	1.116		mg/L		84	43 - 153
Benzo[b]fluoranthene	1.33	1.079		mg/L		81	40 - 153
Benzo[g,h,i]perylene	1.33	1.115		mg/L		84	40 - 153
Benzo[k]fluoranthene	1.33	1.162		mg/L		87	33 - 156
Benzoic acid	4.00	1.877		mg/L		47	31 - 165
Butyl benzyl phthalate	1.33	1.057		mg/L		79	43 - 145
Bis(2-chloroethoxy)methane	1.33	1.008		mg/L		76	30 - 129
Bis(2-chloroethyl)ether	1.33	0.9312		mg/L		70	33 - 127
bis (2-chloroisopropyl) ether	1.33	0.9459		mg/L		71	25 - 124
Bis(2-ethylhexyl) phthalate	1.33	1.061		mg/L		80	46 - 145
Chrysene	1.33	1.065		mg/L		80	42 - 135
Dibenz(a,h)anthracene	1.33	1.101		mg/L		83	41 - 155
Dibenzofuran	1.33	1.076		mg/L		81	39 - 132
Diethyl phthalate	1.33	1.006		mg/L		75	45 - 131
Dimethyl phthalate	1.33	0.9513		mg/L		71	43 - 132
Di-n-butyl phthalate	1.33	1.049		mg/L		79	43 - 142
Di-n-octyl phthalate	1.33	1.134		mg/L		85	34 - 166
Fluoranthene	1.33	1.084		mg/L		81	41 - 138
Fluorene	1.33	1.064		mg/L		80	41 - 131
Hexachlorobenzene	1.33	1.180		mg/L		88	36 - 142
Hexachlorobutadiene	1.33	0.9803		mg/L		74	35 - 129
Hexachlorocyclopentadiene	1.33	0.8911		mg/L		67	16 - 106

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 860-116463/2-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116463

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachloroethane			1.33	0.8476		mg/L		64	36 - 121		
Indeno[1,2,3-cd]pyrene			1.33	1.093		mg/L		82	39 - 154		
Isophorone			1.33	0.9717		mg/L		73	36 - 128		
Naphthalene			1.33	0.9712		mg/L		73	35 - 128		
Nitrobenzene			1.33	0.9273		mg/L		70	32 - 129		
N-Nitrosodi-n-propylamine			1.33	0.9428		mg/L		71	34 - 129		
N-Nitrosodiphenylamine			1.33	1.165		mg/L		87	27 - 155		
Pentachlorophenol			1.33	0.8871		mg/L		67	14 - 148		
Phenanthrene			1.33	1.074		mg/L		81	37 - 139		
Phenol			1.33	1.009		mg/L		76	34 - 127		
Pyrene			1.33	1.108		mg/L		83	42 - 138		
Pyridine			1.33	0.7710		mg/L		58	30 - 113		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*92*		*19 - 122*
2-Fluorobiphenyl (Surr)	*85*		*30 - 115*
2-Fluorophenol (Surr)	*72*		*25 - 121*
Nitrobenzene-d5 (Surr)	*74*		*23 - 129*
p-Terphenyl-d14 (Surr)	*82*		*18 - 137*
Phenol-d5 (Surr)	*79*		*24 - 113*

Lab Sample ID: LCSD 860-116463/3-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116463

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			1.33	0.7881		mg/Kg		59	35 - 129	17	30
1,2-Dichlorobenzene			1.33	0.7093		mg/Kg		53	38 - 122	20	30
1,3-Dichlorobenzene			1.33	0.6595		mg/Kg		49	38 - 120	22	30
1,4-Dichlorobenzene			1.33	0.6723		mg/Kg		50	37 - 121	23	30
2,4,5-Trichlorophenol			1.33	0.9141		mg/Kg		69	40 - 135	18	30
2,4,6-Trichlorophenol			1.33	0.8555		mg/Kg		64	39 - 139	23	30
2,4-Dichlorophenol			1.33	0.8689		mg/Kg		65	36 - 135	15	30
2,4-Dimethylphenol			1.33	0.9554		mg/Kg		72	38 - 133	20	30
2,4-Dinitrophenol			1.33	0.9251		mg/Kg		69	19 - 131	17	40
2,4-Dinitrotoluene			1.33	1.062		mg/Kg		80	48 - 131	0	30
2,6-Dinitrotoluene			1.33	0.8592		mg/Kg		64	42 - 136	15	30
2-Chloronaphthalene			1.33	0.7753	*1	mg/Kg		58	32 - 138	33	30
2-Chlorophenol			1.33	0.7762		mg/Kg		58	38 - 125	22	30
2-Methylnaphthalene			1.33	0.8333		mg/Kg		62	36 - 126	25	30
2-Methylphenol			1.33	0.7935		mg/Kg		60	37 - 128	18	30
2-Nitroaniline			1.33	0.9435		mg/Kg		71	30 - 133	6	40
2-Nitrophenol			1.33	0.8448		mg/Kg		63	33 - 142	17	30
3 & 4 Methylphenol			1.33	0.8333		mg/Kg		62	38 - 126	20	30
3,3'-Dichlorobenzidine			1.33	1.134		mg/Kg		85	35 - 134	22	40
3-Nitroaniline			1.33	0.9531		mg/Kg		71	41 - 135	0	40
4,6-Dinitro-2-methylphenol			1.33	1.079		mg/Kg		81	30 - 146	6	40
4-Bromophenyl phenyl ether			1.33	0.9855		mg/Kg		74	37 - 140	12	30

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-116463/3-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	1.33	0.8364		mg/Kg		63	40 - 134	19	30
4-Chloroaniline	1.33	0.7760		mg/Kg		58	34 - 124	14	40
4-Chlorophenyl phenyl ether	1.33	0.8475		mg/Kg		64	41 - 131	25	30
4-Nitroaniline	1.33	0.9265		mg/Kg		69	46 - 132	0	40
4-Nitrophenol	1.33	0.6962		mg/Kg		52	21 - 152	11	40
Acenaphthene	1.33	0.8526		mg/Kg		64	37 - 131	18	30
Acenaphthylene	1.33	0.8130		mg/Kg		61	39 - 129	23	30
Aniline (Phenylamine, Aminobenzene)	1.33	0.7424		mg/Kg		56	33 - 117	24	40
Anthracene	1.33	1.111		mg/Kg		83	39 - 139	5	30
Benzo[a]anthracene	1.33	1.227		mg/Kg		92	44 - 135	15	30
Benzo[a]pyrene	1.33	1.286		mg/Kg		96	43 - 153	14	30
Benzo[b]fluoranthene	1.33	1.259		mg/Kg		94	40 - 153	15	30
Benzo[g,h,i]perylene	1.33	1.324		mg/Kg		99	40 - 153	17	30
Benzo[k]fluoranthene	1.33	1.435		mg/Kg		108	33 - 156	21	30
Benzoic acid	4.00	1.610		mg/Kg		40	31 - 165	15	50
Butyl benzyl phthalate	1.33	1.306		mg/Kg		98	43 - 145	21	30
Bis(2-chloroethoxy)methane	1.33	0.7467		mg/Kg		56	30 - 129	30	30
Bis(2-chloroethyl)ether	1.33	0.7383		mg/Kg		55	33 - 127	23	30
bis (2-chloroisopropyl) ether	1.33	0.7812		mg/Kg		59	25 - 124	19	30
Bis(2-ethylhexyl) phthalate	1.33	1.345		mg/Kg		101	46 - 145	24	30
Chrysene	1.33	1.231		mg/Kg		92	42 - 135	14	30
Dibenz(a,h)anthracene	1.33	1.348		mg/Kg		101	41 - 155	20	30
Dibenzofuran	1.33	0.8383		mg/Kg		63	39 - 132	25	30
Diethyl phthalate	1.33	0.9347		mg/Kg		70	45 - 131	7	30
Dimethyl phthalate	1.33	0.8981		mg/Kg		67	43 - 132	6	30
Di-n-butyl phthalate	1.33	1.139		mg/Kg		85	43 - 142	8	30
Di-n-octyl phthalate	1.33	1.377		mg/Kg		103	34 - 166	19	30
Fluoranthene	1.33	1.093		mg/Kg		82	41 - 138	1	30
Fluorene	1.33	0.8516		mg/Kg		64	41 - 131	22	30
Hexachlorobenzene	1.33	1.026		mg/Kg		77	36 - 142	14	30
Hexachlorobutadiene	1.33	0.7826		mg/Kg		59	35 - 129	22	30
Hexachlorocyclopentadiene	1.33	0.6387	*1	mg/Kg		48	16 - 106	33	30
Hexachloroethane	1.33	0.6963		mg/Kg		52	36 - 121	20	30
Indeno[1,2,3-cd]pyrene	1.33	1.343		mg/Kg		101	39 - 154	21	30
Isophorone	1.33	0.7937		mg/Kg		60	36 - 128	20	30
Naphthalene	1.33	0.8015		mg/Kg		60	35 - 128	19	30
Nitrobenzene	1.33	0.8260		mg/Kg		62	32 - 129	12	30
N-Nitrosodi-n-propylamine	1.33	0.7794		mg/Kg		58	34 - 129	19	30
N-Nitrosodiphenylamine	1.33	0.9957		mg/Kg		75	27 - 155	16	30
Pentachlorophenol	1.33	1.014		mg/Kg		76	14 - 148	13	40
Phenanthrene	1.33	1.120		mg/Kg		84	37 - 139	4	30
Phenol	1.33	0.8035		mg/Kg		60	34 - 127	23	40
Pyrene	1.33	1.312		mg/Kg		98	42 - 138	17	30
Pyridine	1.33	0.6272		mg/Kg		47	30 - 113	21	40

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	1.33	0.7881		mg/L		59	35 - 129	17	30
1,2-Dichlorobenzene	1.33	0.7093		mg/L		53	38 - 122	20	30

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-116463/3-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichlorobenzene	1.33	0.6595		mg/L		49	38 - 120	22	30
1,4-Dichlorobenzene	1.33	0.6723		mg/L		50	37 - 121	23	30
2,4,5-Trichlorophenol	1.33	0.9141		mg/L		69	40 - 135	18	30
2,4,6-Trichlorophenol	1.33	0.8555		mg/L		64	39 - 139	23	30
2,4-Dichlorophenol	1.33	0.8689		mg/L		65	36 - 135	15	30
2,4-Dimethylphenol	1.33	0.9554		mg/L		72	38 - 133	20	30
2,4-Dinitrophenol	1.33	0.9251		mg/L		69	19 - 131	17	40
2,4-Dinitrotoluene	1.33	1.062		mg/L		80	48 - 131	0	30
2,6-Dinitrotoluene	1.33	0.8592		mg/L		64	42 - 136	15	30
2-Chloronaphthalene	1.33	0.7753	*1	mg/L		58	32 - 138	33	30
2-Chlorophenol	1.33	0.7762		mg/L		58	38 - 125	22	30
2-Methylnaphthalene	1.33	0.8333		mg/L		62	36 - 126	25	30
2-Methylphenol	1.33	0.7935		mg/L		60	37 - 128	18	30
2-Nitroaniline	1.33	0.9435		mg/L		71	30 - 133	6	40
2-Nitrophenol	1.33	0.8448		mg/L		63	33 - 142	17	30
3 & 4 Methylphenol	1.33	0.8333		mg/L		62	38 - 126	20	30
3,3'-Dichlorobenzidine	1.33	1.134		mg/L		85	35 - 134	22	40
3-Nitroaniline	1.33	0.9531		mg/L		71	41 - 135	0	40
4,6-Dinitro-2-methylphenol	1.33	1.079		mg/L		81	30 - 146	6	40
4-Bromophenyl phenyl ether	1.33	0.9855		mg/L		74	37 - 140	12	30
4-Chloro-3-methylphenol	1.33	0.8364		mg/L		63	40 - 134	19	30
4-Chloroaniline	1.33	0.7760		mg/L		58	34 - 124	14	40
4-Chlorophenyl phenyl ether	1.33	0.8475		mg/L		64	41 - 131	25	30
4-Nitroaniline	1.33	0.9265		mg/L		69	46 - 132	0	40
4-Nitrophenol	1.33	0.6962		mg/L		52	21 - 152	11	40
Acenaphthene	1.33	0.8526		mg/L		64	37 - 131	18	30
Acenaphthylene	1.33	0.8130		mg/L		61	39 - 129	23	30
Aniline (Phenylamine, Aminobenzene)	1.33	0.7424		mg/L		56	33 - 117	24	40
Anthracene	1.33	1.111		mg/L		83	39 - 139	5	30
Benzo[a]anthracene	1.33	1.227		mg/L		92	44 - 135	15	30
Benzo[a]pyrene	1.33	1.286		mg/L		96	43 - 153	14	30
Benzo[b]fluoranthene	1.33	1.259		mg/L		94	40 - 153	15	30
Benzo[g,h,i]perylene	1.33	1.324		mg/L		99	40 - 153	17	30
Benzo[k]fluoranthene	1.33	1.435		mg/L		108	33 - 156	21	30
Benzoic acid	4.00	1.610		mg/L		40	31 - 165	15	50
Butyl benzyl phthalate	1.33	1.306		mg/L		98	43 - 145	21	30
Bis(2-chloroethoxy)methane	1.33	0.7467		mg/L		56	30 - 129	30	30
Bis(2-chloroethyl)ether	1.33	0.7383		mg/L		55	33 - 127	23	30
bis (2-chloroisopropyl) ether	1.33	0.7812		mg/L		59	25 - 124	19	30
Bis(2-ethylhexyl) phthalate	1.33	1.345		mg/L		101	46 - 145	24	30
Chrysene	1.33	1.231		mg/L		92	42 - 135	14	30
Dibenz(a,h)anthracene	1.33	1.348		mg/L		101	41 - 155	20	30
Dibenzofuran	1.33	0.8383		mg/L		63	39 - 132	25	30
Diethyl phthalate	1.33	0.9347		mg/L		70	45 - 131	7	30
Dimethyl phthalate	1.33	0.8981		mg/L		67	43 - 132	6	30
Di-n-butyl phthalate	1.33	1.139		mg/L		85	43 - 142	8	30
Di-n-octyl phthalate	1.33	1.377		mg/L		103	34 - 166	19	30
Fluoranthene	1.33	1.093		mg/L		82	41 - 138	1	30

