July 3, 2024

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

Re: Closure Report - Cheddar North HGB Water Leg Release (Cheddar RP)
Incident #: nAPP2404035912
Goodnight Midstream Permian, LLC
Site Location: Unit L, S28, T21S, R32E
(Lat 32.446816°, Long -103.687171°)
Lea County, New Mexico
ESRR Project No. 2023

To whom it may concern:

On behalf of Goodnight Midstream Permian, LLC (Goodnight), Earth Systems Response & Restoration (ESRR) has prepared this letter to document the Cheddar RP (site) release assessment and remediation activities. The site is located at GPS coordinates 32.446816°, -103.687171° within Unit L, S28, T21S, R32E 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 February 09, 2024, due to a water leg release. It resulted in approximately ten (10) barrels of produced water spraying on to the caliche pad with light overspray extending onto adjacent native soils to the north with six (6) barrels of produced water recovered. The release area on the caliche pad measured approximately 195 feet (ft) long by 27 to 200 ft wide with a total square footage of approximately 27,400 square (sq.) ft.

Site Characterization

Based on a review of the New Mexico Office of State Engineers (NMOSE) and United States Geological Survey (USGS) databases, the site is located in a low karst potential area and there are no known surface water features within a 0.50-mile radius of the location. The nearest identified water well (C-04839-POD1) is located on the same location 375 feet to the southwest at GPS coordinates 32.445802°, -103.687718° and was drilled on June 14, 2024 with no indication of groundwater encountered within 55 ft. of the surface. The next nearest identified water well (C-01701-POD1) is located approximately 2.22 miles southeast of the site in Unit L, S35, T21S, R32E. The well has a reported depth to groundwater of 560 ft. below ground surface (bgs) in December 2018.

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Regulatory Criteria

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

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

Release Response and Site Assessment

On February 9, 2024, ESRR conducted an initial release response to evaluate active onsite conditions including creating a GPS perimeter and collecting photos. Additionally, Goodnight Midstream (Goodnight) contractors were onsite conducting recovery activities of free fluids.

On February 12, 2024, subsequent to recovery activities, ESRR advanced twenty (20) delineation soil borings to collect thirty (30) soil samples from depths ranging from surface to 2 feet (ft.) below grade surface (bgs) within and surrounding the release area to assess potential impacts vertically and horizontally. The collected soil samples were placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories (Eurofins) in Midland, Texas. The soil samples were analyzed for TPH by EPA method 8015 Modified, BTEX by EPA Method 8021B, and chloride by EPA method 300.0.

Laboratory analytical data suggest surface soils associated with delineation soil borings HA-1 and HA-7 exceed NMOCD regulatory criteria to a depth of 0.5 feet (ft.) below grade surface (bgs). The impacted area requiring remediation activities is located on the caliche pad measured approximately 95 feet (ft) long by 35 to 70 ft wide with a total square footage of approximately 4,850 sq. ft.

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

Remediation and Confirmation Soil Sampling Activities

On February 28, 2024, Goodnight contractors excavated the impacted soils associated with delineation soil borings HA-1 and HA-7 to depth of 0.5 ft. bgs. as directed by delineation laboratory analytical data. Upon excavation, the excavated soils were transported to the Parabo Disposal Facility, a state regulated disposal facility, for final disposal.

On February 29, 2024, subsequent to excavation activities, ESRR collected confirmation samples from within the excavation area. A total of twenty-five (25) confirmation samples were collected (CS-1 through CS-25) to ensure removal of the impacted soils. All collected samples were submitted to Eurofins for TPH analysis by EPA method 8015 Modified, BTEX analysis by EPA Method 8021B, and chloride analysis by EPA method 300.0.

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Laboratory analytical data suggests soils exceeding NMOCD regulatory criteria are not present and no additional excavation is required. Subsequent to laboratory analytical data review, the excavated area was backfilled with clean landowner approved caliche material and leveled to the surrounding grade surface.

On June 14, 2024, per NMOCD request, ESRR supervised the drilling of a 6-inch borehole to a depth of 55 ft. bgs and the completion of a temporary monitoring well to determine if groundwater was present. Subsequent to completion of the temporary monitoring well, ESRR gauged the onsite well utilizing an industry standard water level meter and determined no groundwater was present.

On June 17, 2024, ESRR returned to the site after 72 hours to gauge the monitoring well utilizing an industry standard groundwater level meter and determined no groundwater was present. Subsequent to water well gauging, the dry water well was plugged per state regulations.

On June 27, 2024, ESRR collected sidewalls from the former excavation area. A total of four (4) confirmation samples were collected (NSW-1, SSW-1, ESW-1, and WSW-1) to ensure removal of the impacted soils. All collected samples were submitted to Eurofins for TPH analysis by EPA method 8015 Modified, BTEX analysis by EPA Method 8021B, and chloride analysis by EPA method 300.0.

Laboratory analytical data suggests soils exceeding NMOCD regulatory criteria are not present and no additional excavation or remediation is required.

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 4 for confirmation soil sample locations.

Conclusions

Based on the assessment findings, depth to groundwater, onsite remediation activities, and laboratory analytical results, no further remediation activities are required at the site. Goodnight formally requests closure of the release. If you have any questions regarding this report or need additional information, please contact us at 432-813-1605.

Sincerely,

Mason Jones
Operations Manager – Midland

K. Williams
Kris Williams, CHMM, REM
Operations Manager - Texas

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Attached:
Figure 1 – Site Location Map
Figure 2 – Delineation Soil Sample Locations and Site Map – 02/12/2024
Figure 3 – Perimeter Soil Sample Locations and Site Map – 02/12/2024
Figure 4 – Confirmation Soil Sample Locations and Site Map – 02/29/2024 & 06/27/2024
Figure 5 – Water Well/Soil Boring Location and Site Map
Figure 6 – Soil Boring Log
Table 1 – Summary of Delineation Soil Analytical Data
Table 2 – Summary of Confirmation Soil Analytical Data
Photographic Log
Groundwater Research
Laboratory Analytical Reports
Regulatory Agency Notification and Communication

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Figure 1 – Site Location Map

Cheddar RP – Goodnight Midstream, LLC
GPS: 32.446816°, -103.687171
Lea County, New Mexico