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 860-116463/3-A
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116463

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluorene			1.33	0.8516		mg/L		64	41 - 131	22	30
Hexachlorobenzene			1.33	1.026		mg/L		77	36 - 142	14	30
Hexachlorobutadiene			1.33	0.7826		mg/L		59	35 - 129	22	30
Hexachlorocyclopentadiene			1.33	0.6387	*1	mg/L		48	16 - 106	33	30
Hexachloroethane			1.33	0.6963		mg/L		52	36 - 121	20	30
Indeno[1,2,3-cd]pyrene			1.33	1.343		mg/L		101	39 - 154	21	30
Isophorone			1.33	0.7937		mg/L		60	36 - 128	20	30
Naphthalene			1.33	0.8015		mg/L		60	35 - 128	19	30
Nitrobenzene			1.33	0.8260		mg/L		62	32 - 129	12	30
N-Nitrosodi-n-propylamine			1.33	0.7794		mg/L		58	34 - 129	19	30
N-Nitrosodiphenylamine			1.33	0.9957		mg/L		75	27 - 155	16	30
Pentachlorophenol			1.33	1.014		mg/L		76	14 - 148	13	40
Phenanthrene			1.33	1.120		mg/L		84	37 - 139	4	30
Phenol			1.33	0.8035		mg/L		60	34 - 127	23	40
Pyrene			1.33	1.312		mg/L		98	42 - 138	17	30
Pyridine			1.33	0.6272		mg/L		47	30 - 113	21	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*88*		*19 - 122*
2-Fluorobiphenyl (Surr)	*65*		*30 - 115*
2-Fluorophenol (Surr)	*57*		*25 - 121*
Nitrobenzene-d5 (Surr)	*62*		*23 - 129*
p-Terphenyl-d14 (Surr)	*98*		*18 - 137*
Phenol-d5 (Surr)	*59*		*24 - 113*

Lab Sample ID: 870-19506-A-4-C MS
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	<0.166	U F2	1.33	0.6747		mg/Kg		51	35 - 129
1,2-Dichlorobenzene	<0.166	U F2	1.33	0.6635		mg/Kg		50	38 - 122
1,3-Dichlorobenzene	<0.166	U F2	1.33	0.6408		mg/Kg		48	38 - 120
1,4-Dichlorobenzene	<0.166	U F2	1.33	0.6736		mg/Kg		51	37 - 121
2,4,5-Trichlorophenol	<0.166	U	1.33	0.9770		mg/Kg		73	40 - 135
2,4,6-Trichlorophenol	<0.166	U F2	1.33	0.8704		mg/Kg		65	39 - 139
2,4-Dichlorophenol	<0.166	U F2	1.33	0.7087		mg/Kg		53	36 - 135
2,4-Dimethylphenol	<0.166	U F2	1.33	0.8257		mg/Kg		62	38 - 133
2,4-Dinitrophenol	<0.333	U	1.33	0.7474		mg/Kg		56	19 - 131
2,4-Dinitrotoluene	<0.166	U	1.33	0.9867		mg/Kg		74	48 - 131
2,6-Dinitrotoluene	<0.166	U	1.33	0.8761		mg/Kg		66	42 - 136
2-Chloronaphthalene	<0.166	U *1 F2	1.33	0.7526		mg/Kg		57	32 - 138
2-Chlorophenol	<0.166	U F2	1.33	0.6726		mg/Kg		51	38 - 125
2-Methylnaphthalene	<0.166	U F2	1.33	0.7726		mg/Kg		58	36 - 126
2-Methylphenol	<0.166	U F2	1.33	0.6047		mg/Kg		45	37 - 128
2-Nitroaniline	<0.333	U	1.33	0.9264		mg/Kg		70	30 - 133
2-Nitrophenol	<0.166	U F2	1.33	0.7257		mg/Kg		55	33 - 142
3 & 4 Methylphenol	<0.166	U F2	1.33	0.6137		mg/Kg		46	38 - 126

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 870-19506-A-4-C MS
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
3,3'-Dichlorobenzidine	<0.333	U	1.33	0.9757		mg/Kg		73	35 - 134
3-Nitroaniline	<0.333	U	1.33	0.8852		mg/Kg		67	41 - 135
4,6-Dinitro-2-methylphenol	<0.333	U	1.33	1.108		mg/Kg		83	30 - 146
4-Bromophenyl phenyl ether	<0.166	U	1.33	1.152		mg/Kg		87	37 - 140
4-Chloro-3-methylphenol	<0.166	U F2	1.33	0.8275		mg/Kg		62	40 - 134
4-Chloroaniline	<0.333	U	1.33	0.6455		mg/Kg		49	34 - 124
4-Chlorophenyl phenyl ether	<0.166	U	1.33	0.9633		mg/Kg		72	41 - 131
4-Nitroaniline	<0.333	U	1.33	0.9875		mg/Kg		74	46 - 132
4-Nitrophenol	<0.333	U	1.33	0.7331		mg/Kg		55	21 - 152
Acenaphthene	<0.166	U	1.33	0.8795		mg/Kg		66	37 - 131
Acenaphthylene	<0.166	U F2	1.33	0.8441		mg/Kg		63	39 - 129
Aniline (Phenylamine, Aminobenzene)	<0.333	U	1.33	0.6036		mg/Kg		45	33 - 117
Anthracene	<0.166	U	1.33	1.119		mg/Kg		84	39 - 139
Benzo[a]anthracene	<0.166	U	1.33	1.082		mg/Kg		81	44 - 135
Benzo[a]pyrene	<0.166	U	1.33	1.164		mg/Kg		87	43 - 153
Benzo[b]fluoranthene	<0.166	U	1.33	1.069		mg/Kg		80	40 - 153
Benzo[g,h,i]perylene	<0.166	U	1.33	1.173		mg/Kg		88	40 - 153
Benzo[k]fluoranthene	<0.166	U	1.33	1.249		mg/Kg		94	33 - 156
Benzoic acid	<0.998	U	3.99	3.380		mg/Kg		85	31 - 171
Butyl benzyl phthalate	<0.166	U	1.33	1.118		mg/Kg		84	43 - 145
Bis(2-chloroethoxy)methane	<0.166	U F2	1.33	0.6867		mg/Kg		52	30 - 129
Bis(2-chloroethyl)ether	<0.166	U F2	1.33	0.6411		mg/Kg		48	33 - 127
bis (2-chloroisopropyl) ether	<0.166	U F2	1.33	0.6427		mg/Kg		48	25 - 124
Bis(2-ethylhexyl) phthalate	<0.333	U	1.33	1.192		mg/Kg		90	46 - 145
Chrysene	<0.166	U	1.33	1.115		mg/Kg		84	42 - 135
Dibenz(a,h)anthracene	<0.166	U	1.33	1.126		mg/Kg		85	41 - 155
Dibenzofuran	<0.166	U	1.33	0.9184		mg/Kg		69	39 - 132
Diethyl phthalate	<0.166	U	1.33	0.9640		mg/Kg		72	45 - 131
Dimethyl phthalate	<0.166	U	1.33	0.8598		mg/Kg		65	43 - 132
Di-n-butyl phthalate	<0.166	U	1.33	1.156		mg/Kg		87	43 - 142
Di-n-octyl phthalate	<0.166	U	1.33	1.265		mg/Kg		95	34 - 166
Fluoranthene	<0.166	U	1.33	1.095		mg/Kg		82	41 - 138
Fluorene	<0.166	U	1.33	0.9241		mg/Kg		69	41 - 131
Hexachlorobenzene	<0.166	U	1.33	1.131		mg/Kg		85	36 - 142
Hexachlorobutadiene	<0.166	U F2	1.33	0.7523		mg/Kg		57	35 - 129
Hexachlorocyclopentadiene	<0.166	U *1 F2	1.33	0.5644		mg/Kg		42	16 - 106
Hexachloroethane	<0.166	U F2	1.33	0.6639		mg/Kg		50	36 - 121
Indeno[1,2,3-cd]pyrene	<0.166	U	1.33	1.121		mg/Kg		84	39 - 154
Isophorone	<0.166	U	1.33	0.7324		mg/Kg		55	36 - 128
Naphthalene	<0.166	U F2	1.33	0.7086		mg/Kg		53	35 - 128
Nitrobenzene	<0.166	U F2	1.33	0.7000		mg/Kg		53	32 - 129
N-Nitrosodi-n-propylamine	<0.166	U F2	1.33	0.6755		mg/Kg		51	34 - 129
N-Nitrosodiphenylamine	<0.166	U	1.33	1.068		mg/Kg		80	27 - 155
Pentachlorophenol	<0.333	U	1.33	0.9385		mg/Kg		71	14 - 148
Phenanthrene	<0.166	U	1.33	1.096		mg/Kg		82	37 - 139
Phenol	<0.333	U	1.33	0.6509		mg/Kg		49	34 - 127
Pyrene	<0.166	U	1.33	1.169		mg/Kg		88	42 - 138
Pyridine	<0.333	U	1.33	0.5664		mg/Kg		43	30 - 113

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	<0.166	U F2	1.33	0.6747		mg/L		51	35 - 129
1,2-Dichlorobenzene	<0.166	U F2	1.33	0.6635		mg/L		50	38 - 122
1,3-Dichlorobenzene	<0.166	U F2	1.33	0.6408		mg/L		48	38 - 120
1,4-Dichlorobenzene	<0.166	U F2	1.33	0.6736		mg/L		51	37 - 121
2,4,5-Trichlorophenol	<0.166	U	1.33	0.9770		mg/L		73	40 - 135
2,4,6-Trichlorophenol	<0.166	U F2	1.33	0.8704		mg/L		65	39 - 139
2,4-Dichlorophenol	<0.166	U F2	1.33	0.7087		mg/L		53	36 - 135
2,4-Dimethylphenol	<0.166	U F2	1.33	0.8257		mg/L		62	38 - 133
2,4-Dinitrophenol	<0.333	U	1.33	0.7474		mg/L		56	19 - 131
2,4-Dinitrotoluene	<0.166	U	1.33	0.9867		mg/L		74	48 - 131
2,6-Dinitrotoluene	<0.166	U	1.33	0.8761		mg/L		66	42 - 136
2-Chloronaphthalene	<0.166	U *1 F2	1.33	0.7526		mg/L		57	32 - 138
2-Chlorophenol	<0.166	U F2	1.33	0.6726		mg/L		51	38 - 125
2-Methylnaphthalene	<0.166	U F2	1.33	0.7726		mg/L		58	36 - 126
2-Methylphenol	<0.166	U F2	1.33	0.6047		mg/L		45	37 - 128
2-Nitroaniline	<0.333	U	1.33	0.9264		mg/L		70	30 - 133
2-Nitrophenol	<0.166	U F2	1.33	0.7257		mg/L		55	33 - 142
3 & 4 Methylphenol	<0.166	U F2	1.33	0.6137		mg/L		46	38 - 126
3,3'-Dichlorobenzidine	<0.333	U	1.33	0.9757		mg/L		73	35 - 134
3-Nitroaniline	<0.333	U	1.33	0.8852		mg/L		67	41 - 135
4,6-Dinitro-2-methylphenol	<0.333	U	1.33	1.108		mg/L		83	30 - 146
4-Bromophenyl phenyl ether	<0.166	U	1.33	1.152		mg/L		87	37 - 140
4-Chloro-3-methylphenol	<0.166	U F2	1.33	0.8275		mg/L		62	40 - 134
4-Chloroaniline	<0.333	U	1.33	0.6455		mg/L		49	34 - 124
4-Chlorophenyl phenyl ether	<0.166	U	1.33	0.9633		mg/L		72	41 - 131
4-Nitroaniline	<0.333	U	1.33	0.9875		mg/L		74	46 - 132
4-Nitrophenol	<0.333	U	1.33	0.7331		mg/L		55	21 - 152
Acenaphthene	<0.166	U	1.33	0.8795		mg/L		66	37 - 131
Acenaphthylene	<0.166	U F2	1.33	0.8441		mg/L		63	39 - 129
Aniline (Phenylamine, Aminobenzene)	<0.333	U	1.33	0.6036		mg/L		45	33 - 117
Anthracene	<0.166	U	1.33	1.119		mg/L		84	39 - 139
Benzo[a]anthracene	<0.166	U	1.33	1.082		mg/L		81	44 - 135
Benzo[a]pyrene	<0.166	U	1.33	1.164		mg/L		87	43 - 153
Benzo[b]fluoranthene	<0.166	U	1.33	1.069		mg/L		80	40 - 153
Benzo[g,h,i]perylene	<0.166	U	1.33	1.173		mg/L		88	40 - 153
Benzo[k]fluoranthene	<0.166	U	1.33	1.249		mg/L		94	33 - 156
Benzoic acid	<0.998	U	3.99	3.380		mg/L		85	31 - 171
Butyl benzyl phthalate	<0.166	U	1.33	1.118		mg/L		84	43 - 145
Bis(2-chloroethoxy)methane	<0.166	U F2	1.33	0.6867		mg/L		52	30 - 129
Bis(2-chloroethyl)ether	<0.166	U F2	1.33	0.6411		mg/L		48	33 - 127
bis (2-chloroisopropyl) ether	<0.166	U F2	1.33	0.6427		mg/L		48	25 - 124
Bis(2-ethylhexyl) phthalate	<0.333	U	1.33	1.192		mg/L		90	46 - 145
Chrysene	<0.166	U	1.33	1.115		mg/L		84	42 - 135
Dibenz(a,h)anthracene	<0.166	U	1.33	1.126		mg/L		85	41 - 155
Dibenzofuran	<0.166	U	1.33	0.9184		mg/L		69	39 - 132
Diethyl phthalate	<0.166	U	1.33	0.9640		mg/L		72	45 - 131
Dimethyl phthalate	<0.166	U	1.33	0.8598		mg/L		65	43 - 132
Di-n-butyl phthalate	<0.166	U	1.33	1.156		mg/L		87	43 - 142
Di-n-octyl phthalate	<0.166	U	1.33	1.265		mg/L		95	34 - 166
Fluoranthene	<0.166	U	1.33	1.095		mg/L		82	41 - 138
Fluorene	<0.166	U	1.33	0.9241		mg/L		69	41 - 131

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 870-19506-A-4-C MS
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	<0.166	U	1.33	1.131		mg/L		85	36 - 142
Hexachlorobutadiene	<0.166	U F2	1.33	0.7523		mg/L		57	35 - 129
Hexachlorocyclopentadiene	<0.166	U *1 F2	1.33	0.5644		mg/L		42	16 - 106
Hexachloroethane	<0.166	U F2	1.33	0.6639		mg/L		50	36 - 121
Indeno[1,2,3-cd]pyrene	<0.166	U	1.33	1.121		mg/L		84	39 - 154
Isophorone	<0.166	U	1.33	0.7324		mg/L		55	36 - 128
Naphthalene	<0.166	U F2	1.33	0.7086		mg/L		53	35 - 128
Nitrobenzene	<0.166	U F2	1.33	0.7000		mg/L		53	32 - 129
N-Nitrosodi-n-propylamine	<0.166	U F2	1.33	0.6755		mg/L		51	34 - 129
N-Nitrosodiphenylamine	<0.166	U	1.33	1.068		mg/L		80	27 - 155
Pentachlorophenol	<0.333	U	1.33	0.9385		mg/L		71	14 - 148
Phenanthrene	<0.166	U	1.33	1.096		mg/L		82	37 - 139
Phenol	<0.333	U	1.33	0.6509		mg/L		49	34 - 127
Pyrene	<0.166	U	1.33	1.169		mg/L		88	42 - 138
Pyridine	<0.333	U	1.33	0.5664		mg/L		43	30 - 113

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*19 - 122*
2-Fluorobiphenyl (Surr)	*62*		*30 - 115*
2-Fluorophenol (Surr)	*49*		*25 - 121*
Nitrobenzene-d5 (Surr)	*55*		*23 - 129*
p-Terphenyl-d14 (Surr)	*84*		*18 - 137*
Phenol-d5 (Surr)	*51*		*24 - 113*

Lab Sample ID: 870-19506-A-4-D MSD
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	<0.166	U F2	1.33	1.030	F2	mg/Kg		77	35 - 129	42	30
1,2-Dichlorobenzene	<0.166	U F2	1.33	0.9433	F2	mg/Kg		71	38 - 122	35	30
1,3-Dichlorobenzene	<0.166	U F2	1.33	0.9587	F2	mg/Kg		72	38 - 120	40	30
1,4-Dichlorobenzene	<0.166	U F2	1.33	0.9649	F2	mg/Kg		73	37 - 121	36	30
2,4,5-Trichlorophenol	<0.166	U	1.33	1.272		mg/Kg		96	40 - 135	26	30
2,4,6-Trichlorophenol	<0.166	U F2	1.33	1.236	F2	mg/Kg		93	39 - 139	35	30
2,4-Dichlorophenol	<0.166	U F2	1.33	1.020	F2	mg/Kg		77	36 - 135	36	30
2,4-Dimethylphenol	<0.166	U F2	1.33	1.149	F2	mg/Kg		86	38 - 133	33	30
2,4-Dinitrophenol	<0.333	U	1.33	0.8805		mg/Kg		66	19 - 131	16	40
2,4-Dinitrotoluene	<0.166	U	1.33	1.236		mg/Kg		93	48 - 131	22	30
2,6-Dinitrotoluene	<0.166	U	1.33	1.100		mg/Kg		83	42 - 136	23	30
2-Chloronaphthalene	<0.166	U *1 F2	1.33	1.168	F2	mg/Kg		88	32 - 138	43	30
2-Chlorophenol	<0.166	U F2	1.33	0.9559	F2	mg/Kg		72	38 - 125	35	30
2-Methylnaphthalene	<0.166	U F2	1.33	1.127	F2	mg/Kg		85	36 - 126	37	30
2-Methylphenol	<0.166	U F2	1.33	0.9141	F2	mg/Kg		69	37 - 128	41	30
2-Nitroaniline	<0.333	U	1.33	1.204		mg/Kg		91	30 - 133	26	40
2-Nitrophenol	<0.166	U F2	1.33	1.056	F2	mg/Kg		79	33 - 142	37	30
3 & 4 Methylphenol	<0.166	U F2	1.33	0.9708	F2	mg/Kg		73	38 - 126	45	30
3,3'-Dichlorobenzidine	<0.333	U	1.33	1.051		mg/Kg		79	35 - 134	7	40

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 870-19506-A-4-D MSD
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3-Nitroaniline	<0.333	U	1.33	1.115		mg/Kg		84	41 - 135	23	40
4,6-Dinitro-2-methylphenol	<0.333	U	1.33	1.129		mg/Kg		85	30 - 146	2	40
4-Bromophenyl phenyl ether	<0.166	U	1.33	1.297		mg/Kg		98	37 - 140	12	30
4-Chloro-3-methylphenol	<0.166	U F2	1.33	1.146	F2	mg/Kg		86	40 - 134	32	30
4-Chloroaniline	<0.333	U	1.33	0.8897		mg/Kg		67	34 - 124	32	40
4-Chlorophenyl phenyl ether	<0.166	U	1.33	1.238		mg/Kg		93	41 - 131	25	30
4-Nitroaniline	<0.333	U	1.33	1.149		mg/Kg		86	46 - 132	15	40
4-Nitrophenol	<0.333	U	1.33	0.8151		mg/Kg		61	21 - 152	11	40
Acenaphthene	<0.166	U	1.33	1.182		mg/Kg		89	37 - 131	29	30
Acenaphthylene	<0.166	U F2	1.33	1.159	F2	mg/Kg		87	39 - 129	31	30
Aniline (Phenylamine, Aminobenzene)	<0.333	U	1.33	0.8214		mg/Kg		62	33 - 117	31	40
Anthracene	<0.166	U	1.33	1.300		mg/Kg		98	39 - 139	15	30
Benzo[a]anthracene	<0.166	U	1.33	1.232		mg/Kg		93	44 - 135	13	30
Benzo[a]pyrene	<0.166	U	1.33	1.447		mg/Kg		109	43 - 153	22	30
Benzo[b]fluoranthene	<0.166	U	1.33	1.241		mg/Kg		93	40 - 153	15	30
Benzo[g,h,i]perylene	<0.166	U	1.33	1.422		mg/Kg		107	40 - 153	19	30
Benzo[k]fluoranthene	<0.166	U	1.33	1.488		mg/Kg		112	33 - 156	17	30
Benzoic acid	<0.998	U	3.99	3.533		mg/Kg		89	31 - 171	4	50
Butyl benzyl phthalate	<0.166	U	1.33	1.290		mg/Kg		97	43 - 145	14	30
Bis(2-chloroethoxy)methane	<0.166	U F2	1.33	0.9715	F2	mg/Kg		73	30 - 129	34	30
Bis(2-chloroethyl)ether	<0.166	U F2	1.33	0.9232	F2	mg/Kg		69	33 - 127	36	30
bis (2-chloroisopropyl) ether	<0.166	U F2	1.33	0.9676	F2	mg/Kg		73	25 - 124	40	30
Bis(2-ethylhexyl) phthalate	<0.333	U	1.33	1.283		mg/Kg		97	46 - 145	7	30
Chrysene	<0.166	U	1.33	1.236		mg/Kg		93	42 - 135	10	30
Dibenz(a,h)anthracene	<0.166	U	1.33	1.337		mg/Kg		101	41 - 155	17	30
Dibenzofuran	<0.166	U	1.33	1.131		mg/Kg		85	39 - 132	21	30
Diethyl phthalate	<0.166	U	1.33	1.220		mg/Kg		92	45 - 131	23	30
Dimethyl phthalate	<0.166	U	1.33	1.134		mg/Kg		85	43 - 132	28	30
Di-n-butyl phthalate	<0.166	U	1.33	1.228		mg/Kg		92	43 - 142	6	30
Di-n-octyl phthalate	<0.166	U	1.33	1.427		mg/Kg		107	34 - 166	12	30
Fluoranthene	<0.166	U	1.33	1.198		mg/Kg		90	41 - 138	9	30
Fluorene	<0.166	U	1.33	1.182		mg/Kg		89	41 - 131	25	30
Hexachlorobenzene	<0.166	U	1.33	1.238		mg/Kg		93	36 - 142	9	30
Hexachlorobutadiene	<0.166	U F2	1.33	1.117	F2	mg/Kg		84	35 - 129	39	30
Hexachlorocyclopentadiene	<0.166	U *1 F2	1.33	0.8230	F2	mg/Kg		62	16 - 106	37	30
Hexachloroethane	<0.166	U F2	1.33	0.9404	F2	mg/Kg		71	36 - 121	34	30
Indeno[1,2,3-cd]pyrene	<0.166	U	1.33	1.343		mg/Kg		101	39 - 154	18	30
Isophorone	<0.166	U	1.33	0.9707		mg/Kg		73	36 - 128	28	30
Naphthalene	<0.166	U F2	1.33	1.032	F2	mg/Kg		78	35 - 128	37	30
Nitrobenzene	<0.166	U F2	1.33	1.015	F2	mg/Kg		76	32 - 129	37	30
N-Nitrosodi-n-propylamine	<0.166	U F2	1.33	0.9634	F2	mg/Kg		72	34 - 129	35	30
N-Nitrosodiphenylamine	<0.166	U	1.33	1.198		mg/Kg		90	27 - 155	11	30
Pentachlorophenol	<0.333	U	1.33	1.120		mg/Kg		84	14 - 148	18	40
Phenanthrene	<0.166	U	1.33	1.291		mg/Kg		97	37 - 139	16	30
Phenol	<0.333	U	1.33	0.9344		mg/Kg		70	34 - 127	36	40
Pyrene	<0.166	U	1.33	1.310		mg/Kg		99	42 - 138	11	30
Pyridine	<0.333	U	1.33	0.6143		mg/Kg		46	30 - 113	8	40

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	<0.166	U F2	1.33	1.030	F2	mg/L		77	35 - 129	42	30
1,2-Dichlorobenzene	<0.166	U F2	1.33	0.9433	F2	mg/L		71	38 - 122	35	30
1,3-Dichlorobenzene	<0.166	U F2	1.33	0.9587	F2	mg/L		72	38 - 120	40	30
1,4-Dichlorobenzene	<0.166	U F2	1.33	0.9649	F2	mg/L		73	37 - 121	36	30
2,4,5-Trichlorophenol	<0.166	U	1.33	1.272		mg/L		96	40 - 135	26	30
2,4,6-Trichlorophenol	<0.166	U F2	1.33	1.236	F2	mg/L		93	39 - 139	35	30
2,4-Dichlorophenol	<0.166	U F2	1.33	1.020	F2	mg/L		77	36 - 135	36	30
2,4-Dimethylphenol	<0.166	U F2	1.33	1.149	F2	mg/L		86	38 - 133	33	30
2,4-Dinitrophenol	<0.333	U	1.33	0.8805		mg/L		66	19 - 131	16	40
2,4-Dinitrotoluene	<0.166	U	1.33	1.236		mg/L		93	48 - 131	22	30
2,6-Dinitrotoluene	<0.166	U	1.33	1.100		mg/L		83	42 - 136	23	30
2-Chloronaphthalene	<0.166	U *1 F2	1.33	1.168	F2	mg/L		88	32 - 138	43	30
2-Chlorophenol	<0.166	U F2	1.33	0.9559	F2	mg/L		72	38 - 125	35	30
2-Methylnaphthalene	<0.166	U F2	1.33	1.127	F2	mg/L		85	36 - 126	37	30
2-Methylphenol	<0.166	U F2	1.33	0.9141	F2	mg/L		69	37 - 128	41	30
2-Nitroaniline	<0.333	U	1.33	1.204		mg/L		91	30 - 133	26	40
2-Nitrophenol	<0.166	U F2	1.33	1.056	F2	mg/L		79	33 - 142	37	30
3 & 4 Methylphenol	<0.166	U F2	1.33	0.9708	F2	mg/L		73	38 - 126	45	30
3,3'-Dichlorobenzidine	<0.333	U	1.33	1.051		mg/L		79	35 - 134	7	40
3-Nitroaniline	<0.333	U	1.33	1.115		mg/L		84	41 - 135	23	40
4,6-Dinitro-2-methylphenol	<0.333	U	1.33	1.129		mg/L		85	30 - 146	2	40
4-Bromophenyl phenyl ether	<0.166	U	1.33	1.297		mg/L		98	37 - 140	12	30
4-Chloro-3-methylphenol	<0.166	U F2	1.33	1.146	F2	mg/L		86	40 - 134	32	30
4-Chloroaniline	<0.333	U	1.33	0.8897		mg/L		67	34 - 124	32	40
4-Chlorophenyl phenyl ether	<0.166	U	1.33	1.238		mg/L		93	41 - 131	25	30
4-Nitroaniline	<0.333	U	1.33	1.149		mg/L		86	46 - 132	15	40
4-Nitrophenol	<0.333	U	1.33	0.8151		mg/L		61	21 - 152	11	40
Acenaphthene	<0.166	U	1.33	1.182		mg/L		89	37 - 131	29	30
Acenaphthylene	<0.166	U F2	1.33	1.159	F2	mg/L		87	39 - 129	31	30
Aniline (Phenylamine, Aminobenzene)	<0.333	U	1.33	0.8214		mg/L		62	33 - 117	31	40
Anthracene	<0.166	U	1.33	1.300		mg/L		98	39 - 139	15	30
Benzo[a]anthracene	<0.166	U	1.33	1.232		mg/L		93	44 - 135	13	30
Benzo[a]pyrene	<0.166	U	1.33	1.447		mg/L		109	43 - 153	22	30
Benzo[b]fluoranthene	<0.166	U	1.33	1.241		mg/L		93	40 - 153	15	30
Benzo[g,h,i]perylene	<0.166	U	1.33	1.422		mg/L		107	40 - 153	19	30
Benzo[k]fluoranthene	<0.166	U	1.33	1.488		mg/L		112	33 - 156	17	30
Benzoic acid	<0.998	U	3.99	3.533		mg/L		89	31 - 171	4	50
Butyl benzyl phthalate	<0.166	U	1.33	1.290		mg/L		97	43 - 145	14	30
Bis(2-chloroethoxy)methane	<0.166	U F2	1.33	0.9715	F2	mg/L		73	30 - 129	34	30
Bis(2-chloroethyl)ether	<0.166	U F2	1.33	0.9232	F2	mg/L		69	33 - 127	36	30
bis (2-chloroisopropyl) ether	<0.166	U F2	1.33	0.9676	F2	mg/L		73	25 - 124	40	30
Bis(2-ethylhexyl) phthalate	<0.333	U	1.33	1.283		mg/L		97	46 - 145	7	30
Chrysene	<0.166	U	1.33	1.236		mg/L		93	42 - 135	10	30
Dibenz(a,h)anthracene	<0.166	U	1.33	1.337		mg/L		101	41 - 155	17	30
Dibenzofuran	<0.166	U	1.33	1.131		mg/L		85	39 - 132	21	30
Diethyl phthalate	<0.166	U	1.33	1.220		mg/L		92	45 - 131	23	30
Dimethyl phthalate	<0.166	U	1.33	1.134		mg/L		85	43 - 132	28	30
Di-n-butyl phthalate	<0.166	U	1.33	1.228		mg/L		92	43 - 142	6	30
Di-n-octyl phthalate	<0.166	U	1.33	1.427		mg/L		107	34 - 166	12	30
Fluoranthene	<0.166	U	1.33	1.198		mg/L		90	41 - 138	9	30
Fluorene	<0.166	U	1.33	1.182		mg/L		89	41 - 131	25	30