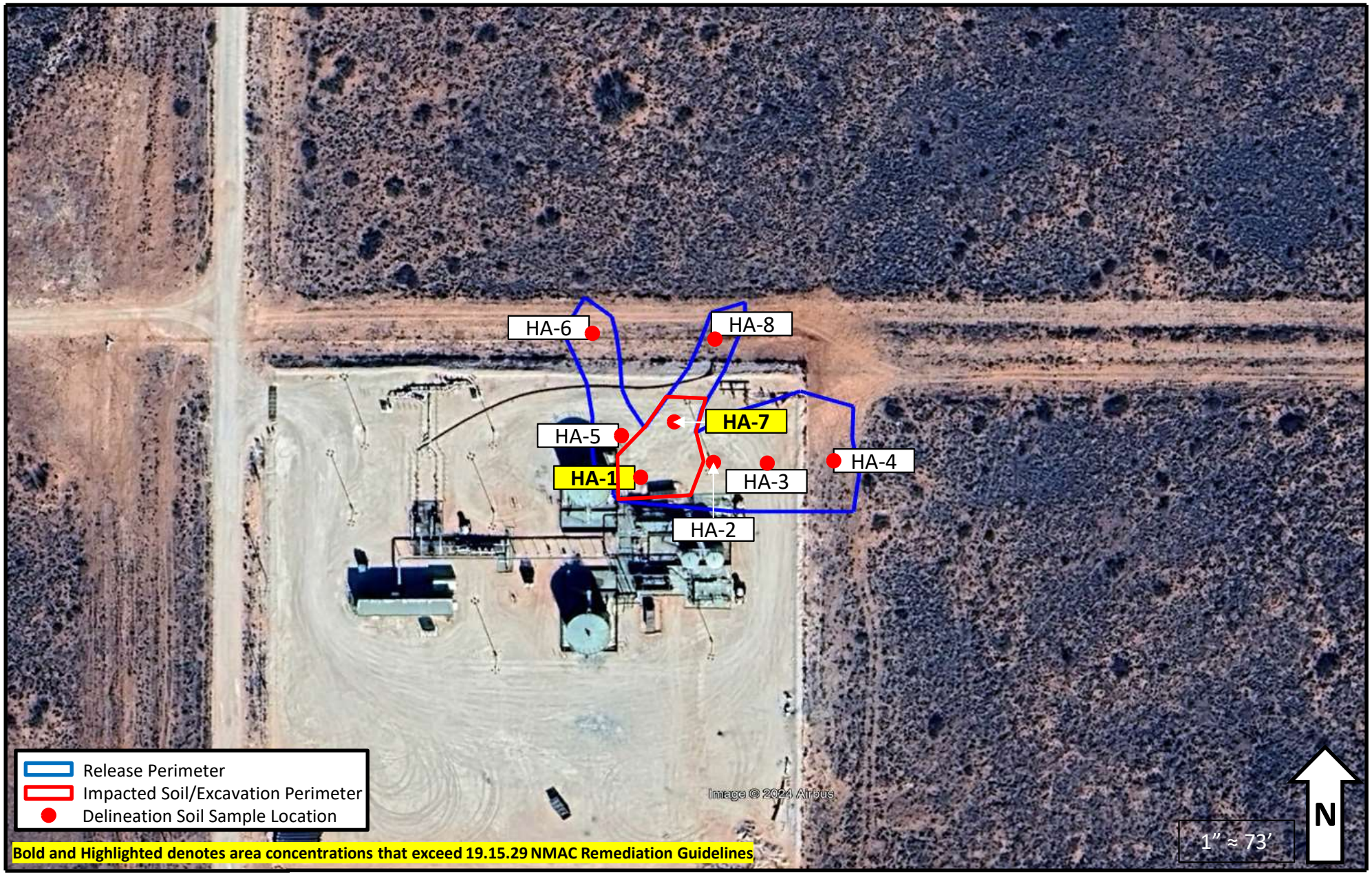

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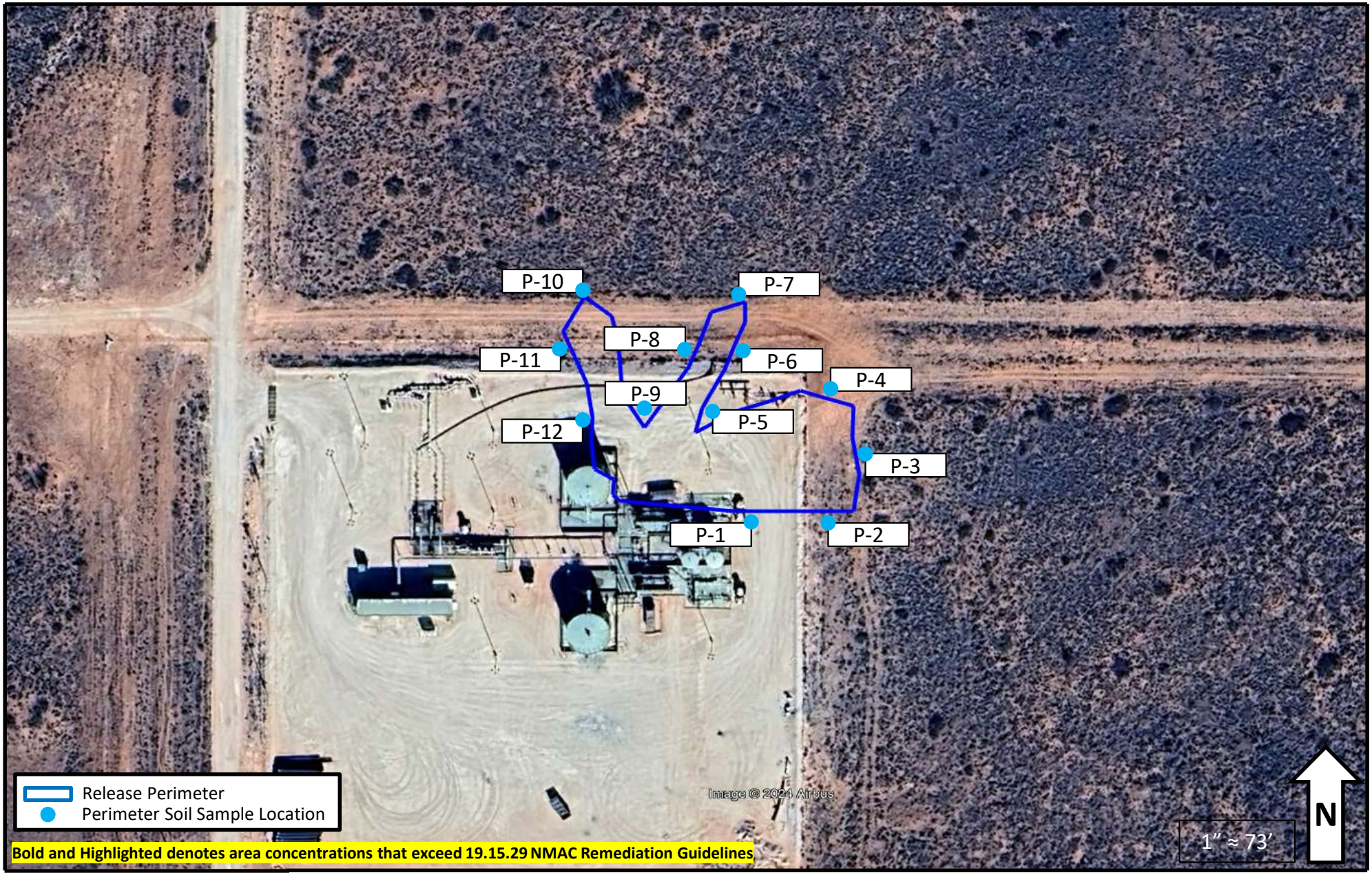
Figure 2 – Delineation Soil Sample Locations and Site Map – 02/12/2024

Goodnight – Cheddar RP
GPS: 32.447083°, -103.688556°
Lea County, New Mexico



Bold and Highlighted denotes area concentrations that exceed 19.15.29 NMAC Remediation Guidelines

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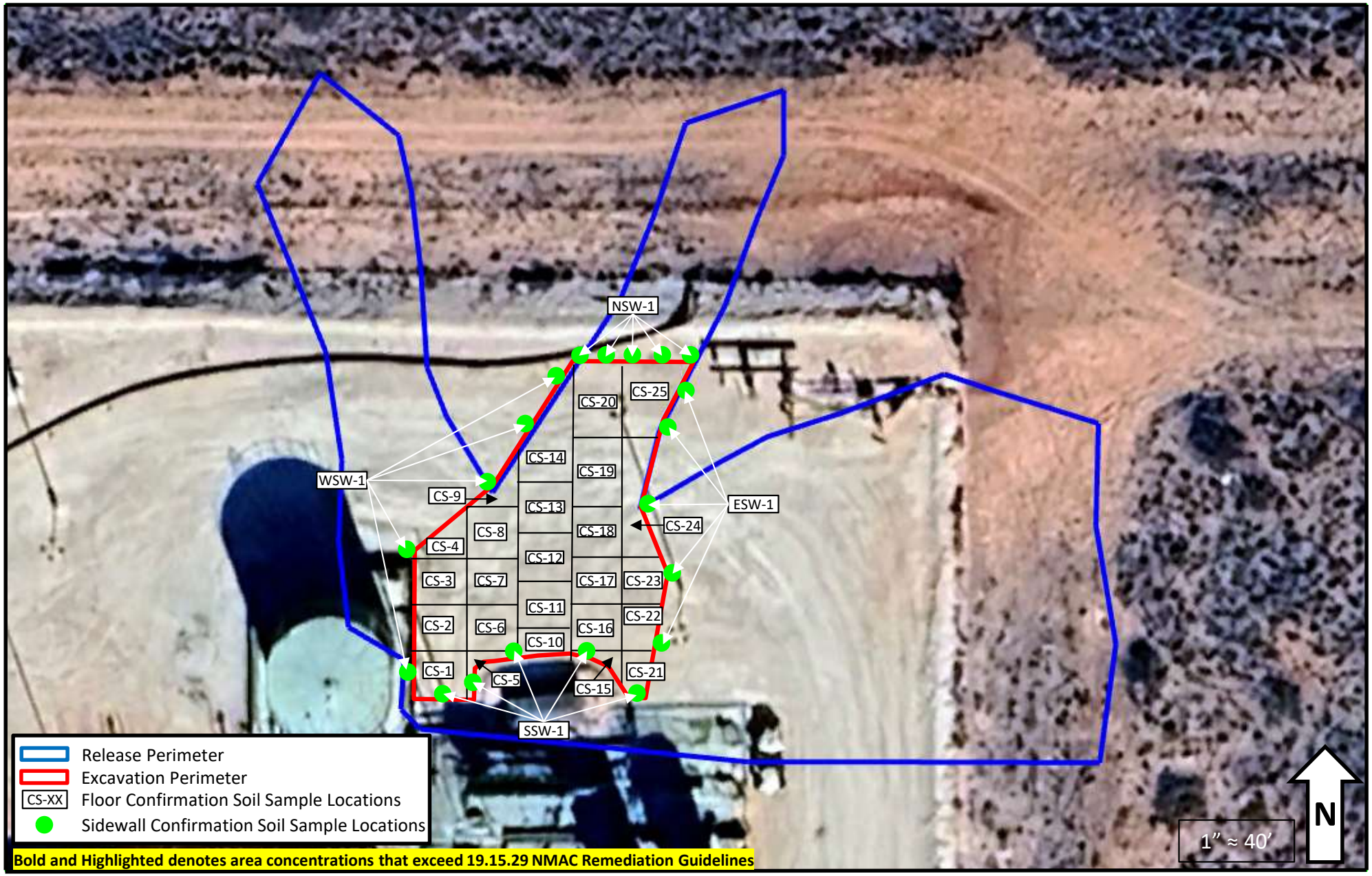
Figure 3 – Perimeter Soil Sample Locations and Site Map – 02/12/2024

Goodnight – Cheddar RP
GPS: 32.447083°, -103.688556°
Lea County, New Mexico



Bold and Highlighted denotes area concentrations that exceed 19.15.29 NMAC Remediation Guidelines

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Figure 4 – Confirmation Soil Sample Locations and Site Map – 02/29/2024 & 6/27/2024

Goodnight – Cheddar RP
GPS: 32.447083°, -103.688556°
Lea County, New Mexico

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Figure 5 – Water Well/Soil Boring Location and Site Map

Goodnight – Cheddar RP
GPS: 32.447083°, -103.688556°
Lea County, New Mexico

Figure 6 - SOIL BORING LOG

PROJECT: Cheddar RP
PROJECT NUMBER: 2023
CLIENT: Goodnight Midstream
SOIL BORING 1
TOTAL DEPTH: 55 feet
FIELD PERSONNEL: Marvin Davis

DRILLING COMPANY: Hungry Horse LLC
DRILLER: Dean Darent
DRILLING METHOD: Air Rotary
BORE HOLE DIAMETER: 6 inch
DATE DRILLED: 6/14/2024

DEPTH (FT)	SOIL SYMBOL	WELL CONSTRUCTION	PID	SAMPLES	SAMPLE INTERVAL	DESCRIPTION INTERVAL	Material Description	DEPTH (FT)
0 – 5					1		Dark Brown, Sandstone w/ Gypsum Fragments, Silty	0 – 5
10					2		Dark Brown, Sandstone, Silty	10
15					3		Brown, Sandstone w/ Gypsum Fragments, Silty	15
20					4		Tan, Very Fine Sandstone, Silty	20
25					5		Brown, Very Fine Sandstone, Silty	25
30					6		Tan, Very Fine Sandstone, Silty	30
35					7		Tan, Very Fine Sandstone w/ Gypsum Fragments, Silty	35
40					8		Tan, Very Fine Sandstone w/ Gypsum Fragments, Silty	40
45					9		Tan, Very Fine Sandstone w/ Gypsum Fragments, Silty	45
50					10		Brown, Very Fine Sandstone w/ Gypsum Fragments, Silty	50
55					11		Brown, Very Fine Sandstone w/ Gypsum Fragments, Silty **Terminus of Boring - No Groundwater Present**	55

Table 1 - Summary of Delineation Soil Analytical Results
Goodnight Cheddar RP
32.447083°, -103.688556°
Lea County, New Mexico

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Motor 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**	**50**				**50**
19.15.29.13(D) NMAC Reclamation Guidelines[1]:			**600**				**100**	**10**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
HA - 1	2/12/2024	0 - 0.5	**10,600**	3,930	17,600	<251	**21,500**	5.72	120	68.1	161	**409**
		0.5 - 1	2,350	161	1,190	<50.5	1,350	<0.0399	0.933	1.26	11.3	13.4
		1.5 - 2R	75.3	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
HA - 2	2/12/2024	0 - 0.5	193	<50	152	<50	152	<0.0494	<0.0199	<0.0199	<0.0398	0.0494
		0.5 - 1	160	<50.2	117	<50.2	117	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
		1.5 - 2	62.8	<50.1	<50.1	<50.1	<50.1	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
HA - 3	2/12/2024	0 - 0.5	523	<50.4	489	<50.4	489	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
		0.5 - 1	65.2	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
HA - 4[1]	2/12/2024	0 - 0.5	59.8	<50.5	<50.5	<50.5	<50.5	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
		1.5 - 2	29.4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
HA - 5	2/12/2024	0 - 0.5	70.9	<50	<50	<50	<50	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
		0.5 - 1	57	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
HA - 6[1]	2/12/2024	0 - 0.5	62.6	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00396	<0.00398
		0.5 - 1	69.5	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
HA - 7	2/12/2024	0 - 0.5	7,410	868	12,100	<249	**13,000**	<0.0994	4.03	5.08	26.6	35.7
		0.5 - 1	85.4	Pending	Pending	Pending	Pending	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
HA - 8[1]	2/12/2024	0 - 0.5	106	<50	97	<50	97	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
		0.5 - 1	68.4	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
P - 1	2/12/2024	0 - 0.5	48.4	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
P - 2	2/12/2024	0 - 0.5	43.8	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P - 3	2/12/2024	0 - 0.5	63.3	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
P - 4	2/12/2024	0 - 0.5	80.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P - 5	2/12/2024	0 - 0.5	63.1	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P - 6	2/12/2024	0 - 0.5	83.3	<50.1	<50.1	<50.1	<50.1	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
P - 7	2/12/2024	0 - 0.5	53.8	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P - 8	2/12/2024	0 - 0.5	78.7	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
P - 9	2/12/2024	0 - 0.5	55.4	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
P - 10	2/12/2024	0 - 0.5	77.7	<50.5	<50.5	<50.5	<50.5	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
P - 11	2/12/2024	0 - 0.5	45.9	<50.2	<50.2	<50.2	<50.2	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
P - 12	2/12/2024	0 - 0.5	95.6	<50.3	<50.3	<50.3	<50.3	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401

Bold and highlighted denotes concentrations that exceed 19.15.29 NMAC Remediation Guidelines

1 = Soil boring present in native soils are subject to 19.15.29.13(D) NMAC Reclamation Guidelines.

TPH = Total Petroleum Hydrocarbons

Ft. = Feet

mg/kg = milligrams per kilogram

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

Table 2 - Summary of Confirmation Soil Analytical Results
Goodnight Cheddar RP
32.447083°, -103.688556°
Lea County, New Mexico

			Chlorides (mg/kg)	Gasoline Range Organics (GRO)-C6-C10 (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Motor 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**	**50**				**50**
Sample ID	**Sample Date**	**Sample Depth (ft.)**										
CS - 1	2/29/2024	0.5 - 1	227	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 2	2/29/2024	0.5 - 1	195	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
CS - 3	2/29/2024	0.5 - 1	155	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
CS - 4	2/29/2024	0.5 - 1	181	<49.8	790	49.8	840	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
CS - 5	2/29/2024	0.5 - 1	616	<49.6	62.8	<49.6	62.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 6	2/29/2024	0.5 - 1	433	<50.4	80.4	<50.4	80.4	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397
CS - 7	2/29/2024	0.5 - 1	1,780	<50.5	809	<50.5	809	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
CS - 8	2/29/2024	0.5 - 1	480	<50.3	200	<50.3	200	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 9	2/29/2024	0.5 - 1	643	<50.3	181	<50.3	181	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
CS - 10	2/29/2024	0.5 - 1	374	<50.1	64.1	<50.1	64.1	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396
CS - 11	2/29/2024	0.5 - 1	3,460	<50.4	729	<50.4	729	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 12	2/29/2024	0.5 - 1	510	<50.5	93.2	<50.5	93.2	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
CS - 13	2/29/2024	0.5 - 1	1,160	<50.0	56.5	<50.0	56.5	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
CS - 14	2/29/2024	0.5 - 1	127	<50.0	160	<50.0	160	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
CS - 15	2/29/2024	0.5 - 1	719	<49.6	55.5	<49.6	55.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 16	2/29/2024	0.5 - 1	1,000	<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397
CS - 17	2/29/2024	0.5 - 1	1,190	<50.4	52.9	<50.4	52.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
CS - 18	2/29/2024	0.5 - 1	710	<50.5	79.3	<50.5	79.3	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 19	2/29/2024	0.5 - 1	1,910	<49.7	106	<49.7	106	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399
CS - 20	2/29/2024	0.5 - 1	973	<49.9	64.5	<49.9	64.5	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396
CS - 21	2/29/2024	0.5 - 1	1,000	<49.6	106	<49.6	106	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
CS - 22	2/29/2024	0.5 - 1	468	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
CS - 23	2/29/2024	0.5 - 1	493	<50.1	70.7	<50.1	70.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404
CS - 24	2/29/2024	0.5 - 1	173	<50.4	<50.4	<50.4	<50.4	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401
CS - 25	2/29/2024	0.5 - 1	227	<50.5	<50.5	<50.5	<50.5	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398
NSW - 1	6/27/2024	0 - 0.5	458	<49.9	53	<49.9	53	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403
SSW - 1	6/27/2024	0 - 0.5	630	<49.8	107	<49.8	107	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
ESW - 1	6/27/2024	0 - 0.5	253	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402
WSW - 1	6/27/2024	0 - 0.5	552	<50	223	<50	223	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402

Bold and highlighted denotes concentrations that exceed 19.15.29 NMAC Remediation Guidelines

TPH = Total Petroleum Hydrocarbons

Ft. = Feet

mg/kg = milligrams per kilogram

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

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PHOTO 1: View of the impacted area facing southwest. 2/09/24

PHOTO 2: View of the impacted area facing west. 2/09/24

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

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PHOTO 3: View of the impacted area facing west. 2/09/24

PHOTO 4: View of the impacted area facing west. 2/09/24

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

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PHOTO 5: View of the excavated area facing southwest. 2/29/24

PHOTO 6: View of the excavated area facing southeast. 2/29/24

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

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PHOTO 7: View of the south end of the excavated area facing west. 2/29/24

PHOTO 8: View of the north end of the excavated area facing west. 2/29/24

Goodnight – Chedder RP
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PHOTO 9: View of the temporary monitoring well facing north. 6/14/24

PHOTO 10: View of the temporary monitoring well facing northwest. 6/14/24

Goodnight – Chedder RP
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PHOTO 11: View of the remediated area facing west. 6/27/2024