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 870-19506-A-4-D MSD
Matrix: Solid
Analysis Batch: 116533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116463

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorobenzene	<0.166	U	1.33	1.238		mg/L		93	36 - 142	9	30
Hexachlorobutadiene	<0.166	U F2	1.33	1.117	F2	mg/L		84	35 - 129	39	30
Hexachlorocyclopentadiene	<0.166	U *1 F2	1.33	0.8230	F2	mg/L		62	16 - 106	37	30
Hexachloroethane	<0.166	U F2	1.33	0.9404	F2	mg/L		71	36 - 121	34	30
Indeno[1,2,3-cd]pyrene	<0.166	U	1.33	1.343		mg/L		101	39 - 154	18	30
Isophorone	<0.166	U	1.33	0.9707		mg/L		73	36 - 128	28	30
Naphthalene	<0.166	U F2	1.33	1.032	F2	mg/L		78	35 - 128	37	30
Nitrobenzene	<0.166	U F2	1.33	1.015	F2	mg/L		76	32 - 129	37	30
N-Nitrosodi-n-propylamine	<0.166	U F2	1.33	0.9634	F2	mg/L		72	34 - 129	35	30
N-Nitrosodiphenylamine	<0.166	U	1.33	1.198		mg/L		90	27 - 155	11	30
Pentachlorophenol	<0.333	U	1.33	1.120		mg/L		84	14 - 148	18	40
Phenanthrene	<0.166	U	1.33	1.291		mg/L		97	37 - 139	16	30
Phenol	<0.333	U	1.33	0.9344		mg/L		70	34 - 127	36	40
Pyrene	<0.166	U	1.33	1.310		mg/L		99	42 - 138	11	30
Pyridine	<0.333	U	1.33	0.6143		mg/L		46	30 - 113	8	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*102*		*19 - 122*
2-Fluorobiphenyl (Surr)	*91*		*30 - 115*
2-Fluorophenol (Surr)	*75*		*25 - 121*
Nitrobenzene-d5 (Surr)	*78*		*23 - 129*
p-Terphenyl-d14 (Surr)	*106*		*18 - 137*
Phenol-d5 (Surr)	*74*		*24 - 113*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 860-116633/1-A
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.392	U	0.392		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Antimony	<0.392	U	0.392		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Barium	<0.392	U	0.392		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Cadmium	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Chromium	<0.392	U	0.392		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Beryllium	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Lead	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Nickel	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Selenium	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1
Silver	<0.196	U	0.196		mg/Kg		08/10/23 12:46	08/10/23 23:43	1

Lab Sample ID: LCS 860-116633/2-B
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116633

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	10.0	9.498		mg/Kg		95	80 - 120
Antimony	10.0	9.394		mg/Kg		94	80 - 120

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 860-116633/2-B
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116633

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Barium			10.0	9.334		mg/Kg		93	80 - 120		
Cadmium			10.0	9.583		mg/Kg		96	80 - 120		
Chromium			10.0	9.686		mg/Kg		97	80 - 120		
Beryllium			10.0	9.312		mg/Kg		93	80 - 120		
Lead			10.0	9.413		mg/Kg		94	80 - 120		
Nickel			10.0	9.577		mg/Kg		96	80 - 120		
Selenium			10.0	9.433		mg/Kg		94	80 - 120		
Silver			5.00	5.013		mg/Kg		100	80 - 120		

Lab Sample ID: LCSD 860-116633/3-B
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116633

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic			10.0	9.404		mg/Kg		94	80 - 120	1	20
Antimony			10.0	9.661		mg/Kg		97	80 - 120	3	20
Barium			10.0	9.399		mg/Kg		94	80 - 120	1	20
Cadmium			10.0	9.476		mg/Kg		95	80 - 120	1	20
Chromium			10.0	9.549		mg/Kg		95	80 - 120	1	20
Beryllium			10.0	9.403		mg/Kg		94	80 - 120	1	20
Lead			10.0	9.455		mg/Kg		95	80 - 120	0	20
Nickel			10.0	9.462		mg/Kg		95	80 - 120	1	20
Selenium			10.0	9.347		mg/Kg		93	80 - 120	1	20
Silver			5.00	4.982		mg/Kg		100	80 - 120	1	20

Lab Sample ID: 870-19348-A-1-G MS ^10
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 116633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	12.2	F1	8.62	18.43	F1	mg/Kg		72	75 - 125		
Antimony	<3.85	U F1	8.62	8.571	F1	mg/Kg		70	75 - 125		
Barium	104		8.62	101.5	4	mg/Kg		-24	75 - 125		
Cadmium	<1.92	U	8.62	7.581		mg/Kg		85	75 - 125		
Chromium	40.3		8.62	23.75	4	mg/Kg		-192	75 - 125		
Beryllium	<1.92	U	8.62	7.902		mg/Kg		83	75 - 125		
Lead	517		8.62	526.0	4	mg/Kg		109	75 - 125		
Nickel	20.7	F1	8.62	25.81	F1	mg/Kg		59	75 - 125		
Selenium	<1.92	U	8.62	7.634		mg/Kg		81	75 - 125		
Silver	<1.92	U	4.31	4.054		mg/Kg		94	75 - 125		

Lab Sample ID: 870-19348-A-1-H MSD ^10
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	12.2	F1	9.43	19.73		mg/Kg		79	75 - 125	7	20
Antimony	<3.85	U F1	9.43	8.783	F1	mg/Kg		66	75 - 125	2	20
Barium	104		9.43	108.2	4	mg/Kg		49	75 - 125	6	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 870-19348-A-1-H MSD ^10
Matrix: Solid
Analysis Batch: 116865

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	<1.92	U	9.43	8.356		mg/Kg		86	75 - 125	10	20
Chromium	40.3		9.43	25.71	4	mg/Kg		-155	75 - 125	8	20
Beryllium	<1.92	U	9.43	8.454		mg/Kg		81	75 - 125	7	20
Lead	517		9.43	554.3	4	mg/Kg		401	75 - 125	5	20
Nickel	20.7	F1	9.43	27.25	F1	mg/Kg		69	75 - 125	5	20
Selenium	<1.92	U	9.43	8.764		mg/Kg		86	75 - 125	14	20
Silver	<1.92	U	4.72	4.315		mg/Kg		91	75 - 125	6	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 860-116513/10-A
Matrix: Solid
Analysis Batch: 116724

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 116513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0200	U	0.0200		mg/Kg		08/09/23 23:47	08/10/23 18:09	1

Lab Sample ID: LCS 860-116513/11-A
Matrix: Solid
Analysis Batch: 116724

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 116513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	0.2066		mg/Kg		103	80 - 120

Lab Sample ID: LCSD 860-116513/12-A
Matrix: Solid
Analysis Batch: 116724

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116513

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.200	0.2134		mg/Kg		107	80 - 120	3	20

Lab Sample ID: 830-4067-A-1-B MS
Matrix: Solid
Analysis Batch: 116724

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 116513

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.0200	U	0.196	0.2086		mg/Kg		98	75 - 125

Lab Sample ID: 830-4067-A-1-C MSD
Matrix: Solid
Analysis Batch: 116724

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 116513

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.0200	U	0.196	0.2154		mg/Kg		101	75 - 125	3	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: 870-19409-A-1 DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116485

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Flashpoint	>180		>180.0		Degrees F		NC	25

Method: 9012 - Cyanide, Reactive

Lab Sample ID: MB 860-116417/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116636 — **Prep Batch: 116417**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.0250	U	0.0250		mg/Kg		08/09/23 11:55	08/10/23 12:04	1

Lab Sample ID: LCS 860-116417/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116636 — **Prep Batch: 116417**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Reactive	20.0	2.873		mg/Kg		14	5 - 40

Lab Sample ID: LCSD 860-116417/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116636 — **Prep Batch: 116417**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Reactive	20.0	2.835		mg/Kg		14	5 - 40	1	20

Lab Sample ID: 860-54884-A-1-D DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116636 — **Prep Batch: 116417**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Reactive	<0.0248	U	<0.0248	U	mg/Kg		NC	20

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 860-116412/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116458 — **Prep Batch: 116412**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<6.25	U	6.25		mg/Kg		08/09/23 11:55	08/09/23 15:25	1

Lab Sample ID: LCS 860-116412/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 116458 — **Prep Batch: 116412**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide, Reactive	50.0	36.07		mg/Kg		72	30 - 120

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method: 9034 - Sulfide, Reactive (Continued)

Lab Sample ID: LCSD 860-116412/3-A
Matrix: Solid
Analysis Batch: 116458

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 116412

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide, Reactive			50.0	36.07		mg/Kg		72	30 - 120	0	20

Lab Sample ID: 860-54884-A-1-B DU
Matrix: Solid
Analysis Batch: 116458

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 116412

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfide, Reactive	<6.19	U		<6.19	U	mg/Kg				NC	20

Method: 9045D - pH

Lab Sample ID: 860-54767-A-1-E DU
Matrix: Solid
Analysis Batch: 116719

Client Sample ID: Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	9.8			9.8		SU				0.1	20
Temperature	22.0			22.0		Deg. C				0	25

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

GC/MS VOA

Prep Batch: 116457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	5035	
880-31770-1 MS	WC-1	Total/NA	Solid	5035	

Analysis Batch: 116525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8260C	116457
MB 860-116525/9	Method Blank	Total/NA	Solid	8260C	
LCSD 860-116525/4	Lab Control Sample Dup	Total/NA	Solid	8260C	
880-31770-1 MS	WC-1	Total/NA	Solid	8260C	116457

GC/MS Semi VOA

Prep Batch: 116463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	3550C	
MB 860-116463/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 860-116463/2-A	Lab Control Sample	Total/NA	Solid	3550C	
LCSD 860-116463/3-A	Lab Control Sample Dup	Total/NA	Solid	3550C	
870-19506-A-4-C MS	Matrix Spike	Total/NA	Solid	3550C	
870-19506-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3550C	

Analysis Batch: 116533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	8270D	116463
MB 860-116463/1-A	Method Blank	Total/NA	Solid	8270D	116463
LCS 860-116463/2-A	Lab Control Sample	Total/NA	Solid	8270D	116463
LCSD 860-116463/3-A	Lab Control Sample Dup	Total/NA	Solid	8270D	116463
870-19506-A-4-C MS	Matrix Spike	Total/NA	Solid	8270D	116463
870-19506-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	116463

Metals

Prep Batch: 116513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	7471B	
MB 860-116513/10-A	Method Blank	Total/NA	Solid	7471B	
LCS 860-116513/11-A	Lab Control Sample	Total/NA	Solid	7471B	
LCSD 860-116513/12-A	Lab Control Sample Dup	Total/NA	Solid	7471B	
830-4067-A-1-B MS	Matrix Spike	Total/NA	Solid	7471B	
830-4067-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	

Prep Batch: 116633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	3051A	
MB 860-116633/1-A	Method Blank	Total/NA	Solid	3051A	
LCS 860-116633/2-B	Lab Control Sample	Total/NA	Solid	3051A	
LCSD 860-116633/3-B	Lab Control Sample Dup	Total/NA	Solid	3051A	
870-19348-A-1-G MS ^10	Matrix Spike	Total/NA	Solid	3051A	
870-19348-A-1-H MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	3051A	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Metals

Analysis Batch: 116724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	7471B	116513
MB 860-116513/10-A	Method Blank	Total/NA	Solid	7471B	116513
LCS 860-116513/11-A	Lab Control Sample	Total/NA	Solid	7471B	116513
LCSD 860-116513/12-A	Lab Control Sample Dup	Total/NA	Solid	7471B	116513
830-4067-A-1-B MS	Matrix Spike	Total/NA	Solid	7471B	116513
830-4067-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	116513

Analysis Batch: 116865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	6020A	116633
MB 860-116633/1-A	Method Blank	Total/NA	Solid	6020A	116633
LCS 860-116633/2-B	Lab Control Sample	Total/NA	Solid	6020A	116633
LCSD 860-116633/3-B	Lab Control Sample Dup	Total/NA	Solid	6020A	116633
870-19348-A-1-G MS ^10	Matrix Spike	Total/NA	Solid	6020A	116633
870-19348-A-1-H MSD ^10	Matrix Spike Duplicate	Total/NA	Solid	6020A	116633