PHOTO 12: View of the remediated area facing northwest. 6/27/2024

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

Earth Systems
Response & Restoration

PHOTO 13: View of the remediated area facing north. 6/27/2024

PHOTO 14: View of the remediated area facing southeast. 6/27/2024

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

Earth Systems
Response & Restoration

PHOTO 15: View of the remediated area facing south. 6/27/2024

PHOTO 16: View of the remediated area facing south by southwest. 6/27/2024

Goodnight – Chedder RP
32.446816°, -103.687171°
Lea County, New Mexico

Earth Systems
Response & Restoration

PHOTO 17: View of the remediated area facing southwest. 6/27/2024

Groundwater Research

Depth to Groundwater and Water Bodies Map

NMOSE Average Depth to Water

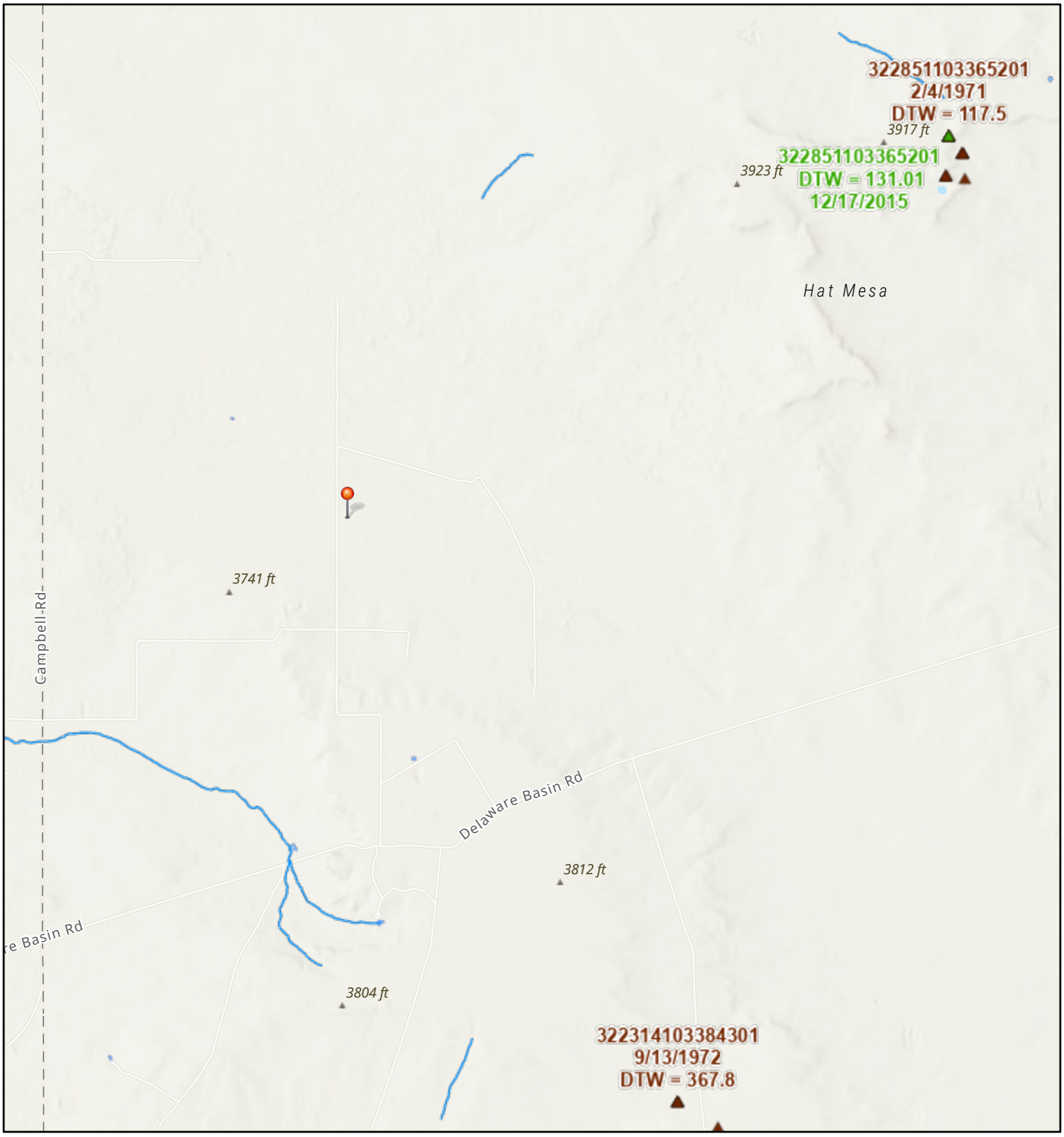
Depth to Groundwater Radius Map

USGS National Water Information System

Karst Potential Map

New Mexico NFHL Data

Water Well and Water Body Locations Map



3/11/2024, 3:46:18 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

- Cheddar RP (Site Location)
- USGS Historical GW Wells
- USGS Active Monitoring GW Wells
- OSW Water Bodys
- OSE Streams

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

New Mexico Oil Conservation Division

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	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 01701 POD1	CP	LE		1	3	35	21S	32E	626652	3589283	3547	840	560	280
C 03717 POD1	C	LE	4	4	1	09	22S	32E	624094	3586365	4400	650		

Average Depth to Water: **560 feet**

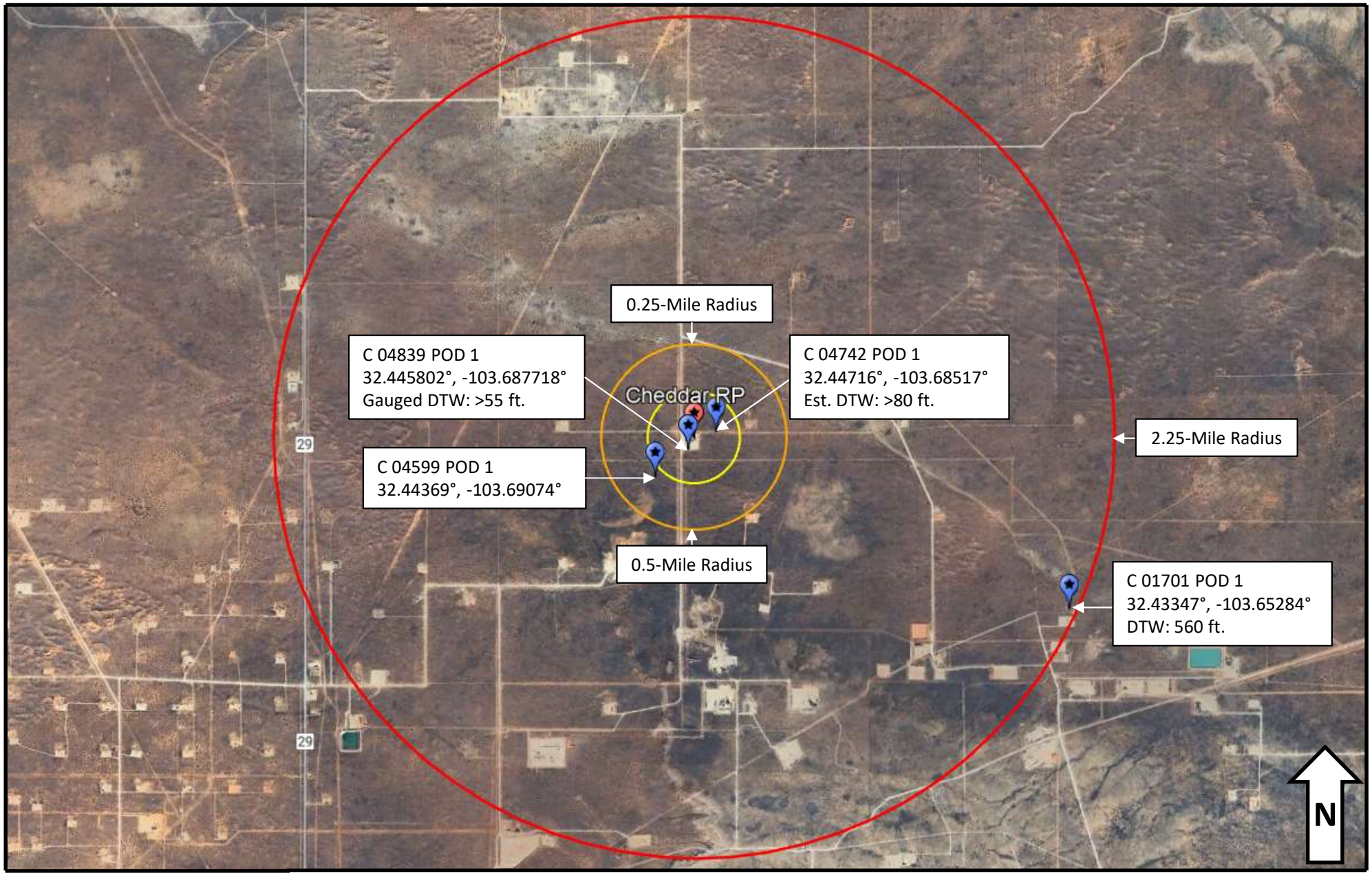
Minimum Depth: **560 feet**

Maximum Depth: **560 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 623405.91 **Northing (Y):** 3590712.53 **Radius:** 4800



Earth Systems
Response & Restoration

Depth to Groundwater Radius Map

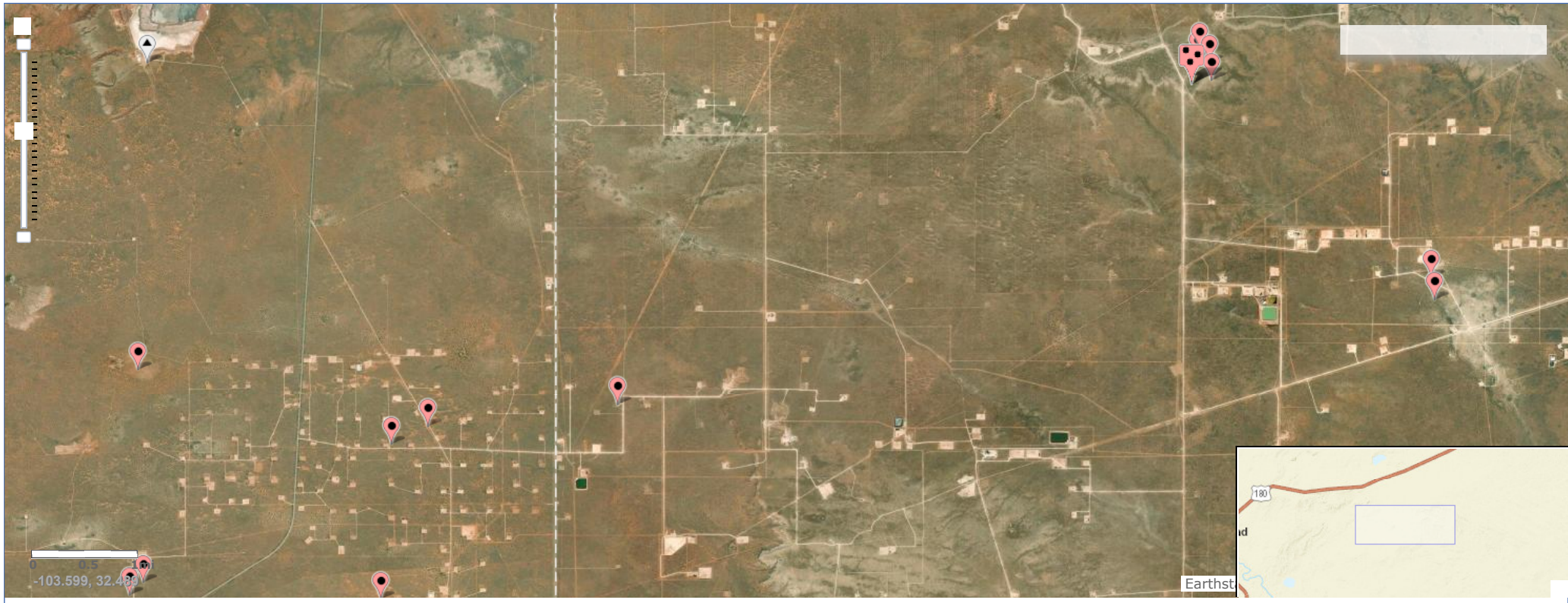
Cheddar RP – Goodnight Midstream, LLC
GPS: 32.446816, -103.687171
Lea County, New Mexico