General Chemistry

Prep Batch: 116412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	7.3.4	
MB 860-116412/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 860-116412/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	
LCSD 860-116412/3-A	Lab Control Sample Dup	Total/NA	Solid	7.3.4	
860-54884-A-1-B DU	Duplicate	Total/NA	Solid	7.3.4	

Prep Batch: 116417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	7.3.3	
MB 860-116417/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 860-116417/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	
LCSD 860-116417/3-A	Lab Control Sample Dup	Total/NA	Solid	7.3.3	
860-54884-A-1-D DU	Duplicate	Total/NA	Solid	7.3.3	

Analysis Batch: 116458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	9034	116412
MB 860-116412/1-A	Method Blank	Total/NA	Solid	9034	116412
LCS 860-116412/2-A	Lab Control Sample	Total/NA	Solid	9034	116412
LCSD 860-116412/3-A	Lab Control Sample Dup	Total/NA	Solid	9034	116412
860-54884-A-1-B DU	Duplicate	Total/NA	Solid	9034	116412

Analysis Batch: 116485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	1010	
LCS 860-116485/1	Lab Control Sample	Total/NA	Solid	1010	
870-19409-A-1 DU	Duplicate	Total/NA	Solid	1010	

Analysis Batch: 116636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Total/NA	Solid	9012	116417

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

General Chemistry (Continued)

Analysis Batch: 116636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-116417/1-A	Method Blank	Total/NA	Solid	9012	116417
LCS 860-116417/2-A	Lab Control Sample	Total/NA	Solid	9012	116417
LCSD 860-116417/3-A	Lab Control Sample Dup	Total/NA	Solid	9012	116417
860-54884-A-1-D DU	Duplicate	Total/NA	Solid	9012	116417

Leach Batch: 116693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Soluble	Solid	DI Leach	
860-54767-A-1-E DU	Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 116719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-31770-1	WC-1	Soluble	Solid	9045D	116693
860-54767-A-1-E DU	Duplicate	Soluble	Solid	9045D	116693

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-31770-2
Project/Site: CTB 127-Dauntless
SDG: 1688

Client Sample ID: WC-1
Lab Sample ID: 880-31770-1

Date Collected: 08/07/23 00:00
Matrix: Solid

Date Received: 08/07/23 17:04

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	116457	08/09/23 15:11	MTMG	EET HOU
Total/NA	Analysis	8260C		50	5 mL	5 mL	116525	08/10/23 13:05	MTMG	EET HOU
Total/NA	Prep	3550C			30.06 g	1 mL	116463	08/09/23 15:49	TH	EET HOU
Total/NA	Analysis	8270D		10	1 mL	1 mL	116533	08/10/23 12:25	LPL	EET HOU
Total/NA	Prep	3051A			.53 g	50 mL	116633	08/10/23 12:46	PB	EET HOU
Total/NA	Analysis	6020A		10			116865	08/11/23 00:05	SHZ	EET HOU
Total/NA	Prep	7471B			.58 g	50 mL	116513	08/09/23 23:47	AGR	EET HOU
Total/NA	Analysis	7471B		1			116724	08/10/23 18:46	SHZ	EET HOU
Total/NA	Analysis	1010		1			116485	08/09/23 17:13	JM	EET HOU
Total/NA	Prep	7.3.3			10 g	50 mL	116417	08/09/23 16:59	JM	EET HOU
Total/NA	Analysis	9012		1	10 mL	10 mL	116636	08/10/23 12:28	AA	EET HOU
Total/NA	Prep	7.3.4			10 g	50 mL	116412	08/09/23 16:57	JM	EET HOU
Total/NA	Analysis	9034		1	40 mL	50 mL	116458	08/09/23 16:58	SCI	EET HOU
Soluble	Leach	DI Leach			20.00 g	20 mL	116693	08/10/23 16:48	TL	EET HOU
Soluble	Analysis	9045D		1	20.00 g	20 mL	116719	08/10/23 18:31	TL	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Job ID: 880-31770-2
Project/Site: CTB 127-Dauntless
SDG: 1688

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Florida	NELAP	E871002	06-30-24
Louisiana (All)	NELAP	03054	06-30-24
Oklahoma	State	1306	08-31-23
Texas	NELAP	T104704215-23-50	06-30-24
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET HOU
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET HOU
6020A	Metals (ICP/MS)	SW846	EET HOU
7471B	Mercury (CVAA)	SW846	EET HOU
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	EET HOU
9012	Cyanide, Reactive	SW846	EET HOU
9034	Sulfide, Reactive	SW846	EET HOU
9045D	pH	SW846	EET HOU
3051A	Preparation, Metals, Microwave Assisted	SW846	EET HOU
3550C	Ultrasonic Extraction	SW846	EET HOU
5035	Closed System Purge and Trap	SW846	EET HOU
7.3.3	Cyanide, Reactive	SW846	EET HOU
7.3.4	Sulfide, Reactive	SW846	EET HOU
7471B	Preparation, Mercury	SW846	EET HOU
DI Leach	Deionized Water Leaching Procedure	ASTM	EET HOU

Protocol References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127-Dauntless

Job ID: 880-31770-2
SDG: 1688

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-31770-1	WC-1	Solid	08/07/23 00:00	08/07/23 17:04

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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

V 880-31770 Chain of Custody

www.xenco.com Page _____ of _____

Project Manager	Tom Carlson	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-894-6385	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:

Project Name	CTB 127 - Dauntless	Turn Around	☐ Routine ☑ Rush
Project Number	1688	Due Date	24 HOURS
Project Location		TAT starts the day received by the lab if received by 4 30pm	
Sampler's Name			
PO #			

SAMPLE RECEIPT				
Temp Blank	Yes No	Wet Ice	Yes No	
Samples Received Intact:	Yes No	Thermometer ID	IR9	
Cooler Custody Seals	Yes No N/A	Correction Factor	-.3	
Sample Custody Seals	Yes No N/A	Temperature Reading	10.3	
Total Containers.		Corrected Temperature	10.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	BTEX 8021	VOC	SEMI VOC	RCRA 11 Metals	RCI	% Moisture
WC-1	S	8/7/2023		0 - 0 5	Comp	6		X	X	X	X	X	X	X

Preservative Codes

None NO, DI Water H_2O, Cool Cool, MeOH Me, HCL HC, HNO_3 HN, H_2S0_4 H_2, NaOH Na, H_3PO_4 HP, $NaHSO_4$ NABIS, $Na_2S_2O_3$ $NaSO_3$, 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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

Notice Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1			2		8-7-23 5:04 PM
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Teel, Brianna	Carrier Tracking No(s):	COC No: 880-7605.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Brianna.Teel@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP Texas		Job #: 880-31770-2
Address: 4145 Greenbriar Dr	Due Date Requested: 8/10/2023			
City: Stafford	TAT Requested (days):			
State, Zip: TX, 77477				
Phone: 281-240-4200(Tel)	PO #:			
Email:	WO #:			
Project Name: CTB 127-Dauntless	Project #: 88000480			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012_ReactiveCN/7.3.3 Cyanide, Reactive	9034_Reactive/7.3.4 Sulfide, Reactive	1010/ Flashpoint	9045D/DI_LEACH_NP pH	6020A/3051A RCRA 11	7471B/7471B_Prep Mercury	8270D/3580A Full List SVOCs	8260C/5035FP_Calc Full List VOCs	Total Number of Containers	Special Instructions/Note:
			Preservation Code:													
WC-1 (880-31770-1)	8/7/23	Central		Solid			X	X	X	X	X	X	X	X	4	

Hold-338
2.6
2.3
3.3
3.0

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If al requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I II, III, IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 05/09/23 10:31	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-31770-2
SDG Number: 1688

Login Number: 31770
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	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-31770-2
SDG Number: 1688

Login Number: 31770
List Number: 2
Creator: Pena, Jesiel

List Source: Eurofins Houston
List Creation: 08/09/23 12:21 PM

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

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/16/2023 11:39:17 AM

JOB DESCRIPTION

CTB 127
SDG NUMBER 1688

JOB NUMBER

880-32031-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

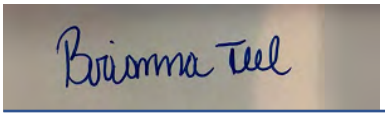
Eurofins Midland

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
8/16/2023 11:39:17 AM

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

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Qualifiers

GC Semi VOA

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

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: CTB 127

Job ID: 880-32031-1
SDG: 1688

Job ID: 880-32031-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-32031-1

Receipt
The samples were received on 8/14/2023 4:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-21 (880-32031-21) and (880-32031-A-21-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-7 (880-32031-33). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-60233 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-60233/5).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-60245 and analytical batch 880-60226 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-32031-A-1-B MS). 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: CS-5 (880-32031-5), CS-6 (880-32031-6), CS-8 (880-32031-8) and CS-10 (880-32031-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-11 (880-32031-11), CS-12 (880-32031-12), CS-14 (880-32031-14) and CS-15 (880-32031-15). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: CS-20 (880-32031-20). 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: (CCV 880-60226/20), (CCV 880-60226/31) and (CCV 880-60226/5). 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.

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-1
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 11:04	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 11:04	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 11:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*08/15/23 09:12*	*08/15/23 11:04*	*1*
o-Terphenyl	*113*		*70 - 130*	*08/15/23 09:12*	*08/15/23 11:04*	*1*

Client Sample ID: CS-2
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 12:11	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 12:11	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:11*	*1*
o-Terphenyl	*102*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:11*	*1*

Client Sample ID: CS-3
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/15/23 09:12	08/15/23 12:33	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/15/23 09:12	08/15/23 12:33	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/15/23 09:12	08/15/23 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:33*	*1*
o-Terphenyl	*110*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:33*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-4

Lab Sample ID: 880-32031-4
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 12:56	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 12:56	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:56*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/15/23 09:12*	*08/15/23 12:56*	*1*

Client Sample ID: CS-5

Lab Sample ID: 880-32031-5
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:18	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:18	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 13:18*	*1*
o-Terphenyl	*119*		*70 - 130*	*08/15/23 09:12*	*08/15/23 13:18*	*1*

Client Sample ID: CS-6

Lab Sample ID: 880-32031-6
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:40	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:40	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 13:40*	*1*
o-Terphenyl	*120*		*70 - 130*	*08/15/23 09:12*	*08/15/23 13:40*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-7

Lab Sample ID: 880-32031-7
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		08/15/23 09:12	08/15/23 14:02	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/15/23 09:12	08/15/23 14:02	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/15/23 09:12	08/15/23 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*08/15/23 09:12*	*08/15/23 14:02*	*1*
o-Terphenyl	*110*		*70 - 130*	*08/15/23 09:12*	*08/15/23 14:02*	*1*

Client Sample ID: CS-8

Lab Sample ID: 880-32031-8
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:24	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:24	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 14:24*	*1*
o-Terphenyl	*115*		*70 - 130*	*08/15/23 09:12*	*08/15/23 14:24*	*1*

Client Sample ID: CS-9

Lab Sample ID: 880-32031-9
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:46	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:46	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*08/15/23 09:12*	*08/15/23 14:46*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/15/23 09:12*	*08/15/23 14:46*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-10

Lab Sample ID: 880-32031-10
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 15:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 15:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*150*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 15:07*	*1*
o-Terphenyl	*130*		*70 - 130*	*08/15/23 09:12*	*08/15/23 15:07*	*1*

Client Sample ID: CS-11

Lab Sample ID: 880-32031-11
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 15:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 15:51	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 15:51*	*1*
o-Terphenyl	*124*		*70 - 130*	*08/15/23 09:12*	*08/15/23 15:51*	*1*

Client Sample ID: CS-12

Lab Sample ID: 880-32031-12
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 16:13	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 16:13	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 16:13*	*1*
o-Terphenyl	*118*		*70 - 130*	*08/15/23 09:12*	*08/15/23 16:13*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-13

Lab Sample ID: 880-32031-13
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/15/23 09:12	08/15/23 16:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/15/23 09:12	08/15/23 16:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/15/23 09:12	08/15/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*08/15/23 09:12*	*08/15/23 16:35*	*1*
o-Terphenyl	*107*		*70 - 130*	*08/15/23 09:12*	*08/15/23 16:35*	*1*

Client Sample ID: CS-14

Lab Sample ID: 880-32031-14
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/15/23 09:12	08/15/23 16:57	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/15/23 09:12	08/15/23 16:57	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/15/23 09:12	08/15/23 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 16:57*	*1*
o-Terphenyl	*119*		*70 - 130*	*08/15/23 09:12*	*08/15/23 16:57*	*1*

Client Sample ID: CS-15

Lab Sample ID: 880-32031-15
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 17:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 17:19	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/15/23 09:12	08/15/23 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 17:19*	*1*
o-Terphenyl	*121*		*70 - 130*	*08/15/23 09:12*	*08/15/23 17:19*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-16

Lab Sample ID: 880-32031-16
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 17:41	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 17:41	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/15/23 09:12	08/15/23 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*08/15/23 09:12*	*08/15/23 17:41*	*1*
o-Terphenyl	*114*		*70 - 130*	*08/15/23 09:12*	*08/15/23 17:41*	*1*

Client Sample ID: CS-17

Lab Sample ID: 880-32031-17
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 18:04	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 18:04	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/15/23 09:12	08/15/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:04*	*1*
o-Terphenyl	*102*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:04*	*1*

Client Sample ID: CS-18

Lab Sample ID: 880-32031-18
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 18:27	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 18:27	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/15/23 09:12	08/15/23 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:27*	*1*
o-Terphenyl	*103*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:27*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-19

Lab Sample ID: 880-32031-19
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 18:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 18:49	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/15/23 09:12	08/15/23 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:49*	*1*
o-Terphenyl	*111*		*70 - 130*	*08/15/23 09:12*	*08/15/23 18:49*	*1*

Client Sample ID: CS-20

Lab Sample ID: 880-32031-20
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 19:12	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 19:12	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:12	08/15/23 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*08/15/23 09:12*	*08/15/23 19:12*	*1*
o-Terphenyl	*126*		*70 - 130*	*08/15/23 09:12*	*08/15/23 19:12*	*1*

Client Sample ID: CS-21

Lab Sample ID: 880-32031-21
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		08/15/23 09:19	08/15/23 11:14	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		08/15/23 09:19	08/15/23 11:14	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		08/15/23 09:19	08/15/23 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 11:14*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*08/15/23 09:19*	*08/15/23 11:14*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-22

Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-22
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 12:22	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 12:22	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*08/15/23 09:19*	*08/15/23 12:22*	*1*
o-Terphenyl	*71*		*70 - 130*	*08/15/23 09:19*	*08/15/23 12:22*	*1*

Client Sample ID: CS-23

Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-23
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 12:44	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 12:44	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*08/15/23 09:19*	*08/15/23 12:44*	*1*
o-Terphenyl	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 12:44*	*1*

Client Sample ID: P-8

Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-24
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/15/23 09:19	08/15/23 13:07	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/15/23 09:19	08/15/23 13:07	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/15/23 09:19	08/15/23 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:07*	*1*
o-Terphenyl	*70*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:07*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: P-9

Lab Sample ID: 880-32031-25
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 13:29	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 13:29	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:29*	*1*
o-Terphenyl	*71*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:29*	*1*

Client Sample ID: P-10

Lab Sample ID: 880-32031-26
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 13:53	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 13:53	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:53*	*1*
o-Terphenyl	*73*		*70 - 130*	*08/15/23 09:19*	*08/15/23 13:53*	*1*

Client Sample ID: SW-1

Lab Sample ID: 880-32031-27
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 14:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 14:16	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 14:16*	*1*
o-Terphenyl	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 14:16*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: SW-2

Lab Sample ID: 880-32031-28
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 14:39	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 14:39	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/15/23 09:19	08/15/23 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*08/15/23 09:19*	*08/15/23 14:39*	*1*
o-Terphenyl	*75*		*70 - 130*	*08/15/23 09:19*	*08/15/23 14:39*	*1*

Client Sample ID: SW-3

Lab Sample ID: 880-32031-29
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 15:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 15:02	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/15/23 09:19	08/15/23 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*08/15/23 09:19*	*08/15/23 15:02*	*1*
o-Terphenyl	*73*		*70 - 130*	*08/15/23 09:19*	*08/15/23 15:02*	*1*

Client Sample ID: SW-4

Lab Sample ID: 880-32031-30
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 15:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 15:25*	*1*
o-Terphenyl	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 15:25*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: SW-5

Lab Sample ID: 880-32031-31
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 16:16	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 16:16	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/15/23 09:19	08/15/23 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*08/15/23 09:19*	*08/15/23 16:16*	*1*
o-Terphenyl	*76*		*70 - 130*	*08/15/23 09:19*	*08/15/23 16:16*	*1*

Client Sample ID: SW-6

Lab Sample ID: 880-32031-32
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 17:05	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 17:05	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/15/23 09:19	08/15/23 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*08/15/23 09:19*	*08/15/23 17:05*	*1*
o-Terphenyl	*75*		*70 - 130*	*08/15/23 09:19*	*08/15/23 17:05*	*1*

Client Sample ID: SW-7

Lab Sample ID: 880-32031-33
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		08/15/23 09:19	08/15/23 17:28	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		08/15/23 09:19	08/15/23 17:28	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		08/15/23 09:19	08/15/23 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*08/15/23 09:19*	*08/15/23 17:28*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*08/15/23 09:19*	*08/15/23 17:28*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: SW-8

Lab Sample ID: 880-32031-34
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 17:50	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 17:50	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/15/23 09:19	08/15/23 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*08/15/23 09:19*	*08/15/23 17:50*	*1*
o-Terphenyl	*86*		*70 - 130*	*08/15/23 09:19*	*08/15/23 17:50*	*1*

Client Sample ID: SW-9

Lab Sample ID: 880-32031-35
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/16/23 11:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 18:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 18:13	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/15/23 09:19	08/15/23 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*08/15/23 09:19*	*08/15/23 18:13*	*1*
o-Terphenyl	*71*		*70 - 130*	*08/15/23 09:19*	*08/15/23 18:13*	*1*

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-32031-1	CS-1	128	113										
880-32031-1 MS	CS-1	134 S1+	106										
880-32031-1 MSD	CS-1	122	98										
880-32031-2	CS-2	118	102										
880-32031-3	CS-3	125	110										
880-32031-4	CS-4	126	111										
880-32031-5	CS-5	137 S1+	119										
880-32031-6	CS-6	139 S1+	120										
880-32031-7	CS-7	125	110										
880-32031-8	CS-8	131 S1+	115										
880-32031-9	CS-9	128	111										
880-32031-10	CS-10	150 S1+	130										
880-32031-11	CS-11	142 S1+	124										
880-32031-12	CS-12	131 S1+	118										
880-32031-13	CS-13	123	107										
880-32031-14	CS-14	138 S1+	119										
880-32031-15	CS-15	135 S1+	121										
880-32031-16	CS-16	129	114										
880-32031-17	CS-17	118	102										
880-32031-18	CS-18	119	103										
880-32031-19	CS-19	129	111										
880-32031-20	CS-20	147 S1+	126										
880-32031-21	CS-21	72	69 S1-										
880-32031-21 MS	CS-21	82	64 S1-										
880-32031-21 MSD	CS-21	96	79										
880-32031-22	CS-22	71	71										
880-32031-23	CS-23	74	72										
880-32031-24	P-8	70	70										
880-32031-25	P-9	71	71										
880-32031-26	P-10	74	73										
880-32031-27	SW-1	72	72										
880-32031-28	SW-2	73	75										
880-32031-29	SW-3	73	73										
880-32031-30	SW-4	72	72										
880-32031-31	SW-5	76	76										
880-32031-32	SW-6	75	75										
880-32031-33	SW-7	70	69 S1-										
880-32031-34	SW-8	85	86										
880-32031-35	SW-9	72	71										
LCS 880-60245/2-A	Lab Control Sample	128	122										
LCS 880-60248/2-A	Lab Control Sample	95	87										
LCSD 880-60245/3-A	Lab Control Sample Dup	128	115										
LCSD 880-60248/3-A	Lab Control Sample Dup	87	80										
MB 880-60245/1-A	Method Blank	137 S1+	129										
MB 880-60248/1-A	Method Blank	80	81										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

Eurofins Midland

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

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

Lab Sample ID: MB 880-60245/1-A
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60245

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		08/15/23 08:00	08/15/23 08:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/15/23 08:00	08/15/23 08:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/15/23 08:00	08/15/23 08:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*08/15/23 08:00*	*08/15/23 08:28*	*1*
o-Terphenyl	*129*		*70 - 130*	*08/15/23 08:00*	*08/15/23 08:28*	*1*

Lab Sample ID: LCS 880-60245/2-A
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60245

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1053		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1019		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*122*		*70 - 130*

Lab Sample ID: LCSD 880-60245/3-A
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60245

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	993.7		mg/Kg		99	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	887.6		mg/Kg		89	70 - 130	14	20

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

Lab Sample ID: 880-32031-1 MS
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 60245

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	993	1061		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.3	U	993	1281		mg/Kg		129	70 - 130		

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

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

Lab Sample ID: 880-32031-1 MS
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 60245

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	134	S1+	70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: 880-32031-1 MSD
Matrix: Solid
Analysis Batch: 60226

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 60245

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	993	903.7		mg/Kg		89	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<50.3	U	993	1188		mg/Kg		120	70 - 130	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: MB 880-60248/1-A
Matrix: Solid
Analysis Batch: 60233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60248

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		08/15/23 08:00	08/15/23 08:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/15/23 08:00	08/15/23 08:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/15/23 08:00	08/15/23 08:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	08/15/23 08:00	08/15/23 08:28	1
o-Terphenyl	81		70 - 130	08/15/23 08:00	08/15/23 08:28	1

Lab Sample ID: LCS 880-60248/2-A
Matrix: Solid
Analysis Batch: 60233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60248

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	877.7		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	833.7		mg/Kg		83	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	87		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

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

Lab Sample ID: LCSD 880-60248/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 60233 — **Prep Batch: 60248**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	800.9		mg/Kg		80	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	800.6		mg/Kg		80	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: 880-32031-21 MS — **Client Sample ID: CS-21**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 60233 — **Prep Batch: 60248**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	998	766.0		mg/Kg		74	70 - 130
Diesel Range Organics (Over C10-C28)	<50.2	U	998	723.2		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*82*		*70 - 130*
o-Terphenyl	*64*	*S1-*	*70 - 130*

Lab Sample ID: 880-32031-21 MSD — **Client Sample ID: CS-21**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 60233 — **Prep Batch: 60248**

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	<50.2	U	998	896.2		mg/Kg		87	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<50.2	U	998	884.2		mg/Kg		86	70 - 130	20	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*96*		*70 - 130*
o-Terphenyl	*79*		*70 - 130*

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

GC Semi VOA

Analysis Batch: 60226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-1	CS-1	Total/NA	Solid	8015B NM	60245
880-32031-2	CS-2	Total/NA	Solid	8015B NM	60245
880-32031-3	CS-3	Total/NA	Solid	8015B NM	60245
880-32031-4	CS-4	Total/NA	Solid	8015B NM	60245
880-32031-5	CS-5	Total/NA	Solid	8015B NM	60245
880-32031-6	CS-6	Total/NA	Solid	8015B NM	60245
880-32031-7	CS-7	Total/NA	Solid	8015B NM	60245
880-32031-8	CS-8	Total/NA	Solid	8015B NM	60245
880-32031-9	CS-9	Total/NA	Solid	8015B NM	60245
880-32031-10	CS-10	Total/NA	Solid	8015B NM	60245
880-32031-11	CS-11	Total/NA	Solid	8015B NM	60245
880-32031-12	CS-12	Total/NA	Solid	8015B NM	60245
880-32031-13	CS-13	Total/NA	Solid	8015B NM	60245
880-32031-14	CS-14	Total/NA	Solid	8015B NM	60245
880-32031-15	CS-15	Total/NA	Solid	8015B NM	60245
880-32031-16	CS-16	Total/NA	Solid	8015B NM	60245
880-32031-17	CS-17	Total/NA	Solid	8015B NM	60245
880-32031-18	CS-18	Total/NA	Solid	8015B NM	60245
880-32031-19	CS-19	Total/NA	Solid	8015B NM	60245
880-32031-20	CS-20	Total/NA	Solid	8015B NM	60245
MB 880-60245/1-A	Method Blank	Total/NA	Solid	8015B NM	60245
LCS 880-60245/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	60245
LCSD 880-60245/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	60245
880-32031-1 MS	CS-1	Total/NA	Solid	8015B NM	60245
880-32031-1 MSD	CS-1	Total/NA	Solid	8015B NM	60245

Analysis Batch: 60233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-21	CS-21	Total/NA	Solid	8015B NM	60248
880-32031-22	CS-22	Total/NA	Solid	8015B NM	60248
880-32031-23	CS-23	Total/NA	Solid	8015B NM	60248
880-32031-24	P-8	Total/NA	Solid	8015B NM	60248
880-32031-25	P-9	Total/NA	Solid	8015B NM	60248
880-32031-26	P-10	Total/NA	Solid	8015B NM	60248
880-32031-27	SW-1	Total/NA	Solid	8015B NM	60248
880-32031-28	SW-2	Total/NA	Solid	8015B NM	60248
880-32031-29	SW-3	Total/NA	Solid	8015B NM	60248
880-32031-30	SW-4	Total/NA	Solid	8015B NM	60248
880-32031-31	SW-5	Total/NA	Solid	8015B NM	60248
880-32031-32	SW-6	Total/NA	Solid	8015B NM	60248
880-32031-33	SW-7	Total/NA	Solid	8015B NM	60248
880-32031-34	SW-8	Total/NA	Solid	8015B NM	60248
880-32031-35	SW-9	Total/NA	Solid	8015B NM	60248
MB 880-60248/1-A	Method Blank	Total/NA	Solid	8015B NM	60248
LCS 880-60248/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	60248
LCSD 880-60248/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	60248
880-32031-21 MS	CS-21	Total/NA	Solid	8015B NM	60248
880-32031-21 MSD	CS-21	Total/NA	Solid	8015B NM	60248

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

GC Semi VOA

Prep Batch: 60245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-1	CS-1	Total/NA	Solid	8015NM Prep	
880-32031-2	CS-2	Total/NA	Solid	8015NM Prep	
880-32031-3	CS-3	Total/NA	Solid	8015NM Prep	
880-32031-4	CS-4	Total/NA	Solid	8015NM Prep	
880-32031-5	CS-5	Total/NA	Solid	8015NM Prep	
880-32031-6	CS-6	Total/NA	Solid	8015NM Prep	
880-32031-7	CS-7	Total/NA	Solid	8015NM Prep	
880-32031-8	CS-8	Total/NA	Solid	8015NM Prep	
880-32031-9	CS-9	Total/NA	Solid	8015NM Prep	
880-32031-10	CS-10	Total/NA	Solid	8015NM Prep	
880-32031-11	CS-11	Total/NA	Solid	8015NM Prep	
880-32031-12	CS-12	Total/NA	Solid	8015NM Prep	
880-32031-13	CS-13	Total/NA	Solid	8015NM Prep	
880-32031-14	CS-14	Total/NA	Solid	8015NM Prep	
880-32031-15	CS-15	Total/NA	Solid	8015NM Prep	
880-32031-16	CS-16	Total/NA	Solid	8015NM Prep	
880-32031-17	CS-17	Total/NA	Solid	8015NM Prep	
880-32031-18	CS-18	Total/NA	Solid	8015NM Prep	
880-32031-19	CS-19	Total/NA	Solid	8015NM Prep	
880-32031-20	CS-20	Total/NA	Solid	8015NM Prep	
MB 880-60245/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-60245/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-60245/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-32031-1 MS	CS-1	Total/NA	Solid	8015NM Prep	
880-32031-1 MSD	CS-1	Total/NA	Solid	8015NM Prep	