USGS science for a changing world

Contact USGS
Search USGS

National Water Information System: Mapper

Help Info



Site Information

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: New Mexico | GO

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

site_no list =

- 323039103432501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

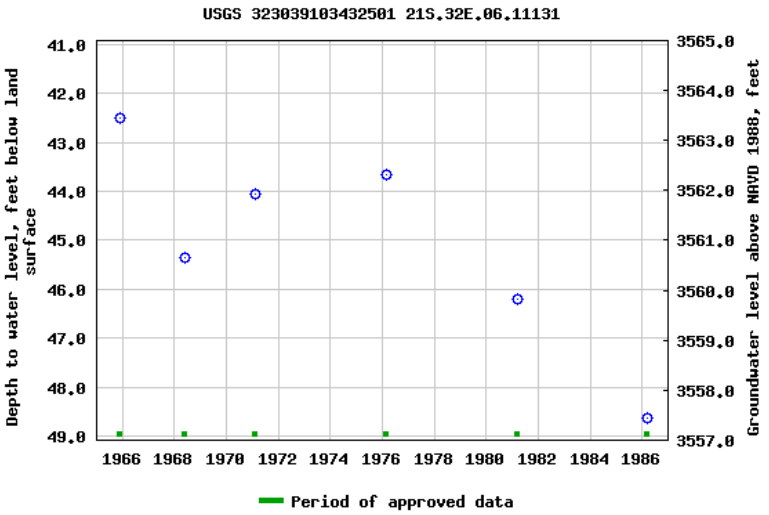
USGS 323039103432501 21S.32E.06.11131

Available data for this site: Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°30'39", Longitude 103°43'25" NAD27
Land-surface elevation 3,606 feet above NAVD88
The depth of the well is 55 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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

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

site_no list =

- 323039103432502

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

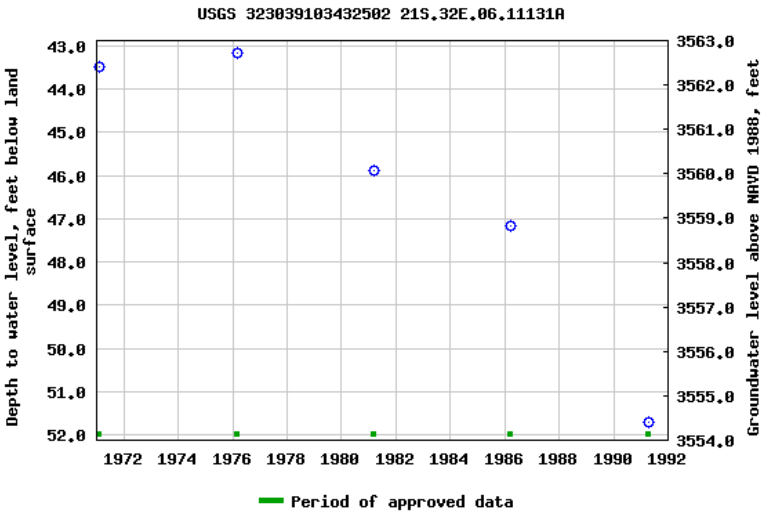
USGS 323039103432502 21S.32E.06.11131A

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°30'39", Longitude 103°43'25" NAD27
Land-surface elevation 3,606 feet above NAVD88
The depth of the well is 55 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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

Page Contact Information: New Mexico Water Data Maintainer
Page Last Modified: 2024-03-11 23:08:07 EDT
0.58 0.52 nadww01

USGS 323109103323801 20S.34E.34.43421

Well Site

DESCRIPTION:
Latitude 32°31'26.6", Longitude 103°32'40.6" NAD83
Lea County, New Mexico , Hydrologic Unit 13060011
Well depth: 100 feet
Land surface altitude: 3,776 feet above NAVD88.
Well completed in "Other aquifers" (N9999OTHER) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1972-10-02	2024-01-31	10
Revisions	Unavailable (site:0) (timeseries:0)		
Additional Data Sources	**Begin Date**	**End Date**	**Count**

OPERATION:
Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to New Mexico Water Science Center Water-Data Inquiries

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 the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 322456103535901

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

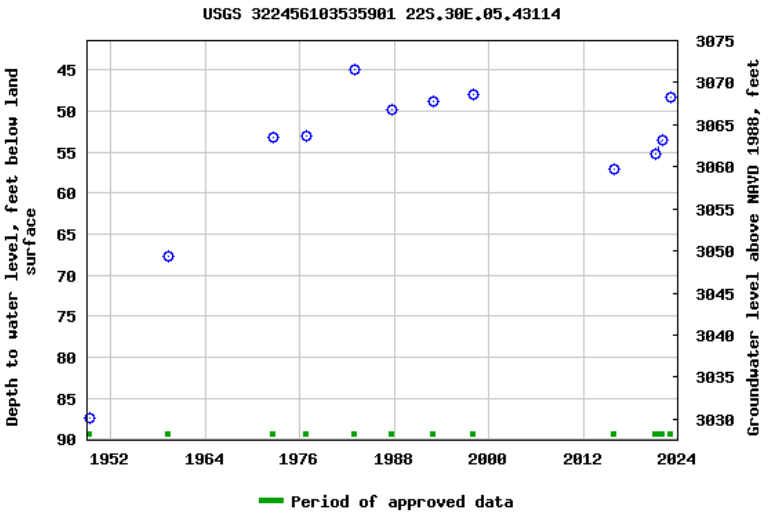
USGS 322456103535901 22S.30E.05.43114

Available data for this site: Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°25'00", Longitude 103°54'10" NAD83
Land-surface elevation 3,117 feet above NAVD88
The depth of the well is 225 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

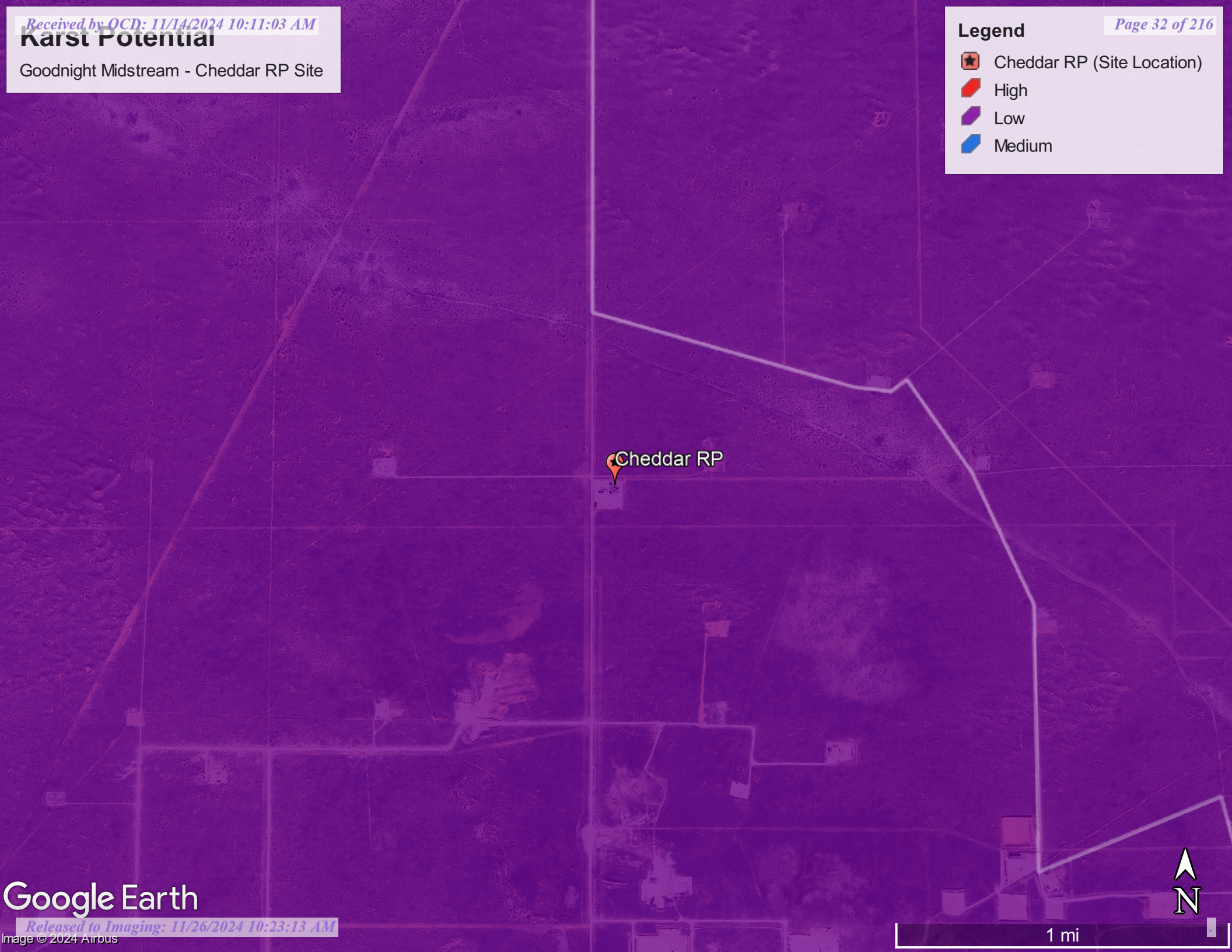
Table of data
Tab-separated data
Graph of data
Reselect period