Prep Batch: 60248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-21	CS-21	Total/NA	Solid	8015NM Prep	
880-32031-22	CS-22	Total/NA	Solid	8015NM Prep	
880-32031-23	CS-23	Total/NA	Solid	8015NM Prep	
880-32031-24	P-8	Total/NA	Solid	8015NM Prep	
880-32031-25	P-9	Total/NA	Solid	8015NM Prep	
880-32031-26	P-10	Total/NA	Solid	8015NM Prep	
880-32031-27	SW-1	Total/NA	Solid	8015NM Prep	
880-32031-28	SW-2	Total/NA	Solid	8015NM Prep	
880-32031-29	SW-3	Total/NA	Solid	8015NM Prep	
880-32031-30	SW-4	Total/NA	Solid	8015NM Prep	
880-32031-31	SW-5	Total/NA	Solid	8015NM Prep	
880-32031-32	SW-6	Total/NA	Solid	8015NM Prep	
880-32031-33	SW-7	Total/NA	Solid	8015NM Prep	
880-32031-34	SW-8	Total/NA	Solid	8015NM Prep	
880-32031-35	SW-9	Total/NA	Solid	8015NM Prep	
MB 880-60248/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-60248/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-60248/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-32031-21 MS	CS-21	Total/NA	Solid	8015NM Prep	
880-32031-21 MSD	CS-21	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

GC Semi VOA

Analysis Batch: 60378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-1	CS-1	Total/NA	Solid	8015 NM	
880-32031-2	CS-2	Total/NA	Solid	8015 NM	
880-32031-3	CS-3	Total/NA	Solid	8015 NM	
880-32031-4	CS-4	Total/NA	Solid	8015 NM	
880-32031-5	CS-5	Total/NA	Solid	8015 NM	
880-32031-6	CS-6	Total/NA	Solid	8015 NM	
880-32031-7	CS-7	Total/NA	Solid	8015 NM	
880-32031-8	CS-8	Total/NA	Solid	8015 NM	
880-32031-9	CS-9	Total/NA	Solid	8015 NM	
880-32031-10	CS-10	Total/NA	Solid	8015 NM	
880-32031-11	CS-11	Total/NA	Solid	8015 NM	
880-32031-12	CS-12	Total/NA	Solid	8015 NM	
880-32031-13	CS-13	Total/NA	Solid	8015 NM	
880-32031-14	CS-14	Total/NA	Solid	8015 NM	
880-32031-15	CS-15	Total/NA	Solid	8015 NM	
880-32031-16	CS-16	Total/NA	Solid	8015 NM	
880-32031-17	CS-17	Total/NA	Solid	8015 NM	
880-32031-18	CS-18	Total/NA	Solid	8015 NM	
880-32031-19	CS-19	Total/NA	Solid	8015 NM	
880-32031-20	CS-20	Total/NA	Solid	8015 NM	
880-32031-21	CS-21	Total/NA	Solid	8015 NM	
880-32031-22	CS-22	Total/NA	Solid	8015 NM	
880-32031-23	CS-23	Total/NA	Solid	8015 NM	
880-32031-24	P-8	Total/NA	Solid	8015 NM	
880-32031-25	P-9	Total/NA	Solid	8015 NM	
880-32031-26	P-10	Total/NA	Solid	8015 NM	
880-32031-27	SW-1	Total/NA	Solid	8015 NM	
880-32031-28	SW-2	Total/NA	Solid	8015 NM	
880-32031-29	SW-3	Total/NA	Solid	8015 NM	
880-32031-30	SW-4	Total/NA	Solid	8015 NM	
880-32031-31	SW-5	Total/NA	Solid	8015 NM	
880-32031-32	SW-6	Total/NA	Solid	8015 NM	
880-32031-33	SW-7	Total/NA	Solid	8015 NM	
880-32031-34	SW-8	Total/NA	Solid	8015 NM	
880-32031-35	SW-9	Total/NA	Solid	8015 NM	

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-1
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-1
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 11:04	SM	EET MID

Client Sample ID: CS-2
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-2
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 12:11	SM	EET MID

Client Sample ID: CS-3
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-3
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 12:33	SM	EET MID

Client Sample ID: CS-4
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-4
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 12:56	SM	EET MID

Client Sample ID: CS-5
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-5
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 13:18	SM	EET MID

Client Sample ID: CS-6
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-6
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			60378	08/16/23 12:20	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-6
Lab Sample ID: 880-32031-6
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 13:40	SM	EET MID

Client Sample ID: CS-7
Lab Sample ID: 880-32031-7
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 14:02	SM	EET MID

Client Sample ID: CS-8
Lab Sample ID: 880-32031-8
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 14:24	SM	EET MID

Client Sample ID: CS-9
Lab Sample ID: 880-32031-9
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 14:46	SM	EET MID

Client Sample ID: CS-10
Lab Sample ID: 880-32031-10
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 15:07	SM	EET MID

Client Sample ID: CS-11
Lab Sample ID: 880-32031-11
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 12:20	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-11
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-11
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			10.04 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 15:51	SM	EET MID

Client Sample ID: CS-12
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-12
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 16:13	SM	EET MID

Client Sample ID: CS-13
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-13
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 16:35	SM	EET MID

Client Sample ID: CS-14
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-14
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 16:57	SM	EET MID

Client Sample ID: CS-15
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-15
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 17:19	SM	EET MID

Client Sample ID: CS-16
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-16
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			60378	08/16/23 12:20	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-16
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-16
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	8015NM Prep			9.94 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 17:41	SM	EET MID

Client Sample ID: CS-17
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-17
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 18:04	SM	EET MID

Client Sample ID: CS-18
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-18
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 18:27	SM	EET MID

Client Sample ID: CS-19
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-19
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 18:49	SM	EET MID

Client Sample ID: CS-20
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-20
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			60378	08/16/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	60245	08/15/23 09:12	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60226	08/15/23 19:12	SM	EET MID

Client Sample ID: CS-21
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-21
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			60378	08/16/23 11:05	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: CS-21
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-21
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	8015NM Prep			9.96 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 11:14	SM	EET MID

Client Sample ID: CS-22
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-22
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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 12:22	SM	EET MID

Client Sample ID: CS-23
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-23
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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 12:44	SM	EET MID

Client Sample ID: P-8
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-24
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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 13:07	SM	EET MID

Client Sample ID: P-9
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-25
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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 13:29	SM	EET MID

Client Sample ID: P-10
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-26
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			60378	08/16/23 11:05	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: P-10
Lab Sample ID: 880-32031-26
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 13:53	SM	EET MID

Client Sample ID: SW-1
Lab Sample ID: 880-32031-27
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 14:16	SM	EET MID

Client Sample ID: SW-2
Lab Sample ID: 880-32031-28
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 14:39	SM	EET MID

Client Sample ID: SW-3
Lab Sample ID: 880-32031-29
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 15:02	SM	EET MID

Client Sample ID: SW-4
Lab Sample ID: 880-32031-30
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 15:25	SM	EET MID

Client Sample ID: SW-5
Lab Sample ID: 880-32031-31
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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			60378	08/16/23 11:05	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

Client Sample ID: SW-5
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-31
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	8015NM Prep			9.94 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 16:16	SM	EET MID

Client Sample ID: SW-6
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 17:05	SM	EET MID

Client Sample ID: SW-7
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 17:28	SM	EET MID

Client Sample ID: SW-8
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-34
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			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 17:50	SM	EET MID

Client Sample ID: SW-9
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			60378	08/16/23 11:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	60248	08/15/23 09:19	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60233	08/15/23 18:13	SM	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
Job ID: 880-32031-1
Project/Site: CTB 127
SDG: 1688

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	T104704400-23-26	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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-1
SDG: 1688

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: CTB 127

Job ID: 880-32031-1
SDG: 1688

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32031-1	CS-1	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-2	CS-2	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-3	CS-3	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-4	CS-4	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-5	CS-5	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-6	CS-6	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-7	CS-7	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-8	CS-8	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-9	CS-9	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-10	CS-10	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-11	CS-11	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-12	CS-12	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-13	CS-13	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-14	CS-14	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-15	CS-15	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-16	CS-16	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-17	CS-17	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-18	CS-18	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-19	CS-19	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-20	CS-20	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-21	CS-21	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-22	CS-22	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-23	CS-23	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-24	P-8	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-25	P-9	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-26	P-10	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-27	SW-1	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-28	SW-2	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-29	SW-3	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-30	SW-4	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-31	SW-5	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-32	SW-6	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-33	SW-7	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-34	SW-8	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-35	SW-9	Solid	08/14/23 00:00	08/14/23 16:10

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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

Work C

880-32031 Chain of Custody

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Project Manager	Tom Carlson	Bill to. (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address.	4115 S CR 1297	Address.	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-894-6385	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·

Project Name	CTB 127
Project Number·	1688
Project Location	
Sampler's Name	
PO #.	

Turn Around
☐ Routine ☑ Rush
Due Date 24 Hour
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	1148	
Cooler Custody Seals	Yes No N/A	Correction Factor·	0.3	
Sample Custody Seals	Yes No N/A	Temperature Reading	2.6	
Total Containers.		Corrected Temperature.	2.9	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH TX 8015	Chlorides	BTEX 8021
CS-1	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-2	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-3	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-4	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-5	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-6	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-7	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-8	S	8/14/2023		0 5 - 1	Comp	1		X		
CS-9	S	8/14/2023		2 - 2 5	Comp	1		X		
CS-10	S	8/14/2023		2 - 2 5	Comp	1		X		

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl 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
1	JKramer	8.14.23	2		
3		1610	4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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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

Work Order No: _____

www.xenco.com Page 2 of 4

Project Manager	Tom Carlson	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address	4115 S CR 1297	Address.	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-894-6385	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:

Project Name	CTB 127
Project Number	1688
Project Location	
Sampler's Name:	
PO #:	

Turn Around
☐ Routine ☑ Rush
Due Date: 24 Hour
TAT starts the day received by the lab, if received by 4.30pm

SAMPLE RECEIPT				
Samples Received Intact:	Yes No	Temp Blank.	Yes No	Wet Ice: Yes No
Cooler Custody Seals	Yes No N/A	Thermometer ID		
Sample Custody Seals	Yes No N/A	Correction Factor		
Total Containers		Temperature Reading		
		Corrected Temperature		

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code / Parameters: TPH TX 8015	Chlorides	BTEX 8021
CS-11	S	8/14/2023		2 - 2 5	Comp	1	X		
CS-12	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-13	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-14	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-15	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-16	S	8/14/2023		1 5 - 2	Comp	1	X		
CS-17	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-18	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-19	S	8/14/2023		0 5 - 1	Comp	1	X		
CS-20	S	8/14/2023		0 5 - 1	Comp	1	X		

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4. H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl 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
1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

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Chain of Custody

Houston TX (281) 240-4200, Dallas, TX (214) 902-0300
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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: _____

www.xenco.com Page 3 of 4

Project Manager:	Tom Carlson	Bill to: (if different)	ESRR
Company Name	Earth Systems R&R	Company Name.	
Address.	4115 S CR 1297	Address.	
City, State ZIP	Odessa, Texas, 79765	City, State ZIP	
Phone	432-894-6385 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:

Project Name	CTB 127	**Turn Around**	
Project Number:	1688	☐ Routine ☑ Rush	
Project Location		Due Date	24 Hour
Sampler's Name:		TAT starts the day received by the lab if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank.	Yes No	Wet 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	

ANALYSIS REQUEST

Preservative Codes

None NO DI Water H_2O
Cool Cool MeOH Me
HCL HC HNO_3 HN
H_2S0_4 H_2 NaOH Na
H_3PO_4 HP
$NaHSO_4$ NABIS
$Na_2S_2O_3$ $NaSO_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH TX 8015	Chlorides	BTEX 8021	Sample Comments
CS-21	S	8/14/2023		0 5 - 1	Comp	1		X			
CS-22	S	8/14/2023		2 - 2 5	Comp	1		X			
CS-23	S	8/14/2023		2 - 2 5	Comp	1		X			
P-8	S	8/14/2023		0 - 0 5	Grab	1		X	X	X	
P-9	S	8/14/2023		0 - 0 5	Grab	1		X	X	X	
P-10	S	8/14/2023		0 - 0 5	Grab	1		X	X	X	
SW-1	S	8/14/2023		0 25'	Comp	1		X			
SW-2	S	8/14/2023		0 25'	Comp	1		X			
SW-3	S	8/14/2023		0 25'	Comp	1		X			
SW-4	S	8/14/2023		1'	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 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 Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

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1			2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

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www xenco com Page 4 of 4

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Phone	432-894-6385	Email	tcarlson@earthsys net

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State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other·

Project Name	CTB 127
Project Number·	1688
Project Location	
Sampler's Name	
PO #:	

Turn Around
☐ Routine ☑ Rush
Due Date 24 Hour
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	
Cooler Custody Seals	Yes No N/A		Correction Factor·	
Sample Custody Seals.	Yes No N/A		Temperature Reading	
Total Containers			Corrected Temperature	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH TX 8015	Chlorides	BTEX 8021
SW-5	S	8/14/2023		1'	Comp	1		X		
SW-6	S	8/14/2023		0 25	Comp	1		X		
SW-7	S	8/14/2023		1'	Comp	1		X		
SW-8	S	8/14/2023		1 25'	Grab	1		X		
SW-9	S	8/14/2023		1 25'	Grab	1		X		

Preservative Codes

None NO	DI Water· H_2O
Cool Cool	MeOH Me
HCL HC	HNO_3 HN
H_2S0_4. H_2	NaOH Na
H_3PO_4 HP	
$NaHSO_4$ NABIS	
$Na_2S_2O_3$ $NaSO_3$	
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 Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
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1			2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-32031-1
SDG Number: 1688

Login Number: 32031
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

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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 8/17/2023 10:24:01 AM

JOB DESCRIPTION

CTB 127
SDG NUMBER 1688

JOB NUMBER

880-32031-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

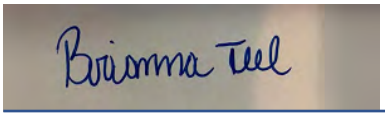
Eurofins Midland

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
8/17/2023 10:24:01 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: CTB 127

Laboratory Job ID: 880-32031-2
SDG: 1688

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Qualifiers

GC VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Job ID: 880-32031-2

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-32031-2

Receipt
The samples were received on 8/14/2023 4:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-60364 and analytical batch 880-60348 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-60348 recovered below the lower control limit for o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-60348/33).