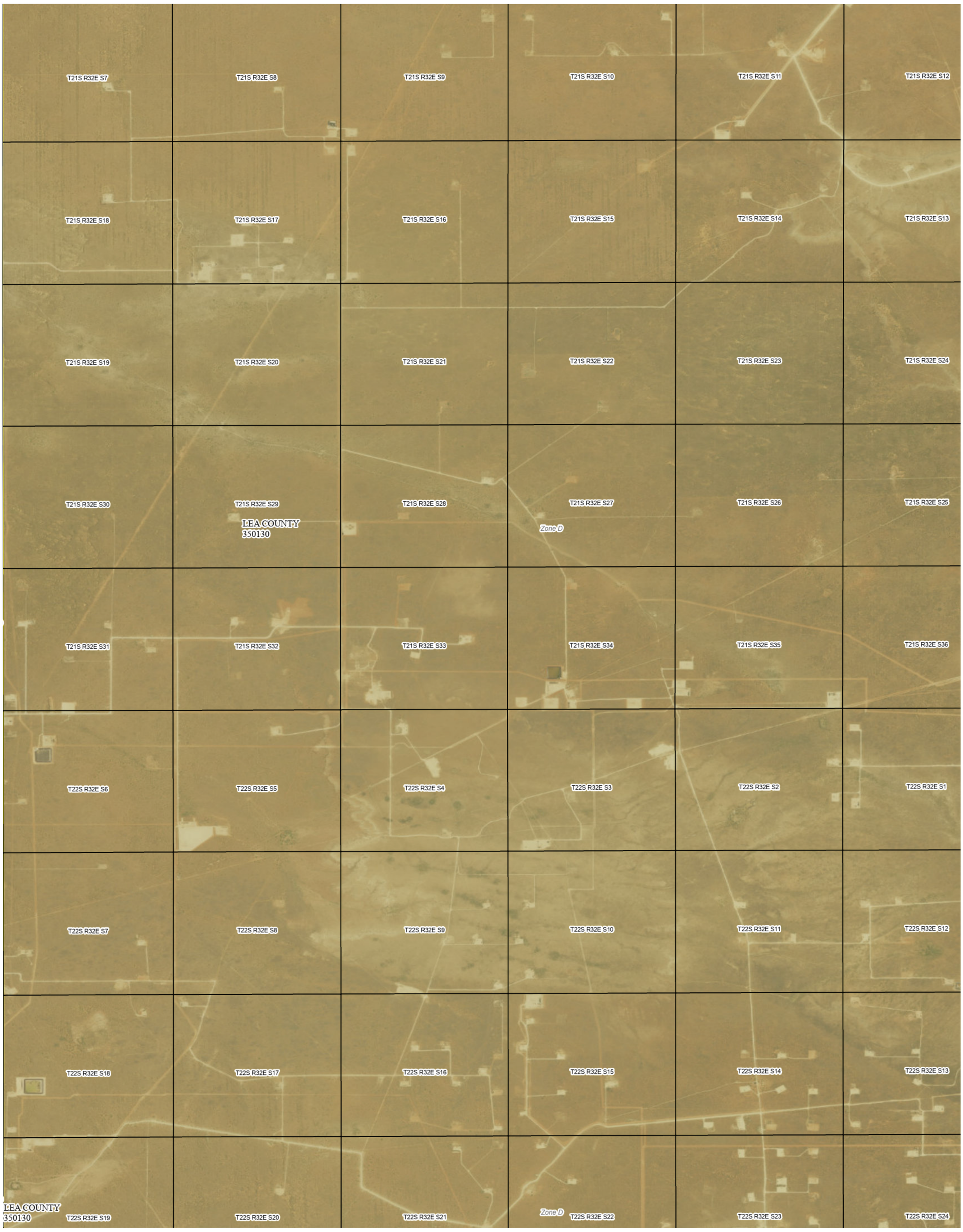
Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Karst Potential

Goodnight Midstream - Cheddar RP Site



103°44'12.83"W 32°30'26.39"N



103°36'39.41"W 32°22'3.68"N

FLOOD HAZARD INFORMATION

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

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

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

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

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

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **3/11/2024 6:08 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

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

SCALE

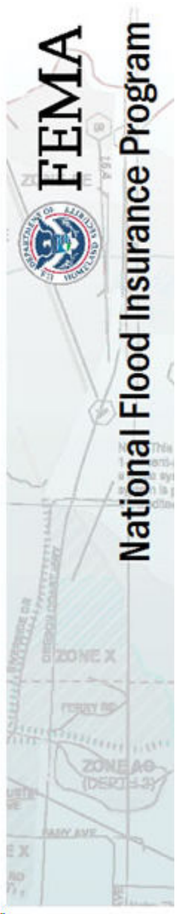
Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: No elevation features on this FIRM
For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 2,000 feet 1:24,000

0 1,000 2,000 4,000 6,000 8,000 Feet

0 210 420 840 1,260 1,680 Meters



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

PANEL **1575** OF **2102**

Panel Contains:

COMMUNITY	NUMBER	PANEL
LEA COUNTY	350130	1575
EDDY COUNTY	350120	1575

MAP NUMBER
35025C1575D
EFFECTIVE DATE
December 16, 2

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/19/2024 5:06:35 PM Revision 1

JOB DESCRIPTION

Cheddar RP
New Mexico

JOB NUMBER

880-39266-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

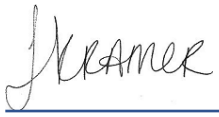
Eurofins Midland

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



Generated
2/19/2024 5:06:35 PM
Revision 1

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
Designee for
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: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1+	Surrogate recovery exceeds control limits, 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 Job ID: 880-39266-1
Project: Cheddar RP

Job ID: 880-39266-1 Eurofins Midland

Job Narrative
880-39266-1

REVISION

The report being provided is a revision of the original report sent on 2/16/2024. The report (revision 1) is being revised due to Per client email, requesting TPH to be ran on sample HA-7 0.5-1.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/13/2024 9:59 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 1.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: HA-5 (880-39266-1), HA-5 (880-39266-2), HA-6 (880-39266-3), HA-6 (880-39266-4), HA-7 (880-39266-5), HA-7 (880-39266-6), HA-8 (880-39266-7), HA-8 (880-39266-8), PS-1 (880-39266-9), PS-2 (880-39266-10), HA-1 (880-39266-11), HA-1 (880-39266-12), HA-1 (880-39266-13), HA-2 (880-39266-14), HA-2 (880-39266-15), HA-2 (880-39266-16), HA-3 (880-39266-17), HA-3 (880-39266-18), HA-4 (880-39266-19), HA-4 (880-39266-20), PS-3 (880-39266-21), PS-4 (880-39266-22), PS-5 (880-39266-23), PS-6 (880-39266-24), PS-7 (880-39266-25), PS-8 (880-39266-26), PS-9 (880-39266-27), PS-10 (880-39266-28), PS-11 (880-39266-29) and PS-12 (880-39266-30).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: PS-9 (880-39266-27), PS-10 (880-39266-28) and PS-11 (880-39266-29). 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 880-72999 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-72999/33).

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA-6 (880-39266-3), HA-7 (880-39266-5), PS-1 (880-39266-9), HA-1 (880-39266-12), HA-2 (880-39266-14), HA-2 (880-39266-16) and PS-5 (880-39266-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-39266-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-73027 and 880-73027 and analytical batch 880-73041 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: HA-7 (880-39266-5) and HA-1 (880-39266-12). Elevated reporting limits (RLs) are provided.

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA-8 (880-39266-7), PS-2 (880-39266-10) and HA-1 (880-39266-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis

Case Narrative

Client: Earth Systems Response and Restoration Job ID: 880-39266-1
Project: Cheddar RP

Job ID: 880-39266-1 (Continued) Eurofins Midland

was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA-1 (880-39266-11), HA-2 (880-39266-14), PS-3 (880-39266-21) and PS-7 (880-39266-25). 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 880-73139 recovered under the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: The following sample was diluted due to the nature of the sample matrix: HA-2 (880-39266-14). 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.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73028 and 880-73085 and analytical batch 880-73094 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA-6 (880-39266-3), HA-7 (880-39266-5), HA-1 (880-39266-11) and HA-2 (880-39266-16). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-72722 and analytical batch 880-73204 was outside the upper control limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-72722 and analytical batch 880-73204 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.

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: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-5

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:58	1
Ethylbenzene	<0.00200	U F2	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:58	1
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.00401		mg/Kg		02/13/24 10:45	02/13/24 15:58	1
o-Xylene	<0.00200	U F2	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:58	1
Xylenes, Total	<0.00401	U F2 F1	0.00401		mg/Kg		02/13/24 10:45	02/13/24 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*02/13/24 10:45*	*02/13/24 15:58*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/13/24 10:45*	*02/13/24 15:58*	*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			02/13/24 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/14/24 19:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 19:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 19:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*02/13/24 11:11*	*02/14/24 19:55*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/13/24 11:11*	*02/14/24 19:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.9**		5.00		mg/Kg			02/13/24 21:28	1

Client Sample ID: HA-5

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-2

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**57.0**		4.99		mg/Kg			02/13/24 21:42	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-6
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 16:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 16:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 16:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 16:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 16:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*158*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 16:24*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*02/13/24 10:45*	*02/13/24 16:24*	*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			02/13/24 16:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			02/14/24 20:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 20:58	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 20:58	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*02/13/24 11:11*	*02/14/24 20:58*	*1*
o-Terphenyl	*116*		*70 - 130*	*02/13/24 11:11*	*02/14/24 20:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.6**		4.96		mg/Kg			02/13/24 21:47	1

Client Sample ID: HA-6
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.5**		4.98		mg/Kg			02/13/24 21:51	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-7

Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0994	U	0.0994		mg/Kg		02/13/24 10:45	02/13/24 18:34	50
Toluene	**4.03**		0.0994		mg/Kg		02/13/24 10:45	02/13/24 18:34	50
Ethylbenzene	**5.08**		0.0994		mg/Kg		02/13/24 10:45	02/13/24 18:34	50
m-Xylene & p-Xylene	**18.9**		0.199		mg/Kg		02/13/24 10:45	02/13/24 18:34	50
o-Xylene	**7.67**		0.0994		mg/Kg		02/13/24 10:45	02/13/24 18:34	50
Xylenes, Total	**26.6**		0.199		mg/Kg		02/13/24 10:45	02/13/24 18:34	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*182*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 18:34*	*50*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/13/24 10:45*	*02/13/24 18:34*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**35.7**		0.199		mg/Kg			02/13/24 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**13000**		249		mg/Kg			02/15/24 02:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**868**		249		mg/Kg		02/13/24 11:11	02/15/24 02:38	5
Diesel Range Organics (Over C10-C28)	**12100**		249		mg/Kg		02/13/24 11:11	02/15/24 02:38	5
Oll Range Organics (Over C28-C36)	<249	U	249		mg/Kg		02/13/24 11:11	02/15/24 02:38	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*199*	*S1+*	*70 - 130*	*02/13/24 11:11*	*02/15/24 02:38*	*5*
o-Terphenyl	*130*		*70 - 130*	*02/13/24 11:11*	*02/15/24 02:38*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7410**		50.2		mg/Kg			02/13/24 21:56	10

Client Sample ID: HA-7

Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/19/24 03:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		02/16/24 16:51	02/19/24 03:23	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/16/24 16:51	02/19/24 03:23	1
Oll Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/16/24 16:51	02/19/24 03:23	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-7

Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-6

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	02/16/24 16:51	02/19/24 03:23	1
o-Terphenyl	87		70 - 130	02/16/24 16:51	02/19/24 03:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85.4**		4.96		mg/Kg			02/13/24 22:10	1

Client Sample ID: HA-8

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-7

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/13/24 16:42	02/14/24 13:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:35	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/13/24 16:42	02/14/24 13:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130	02/13/24 16:42	02/14/24 13:35	1
1,4-Difluorobenzene (Surr)	88		70 - 130	02/13/24 16:42	02/14/24 13:35	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			02/14/24 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**97.0**		50.0		mg/Kg			02/14/24 21:19	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	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 21:19	1
Diesel Range Organics (Over C10-C28)	**97.0**		50.0		mg/Kg		02/13/24 11:11	02/14/24 21:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130	02/13/24 11:11	02/14/24 21:19	1
o-Terphenyl	108		70 - 130	02/13/24 11:11	02/14/24 21:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**106**		4.99		mg/Kg			02/13/24 22:14	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-8
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-8
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68.4		4.98		mg/Kg			02/13/24 22:19	1

Client Sample ID: PS-1
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 17:17	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 17:17	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 17:17	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 17:17	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 17:17	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*50*	*S1-*	*70 - 130*	*02/13/24 10:45*	*02/13/24 17:17*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/13/24 10:45*	*02/13/24 17:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/13/24 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/14/24 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/14/24 21:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/14/24 21:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/14/24 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*02/13/24 11:11*	*02/14/24 21:40*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/13/24 11:11*	*02/14/24 21:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48.4		5.03		mg/Kg			02/13/24 22:24	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-2

Lab Sample ID: 880-39266-10
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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		02/13/24 16:42	02/14/24 13:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 13:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 13:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 16:42	02/14/24 13:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 13:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 16:42	02/14/24 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*02/13/24 16:42*	*02/14/24 13:56*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*02/13/24 16:42*	*02/14/24 13:56*	*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			02/14/24 13:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/14/24 22:01	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	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/14/24 22:01	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/14/24 22:01	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/14/24 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:01*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43.8**		4.98		mg/Kg			02/13/24 22:28	1

Client Sample ID: HA-1

Lab Sample ID: 880-39266-11
Matrix: Solid
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**5.72**		0.0994		mg/Kg		02/13/24 10:45	02/13/24 19:00	50
Toluene	**120**		2.00		mg/Kg		02/13/24 16:42	02/14/24 16:40	1000
Ethylbenzene	**68.1**		2.00		mg/Kg		02/13/24 16:42	02/14/24 16:40	1000
m-Xylene & p-Xylene	**161**		3.99		mg/Kg		02/13/24 16:42	02/14/24 16:40	1000
o-Xylene	**54.3**		2.00		mg/Kg		02/13/24 16:42	02/14/24 16:40	1000
Xylenes, Total	**215**		3.99		mg/Kg		02/13/24 16:42	02/14/24 16:40	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*614*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 19:00*	*50*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-11
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*	*02/13/24 10:45*	*02/13/24 19:00*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**409**		3.99		mg/Kg			02/14/24 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**21500**		251		mg/Kg			02/15/24 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**3930**		251		mg/Kg		02/13/24 11:11	02/15/24 02:17	5
Diesel Range Organics (Over C10-C28)	**17600**		251		mg/Kg		02/13/24 11:11	02/15/24 02:17	5
Oil Range Organics (Over C28-C36)	<251	U	251		mg/Kg		02/13/24 11:11	02/15/24 02:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*379*	*S1+*	*70 - 130*	*02/13/24 11:11*	*02/15/24 02:17*	*5*
o-Terphenyl	*205*	*S1+*	*70 - 130*	*02/13/24 11:11*	*02/15/24 02:17*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10600**		101		mg/Kg			02/13/24 22:33	20

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399		mg/Kg		02/13/24 10:45	02/13/24 19:25	20
Toluene	**0.933**		0.0399		mg/Kg		02/13/24 10:45	02/13/24 19:25	20
Ethylbenzene	**1.26**		0.0399		mg/Kg		02/13/24 10:45	02/13/24 19:25	20
m-Xylene & p-Xylene	**4.16**		0.0798		mg/Kg		02/13/24 10:45	02/13/24 19:25	20
o-Xylene	**7.09**		0.0399		mg/Kg		02/13/24 10:45	02/13/24 19:25	20
Xylenes, Total	**11.3**		0.0798		mg/Kg		02/13/24 10:45	02/13/24 19:25	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*237*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 19:25*	*20*
1,4-Difluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 19:25*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**13.4**		0.0798		mg/Kg			02/13/24 19:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1350**		50.5		mg/Kg			02/15/24 03:20	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-12
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	161		50.5		mg/Kg		02/13/24 11:11	02/15/24 03:20	1
Diesel Range Organics (Over C10-C28)	1190		50.5		mg/Kg		02/13/24 11:11	02/15/24 03:20	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/15/24 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*02/13/24 11:11*	*02/15/24 03:20*	*1*
o-Terphenyl	*95*		*70 - 130*	*02/13/24 11:11*	*02/15/24 03:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2350		24.9		mg/Kg			02/13/24 22:47	5

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 1.5-2

Lab Sample ID: 880-39266-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 18:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 18:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 18:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 18:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 18:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/13/24 10:45*	*02/13/24 18:09*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/13/24 10:45*	*02/13/24 18:09*	*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			02/13/24 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			02/14/24 22:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/13/24 11:11	02/14/24 22:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/13/24 11:11	02/14/24 22:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/13/24 11:11	02/14/24 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:22*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:22*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-1

Lab Sample ID: 880-39266-13
Matrix: Solid
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 1.5-2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.3**		5.05		mg/Kg			02/13/24 22:51	1

Client Sample ID: HA-2

Lab Sample ID: 880-39266-14
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0494**		0.0199		mg/Kg		02/14/24 14:00	02/14/24 16:19	10
Toluene	<0.0199	U	0.0199		mg/Kg		02/14/24 14:00	02/14/24 16:19	10
Ethylbenzene	<0.0199	U	0.0199		mg/Kg		02/14/24 14:00	02/14/24 16:19	10
m-Xylene & p-Xylene	<0.0398	U	0.0398		mg/Kg		02/14/24 14:00	02/14/24 16:19	10
o-Xylene	<0.0199	U	0.0199		mg/Kg		02/14/24 14:00	02/14/24 16:19	10
Xylenes, Total	<0.0398	U	0.0398		mg/Kg		02/14/24 14:00	02/14/24 16:19	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*184*	*S1+*	*70 - 130*	*02/14/24 14:00*	*02/14/24 16:19*	*10*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/14/24 14:00*	*02/14/24 16:19*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0494**		0.0398		mg/Kg			02/14/24 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**152**		50.0		mg/Kg			02/14/24 22:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 22:44	1
Diesel Range Organics (Over C10-C28)	**152**		50.0		mg/Kg		02/13/24 11:11	02/14/24 22:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:44*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/13/24 11:11*	*02/14/24 22:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**193**		4.98		mg/Kg			02/13/24 23:05	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-2

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 14:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 14:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 14:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/13/24 16:42	02/14/24 14:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 14:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/13/24 16:42	02/14/24 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*02/13/24 16:42*	*02/14/24 14:37*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*02/13/24 16:42*	*02/14/24 14:37*	*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			02/14/24 14:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**117**		50.2		mg/Kg			02/14/24 23:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		02/13/24 11:11	02/14/24 23:05	1
Diesel Range Organics (Over C10-C28)	**117**		50.2		mg/Kg		02/13/24 11:11	02/14/24 23:05	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		02/13/24 11:11	02/14/24 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*02/13/24 11:11*	*02/14/24 23:05*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/13/24 11:11*	*02/14/24 23:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**160**		5.04		mg/Kg			02/13/24 23:10	1

Client Sample ID: HA-2

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 1.5-2

Lab Sample ID: 880-39266-16
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		02/13/24 10:45	02/13/24 21:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 21:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 21:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 21:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 21:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/13/24 21:58*	*1*

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-2

Lab Sample ID: 880-39266-16
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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)	*83*		*70 - 130*	*02/13/24 10:45*	*02/13/24 21:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/13/24 21:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/14/24 23:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/14/24 23:26	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/14/24 23:26	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/14/24 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*02/13/24 11:11*	*02/14/24 23:26*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/13/24 11:11*	*02/14/24 23:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**62.8**		5.02		mg/Kg			02/13/24 23:14	1

Client Sample ID: HA-3

Lab Sample ID: 880-39266-17
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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		02/13/24 10:45	02/13/24 22:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 22:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 22:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/13/24 10:45	02/13/24 22:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 22:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/13/24 10:45	02/13/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/13/24 10:45*	*02/13/24 22:24*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/13/24 10:45*	*02/13/24 22:24*	*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			02/13/24 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**489**		50.4		mg/Kg			02/15/24 02:59	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-17
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	<50.4	U	50.4		mg/Kg		02/13/24 11:11	02/15/24 02:59	1
Diesel Range Organics (Over C10-C28)	**489**		50.4		mg/Kg		02/13/24 11:11	02/15/24 02:59	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		02/13/24 11:11	02/15/24 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*02/13/24 11:11*	*02/15/24 02:59*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/13/24 11:11*	*02/15/24 02:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**523**		5.05		mg/Kg			02/13/24 23:19	1

Client Sample ID: HA-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-18
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**65.2**		5.04		mg/Kg			02/13/24 23:24	1