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 for preparation batch 880-60362 and analytical batch 880-60399 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.The associated sample is: P-8 (880-32031-24).

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-60362 and analytical batch 880-60399 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.

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Client Sample ID: P-8
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-24
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/16/23 09:58	08/16/23 21:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/16/23 09:58	08/16/23 21:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/16/23 09:58	08/16/23 21:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/16/23 09:58	08/16/23 21:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/16/23 09:58	08/16/23 21:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/16/23 09:58	08/16/23 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:03*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/17/23 10:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57.1**		4.98		mg/Kg			08/16/23 19:09	1

Client Sample ID: P-9
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-25
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 21:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 21:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 21:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/16/23 09:58	08/16/23 21:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 21:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/16/23 09:58	08/16/23 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			08/17/23 10:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.8**	**F1**	4.96		mg/Kg			08/16/23 19:16	1

Client Sample ID: P-10
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

Lab Sample ID: 880-32031-26
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		08/16/23 09:58	08/16/23 21:44	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/16/23 09:58	08/16/23 21:44	1

Client Sample Results

Client: Earth Systems Response and Restoration
Job ID: 880-32031-2
Project/Site: CTB 127
SDG: 1688

Client Sample ID: P-10
Lab Sample ID: 880-32031-26
Date Collected: 08/14/23 00:00
Matrix: Solid
Date Received: 08/14/23 16:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/16/23 09:58	08/16/23 21:44	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/16/23 09:58	08/16/23 21:44	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/16/23 09:58	08/16/23 21:44	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/16/23 09:58	08/16/23 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:44*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*08/16/23 09:58*	*08/16/23 21:44*	*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			08/17/23 10:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.8**		4.96		mg/Kg			08/16/23 19:37	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

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)								
880-32031-24	P-8	73	103								
880-32031-25	P-9	93	102								
880-32031-26	P-10	78	102								
890-5093-A-1-E MS	Matrix Spike	95	99								
890-5093-A-1-F MSD	Matrix Spike Duplicate	93	96								
LCS 880-60364/1-A	Lab Control Sample	95	88								
LCSD 880-60364/2-A	Lab Control Sample Dup	91	96								
MB 880-60364/5-A	Method Blank	100	134 S1+								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-60364/5-A
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60364

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 14:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 14:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 14:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/16/23 09:58	08/16/23 14:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/16/23 09:58	08/16/23 14:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/16/23 09:58	08/16/23 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/16/23 09:58*	*08/16/23 14:42*	*1*
1,4-Difluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*08/16/23 09:58*	*08/16/23 14:42*	*1*

Lab Sample ID: LCS 880-60364/1-A
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60364

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09225		mg/Kg		92	70 - 130
Toluene	0.100	0.1034		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.09910		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2002		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09527		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: LCSD 880-60364/2-A
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60364

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	11	35
Toluene	0.100	0.1005		mg/Kg		101	70 - 130	3	35
Ethylbenzene	0.100	0.09272		mg/Kg		93	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1921		mg/Kg		96	70 - 130	4	35
o-Xylene	0.100	0.09112		mg/Kg		91	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-5093-A-1-E MS
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.1075		mg/Kg		108	70 - 130
Toluene	<0.00199	U	0.0996	0.1008		mg/Kg		101	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

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

Lab Sample ID: 890-5093-A-1-E MS
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60364

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.09476		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2049		mg/Kg		103	70 - 130
o-Xylene	<0.00199	U	0.0996	0.09682		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-5093-A-1-F MSD
Matrix: Solid
Analysis Batch: 60348

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60364

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0990	0.09479		mg/Kg		96	70 - 130	13	35
Toluene	<0.00199	U	0.0990	0.09212		mg/Kg		93	70 - 130	9	35
Ethylbenzene	<0.00199	U	0.0990	0.08281		mg/Kg		84	70 - 130	13	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1712		mg/Kg		86	70 - 130	18	35
o-Xylene	<0.00199	U	0.0990	0.08238		mg/Kg		83	70 - 130	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-60362/1-A
Matrix: Solid
Analysis Batch: 60399

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			08/16/23 17:14	1

Lab Sample ID: LCS 880-60362/2-A
Matrix: Solid
Analysis Batch: 60399

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.8		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-60362/3-A
Matrix: Solid
Analysis Batch: 60399

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	253.7		mg/Kg		101	90 - 110	0	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-32031-25 MS
Matrix: Solid
Analysis Batch: 60399

Client Sample ID: P-9
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	39.8	F1	248	327.3	F1	mg/Kg		116	90 - 110		

Lab Sample ID: 880-32031-25 MSD
Matrix: Solid
Analysis Batch: 60399

Client Sample ID: P-9
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	39.8	F1	248	328.0	F1	mg/Kg		116	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

GC VOA

Analysis Batch: 60348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-24	P-8	Total/NA	Solid	8021B	60364
880-32031-25	P-9	Total/NA	Solid	8021B	60364
880-32031-26	P-10	Total/NA	Solid	8021B	60364
MB 880-60364/5-A	Method Blank	Total/NA	Solid	8021B	60364
LCS 880-60364/1-A	Lab Control Sample	Total/NA	Solid	8021B	60364
LCSD 880-60364/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	60364
890-5093-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	60364
890-5093-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	60364

Prep Batch: 60364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-24	P-8	Total/NA	Solid	5035	
880-32031-25	P-9	Total/NA	Solid	5035	
880-32031-26	P-10	Total/NA	Solid	5035	
MB 880-60364/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-60364/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-60364/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5093-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-5093-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 60444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-24	P-8	Total/NA	Solid	Total BTEX	
880-32031-25	P-9	Total/NA	Solid	Total BTEX	
880-32031-26	P-10	Total/NA	Solid	Total BTEX	

HPLC/IC

Leach Batch: 60362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-24	P-8	Soluble	Solid	DI Leach	
880-32031-25	P-9	Soluble	Solid	DI Leach	
880-32031-26	P-10	Soluble	Solid	DI Leach	
MB 880-60362/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-60362/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-60362/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-32031-25 MS	P-9	Soluble	Solid	DI Leach	
880-32031-25 MSD	P-9	Soluble	Solid	DI Leach	

Analysis Batch: 60399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-32031-24	P-8	Soluble	Solid	300.0	60362
880-32031-25	P-9	Soluble	Solid	300.0	60362
880-32031-26	P-10	Soluble	Solid	300.0	60362
MB 880-60362/1-A	Method Blank	Soluble	Solid	300.0	60362
LCS 880-60362/2-A	Lab Control Sample	Soluble	Solid	300.0	60362
LCSD 880-60362/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	60362
880-32031-25 MS	P-9	Soluble	Solid	300.0	60362
880-32031-25 MSD	P-9	Soluble	Solid	300.0	60362

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Client Sample ID: P-8

Lab Sample ID: 880-32031-24
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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	60364	08/16/23 09:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60348	08/16/23 21:03	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60444	08/17/23 10:00	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	60362	08/16/23 15:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60399	08/16/23 19:09	SMC	EET MID

Client Sample ID: P-9

Lab Sample ID: 880-32031-25
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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	60364	08/16/23 09:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60348	08/16/23 21:24	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60444	08/17/23 10:00	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	60362	08/16/23 15:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60399	08/16/23 19:16	SMC	EET MID

Client Sample ID: P-10

Lab Sample ID: 880-32031-26
Matrix: Solid
Date Collected: 08/14/23 00:00
Date Received: 08/14/23 16:10

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	60364	08/16/23 09:58	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60348	08/16/23 21:44	SM	EET MID
Total/NA	Analysis	Total BTEX		1			60444	08/17/23 10:00	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	60362	08/16/23 15:26	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60399	08/16/23 19:37	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
Job ID: 880-32031-2
Project/Site: CTB 127
SDG: 1688

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	T104704400-23-26	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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: CTB 127

Job ID: 880-32031-2
SDG: 1688

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	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: CTB 127

Job ID: 880-32031-2
SDG: 1688

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-32031-24	P-8	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-25	P-9	Solid	08/14/23 00:00	08/14/23 16:10
880-32031-26	P-10	Solid	08/14/23 00:00	08/14/23 16:10

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-32031-2
SDG Number: 1688

Login Number: 32031
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

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

Tom Carlson

From: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Sent: Tuesday, August 8, 2023 12:38 PM
To: Tom Carlson; Enviro, OCD, EMNRD
Cc: Kristopher Williams; Mason Jones; Krakow, Matthew J.
Subject: RE: [EXTERNAL] RE: CTB 127 - Incident nAPP2320649763

Thank you for the update.

Mike Bratcher ● Incident Supervisor
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave | Artesia, NM 88210
(575) 626-0857 | mike.bratcher@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Tom Carlson <tcarlson@earthsys.net>
Sent: Tuesday, August 8, 2023 8:30 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kristopher Williams <kwilliams@earthsys.net>; Mason Jones <mjones@earthsys.net>; Krakow, Matthew J. <MJKrakow@Marathonpetroleum.com>
Subject: [EXTERNAL] RE: CTB 127 - Incident nAPP2320649763

Good Morning Mr. Bratcher,

Sampling activities has been postponed to Monday 8/14 due to the rain.

Thanks,
Tom

Tom Carlson, GIT | Project Manager
4115 South C.R. 1297 | Odessa, Texas 79765
M 432-894-6385 | tcarlson@earthsys.net

From: Tom Carlson
Sent: Monday, August 7, 2023 6:57 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>
Cc: Kristopher Williams <kwilliams@earthsys.net>; Mason Jones <mjones@earthsys.net>; Krakow, Matthew J. <MJKrakow@Marathonpetroleum.com>
Subject: CTB 127 - Incident nAPP2320649763

Good Afternoon Mr. Bratcher,

I will be conducting confirmation sampling for the CTB 127 (Dauntless 7 Fed) incident id: nAPP2320649763 on Thursday 8/10. Adhering to Table I with a water depth of > 51 ft. bgs.

Please let me know if you have any questions.

Respectfully,
Tom

Tom Carlson, GIT | Project Manager
4115 South C.R. 1297 | Odessa, Texas 79765
M 432-894-6385 | tcarlson@earthsys.net

Earth Systems
Response & Restoration

Tom Carlson

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Wednesday, August 16, 2023 4:45 PM
To: Kristopher Williams
Cc: Tom Carlson
Subject: Re: [EXTERNAL] Earth Systems Soil Boring - CTB 127 Dauntless

BLM clears you to proceed with the installation of the soil bore.

Sincerely,

Shelly J Taylor
Environmental Protection Specialist
Realty - Compliance

Bureau of Land Management/Carlsbad Field Office
620 E. Greene St
Carlsbad, NM 88220
Direct 575.234.5706
Mobile 575.499.6831
sjtaylor@blm.gov

Spill/Release email: **BLM_NM_CFO_REALTY_SPILL@BLM.GOV**

PLEASE NOTE: I have a new email address: **sjtaylor@blm.gov**

From: Kristopher Williams <kwilliams@earthsys.net>
Sent: Wednesday, August 16, 2023 3:04 PM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Cc: Tom Carlson <tcarlson@earthsys.net>
Subject: [EXTERNAL] Earth Systems Soil Boring - CTB 127 Dauntless

Good Afternoon Shelly,
As discussed, we are needing to install a 55 ft. deep soil boring to confirm that groundwater is >55ft. deep. The soil boring will be open for less than 72 hours before being backfilled and we are not expecting to encounter any groundwater. Additionally, the area for the soil boring is within an active O&G facility that is completely fenced and on a pad. If you agree no permit or additional permission is needed from the BLM, we will move forward with the soil boring.

Thank you for all your help.
Respectively,
Kris

Kris Williams, CHMM, REM
Texas Operations Manager
E: kwilliams@earthsys.net
P: 325-665-3604
W: earthsys.net

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	nAPP2320649763
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Western Refining Pipeline, LLC	OGRID
Contact Name Matthew Krakow	Contact Telephone 505-632-4169
Contact email mjkrakow@marathonpetroleum.com	Incident # *(assigned by OCD)* nAPP2320649763
Contact mailing address 111 CR 4990 Bloomfield, NM 87413	

Location of Release Source

Latitude 32.14017 Longitude -103.61445
(NAD 83 in decimal degrees to 5 decimal places)

Site Name CTB 127 (Dauntless 7 Fed)	Site Type Crude Oil Gathering
Date Release Discovered 7/14/23	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
	7S	21S	33E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☑ Private (*Name:* Western Refining Pipeline, LLC)

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) 7.5 bbls	Volume Recovered (bbls) 0 bbls
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride 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 Nipple cracked on the thermal relief line.

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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 not 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: Matthew Krakow Title: Environmental Specialist

Signature: Matthew Krakow Date: 7/25/2023

email: mjkrakow@marathonpetroleum.com Telephone: 505-632-4169

OCD Only

Received by: _____ Date: _____

State of New Mexico
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Site Assessment/Characterization

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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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Printed Name: Matthew Krakow Title: Environmental Specialist

Signature: Matthew Krakow Date: 9/29/2023

email: mjkrakow@marathonpetroleum.com Telephone: 505-632-4169

OCD Only

Received by: _____ Date: _____

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Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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.

Printed Name: Matthew Krakow Title: Environmental Specialist

Signature: Matthew Krakow Date: 9/29/2023

email: mjkrakow@marathonpetroleum.com Telephone: 505-632-4169

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Nelson Velez Date: 01/23/2024

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

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

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

CONDITIONS

Action 271208

CONDITIONS

Operator: WESTERN REFINING PIPELINE LLC 200 E. Hardin Street Findlay, OH 45840	OGRID: 319135
	Action Number: 271208
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	1/23/2024