Client Sample ID: HA-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 22:50	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 22:50	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 22:50	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 22:50	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:45	02/13/24 22:50	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/13/24 10:45	02/13/24 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*02/13/24 10:45*	*02/13/24 22:50*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*02/13/24 10:45*	*02/13/24 22:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/13/24 22:50	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			02/14/24 23:47	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-19
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	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 23:47	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 23:47	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/13/24 11:11	02/14/24 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*02/13/24 11:11*	*02/14/24 23:47*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/13/24 11:11*	*02/14/24 23:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**59.8**		4.99		mg/Kg			02/13/24 23:28	1

Client Sample ID: HA-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0.5-1

Lab Sample ID: 880-39266-20
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.4**		5.02		mg/Kg			02/13/24 23:33	1

Client Sample ID: PS-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-21
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/13/24 16:42	02/14/24 14:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/13/24 16:42	02/14/24 14:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/13/24 16:42	02/14/24 14:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/13/24 16:42	02/14/24 14:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/13/24 16:42	02/14/24 14:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/13/24 16:42	02/14/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*02/13/24 16:42*	*02/14/24 14:57*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*02/13/24 16:42*	*02/14/24 14:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/14/24 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/24 00:31	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-3

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-21
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/13/24 11:11*	*02/15/24 00:31*	*1*
o-Terphenyl	*87*		*70 - 130*	*02/13/24 11:11*	*02/15/24 00:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.3**		4.97		mg/Kg			02/13/24 13:05	1

Client Sample ID: PS-4

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-22
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		02/13/24 10:45	02/13/24 23:42	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 23:42	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 23:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 23:42	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/13/24 23:42	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/13/24 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*02/13/24 10:45*	*02/13/24 23:42*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*02/13/24 10:45*	*02/13/24 23:42*	*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			02/13/24 23:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/24 00:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*02/13/24 11:11*	*02/15/24 00:52*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/13/24 11:11*	*02/15/24 00:52*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-4

Lab Sample ID: 880-39266-22
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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	80.9		4.95		mg/Kg			02/13/24 13:25	1

Client Sample ID: PS-5

Lab Sample ID: 880-39266-23
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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		02/13/24 10:45	02/14/24 00:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/14/24 00:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/14/24 00:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/14/24 00:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:45	02/14/24 00:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 10:45	02/14/24 00:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/13/24 10:45*	*02/14/24 00:08*	*1*
1,4-Difluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/13/24 10:45*	*02/14/24 00:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/14/24 00:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/24 01:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:13*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.1		5.05		mg/Kg			02/13/24 13:32	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-6

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-24
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		02/13/24 10:45	02/14/24 00:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 00:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 00:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/13/24 10:45	02/14/24 00:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 00:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/13/24 10:45	02/14/24 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/13/24 10:45*	*02/14/24 00:34*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/13/24 10:45*	*02/14/24 00:34*	*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			02/14/24 00:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			02/15/24 01:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/15/24 01:35	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/15/24 01:35	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		02/13/24 11:11	02/15/24 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:35*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.3**		5.03		mg/Kg			02/13/24 13:52	1

Client Sample ID: PS-7

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-25
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		02/13/24 16:42	02/14/24 15:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 15:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 15:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 16:42	02/14/24 15:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 16:42	02/14/24 15:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 16:42	02/14/24 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*58*	*S1-*	*70 - 130*	*02/13/24 16:42*	*02/14/24 15:18*	*1*

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-7

Lab Sample ID: 880-39266-25
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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)	*81*		*70 - 130*	*02/13/24 16:42*	*02/14/24 15:18*	*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			02/14/24 15:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/15/24 01:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 11:11	02/15/24 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:56*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/13/24 11:11*	*02/15/24 01:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53.8**		5.04		mg/Kg			02/13/24 13:59	1

Client Sample ID: PS-8

Lab Sample ID: 880-39266-26
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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		02/13/24 10:45	02/14/24 01:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 01:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 01:25	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/13/24 10:45	02/14/24 01:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/14/24 01:25	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/13/24 10:45	02/14/24 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*70*		*70 - 130*	*02/13/24 10:45*	*02/14/24 01:25*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*02/13/24 10:45*	*02/14/24 01:25*	*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			02/14/24 01:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			02/15/24 03:41	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-8

Lab Sample ID: 880-39266-26
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/15/24 03:41	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/15/24 03:41	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		02/13/24 11:11	02/15/24 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/13/24 11:11*	*02/15/24 03:41*	*1*
o-Terphenyl	*97*		*70 - 130*	*02/13/24 11:11*	*02/15/24 03:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.7**		5.04		mg/Kg			02/13/24 14:06	1

Client Sample ID: PS-9

Lab Sample ID: 880-39266-27
Matrix: Solid
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
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		02/13/24 10:00	02/13/24 18:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:00	02/13/24 18:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:00	02/13/24 18:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/13/24 10:00	02/13/24 18:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/13/24 10:00	02/13/24 18:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/13/24 10:00	02/13/24 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*02/13/24 10:00*	*02/13/24 18:15*	*1*
1,4-Difluorobenzene (Surr)	*58*	*S1-*	*70 - 130*	*02/13/24 10:00*	*02/13/24 18:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/13/24 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/14/24 10:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/13/24 16:31	02/14/24 10:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/13/24 16:31	02/14/24 10:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/13/24 16:31	02/14/24 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*02/13/24 16:31*	*02/14/24 10:09*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/13/24 16:31*	*02/14/24 10:09*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-9
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-27
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.4		5.01		mg/Kg			02/13/24 14:13	1

Client Sample ID: PS-10
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-28
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		02/13/24 10:00	02/13/24 18:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 18:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 18:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/13/24 10:00	02/13/24 18:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 18:36	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/13/24 10:00	02/13/24 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*65*	*S1-*	*70 - 130*	*02/13/24 10:00*	*02/13/24 18:36*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*02/13/24 10:00*	*02/13/24 18:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			02/13/24 18:36	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			02/14/24 11:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		02/13/24 16:31	02/14/24 11:14	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		02/13/24 16:31	02/14/24 11:14	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		02/13/24 16:31	02/14/24 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*02/13/24 16:31*	*02/14/24 11:14*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/13/24 16:31*	*02/14/24 11:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.7		4.99		mg/Kg			02/13/24 14:19	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-11

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-29
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:00	02/13/24 18:56	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:00	02/13/24 18:56	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:00	02/13/24 18:56	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/13/24 10:00	02/13/24 18:56	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/13/24 10:00	02/13/24 18:56	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/13/24 10:00	02/13/24 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*02/13/24 10:00*	*02/13/24 18:56*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/13/24 10:00*	*02/13/24 18:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/13/24 18:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			02/15/24 16:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		02/15/24 09:59	02/15/24 16:58	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		02/15/24 09:59	02/15/24 16:58	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		02/15/24 09:59	02/15/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*02/15/24 09:59*	*02/15/24 16:58*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/15/24 09:59*	*02/15/24 16:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.9**		5.00		mg/Kg			02/13/24 14:26	1

Client Sample ID: PS-12

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-30
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 19:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 19:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 19:17	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/13/24 10:00	02/13/24 19:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:00	02/13/24 19:17	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/13/24 10:00	02/13/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*02/13/24 10:00*	*02/13/24 19:17*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-12
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59
Sample Depth: 0-0.5

Lab Sample ID: 880-39266-30
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*76*		*70 - 130*	*02/13/24 10:00*	*02/13/24 19:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			02/13/24 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			02/15/24 17:20	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		02/15/24 09:59	02/15/24 17:20	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		02/15/24 09:59	02/15/24 17:20	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		02/15/24 09:59	02/15/24 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*02/15/24 09:59*	*02/15/24 17:20*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/15/24 09:59*	*02/15/24 17:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95.6**		4.96		mg/Kg			02/13/24 14:33	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-39094-A-1-B MS	Matrix Spike	104	97
880-39094-A-1-C MSD	Matrix Spike Duplicate	107	93
880-39266-1	HA-5	70	100
880-39266-1 MS	HA-5	100	82
880-39266-1 MSD	HA-5	145 S1+	87
880-39266-3	HA-6	158 S1+	114
880-39266-5	HA-7	182 S1+	91
880-39266-7	HA-8	55 S1-	88
880-39266-7 MS	HA-8	110	93
880-39266-7 MSD	HA-8	115	92
880-39266-9	PS-1	50 S1-	110
880-39266-10	PS-2	68 S1-	79
880-39266-11	HA-1	614 S1+	127
880-39266-12	HA-1	237 S1+	131 S1+
880-39266-13	HA-1	126	85
880-39266-14	HA-2	184 S1+	105
880-39266-15	HA-2	89	82
880-39266-16	HA-2	142 S1+	83
880-39266-17	HA-3	119	94
880-39266-19	HA-4	113	95
880-39266-21	PS-3	63 S1-	77
880-39266-22	PS-4	117	78
880-39266-23	PS-5	100	135 S1+
880-39266-24	PS-6	119	91
880-39266-25	PS-7	58 S1-	81
880-39266-26	PS-8	70	75
880-39266-27	PS-9	83	58 S1-
880-39266-28	PS-10	65 S1-	71
880-39266-29	PS-11	66 S1-	86
880-39266-30	PS-12	86	76
LCS 880-73002/1-A	Lab Control Sample	107	103
LCS 880-73027/1-A	Lab Control Sample	108	90
LCS 880-73089/1-A	Lab Control Sample	111	84
LCSD 880-73002/2-A	Lab Control Sample Dup	108	99
LCSD 880-73027/2-A	Lab Control Sample Dup	129	86
LCSD 880-73089/2-A	Lab Control Sample Dup	110	94
MB 880-73002/5-A	Method Blank	75	81
MB 880-73027/5-A	Method Blank	76	92
MB 880-73089/5-A	Method Blank	84	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-39032-A-41-E MS	Matrix Spike	126	87
880-39032-A-41-F MSD	Matrix Spike Duplicate	120	85
880-39266-1	HA-5	117	106
880-39266-1 MS	HA-5	108	83
880-39266-1 MSD	HA-5	113	86
880-39266-3	HA-6	135 S1+	116
880-39266-5	HA-7	199 S1+	130
880-39266-6	HA-7	111	87
880-39266-7	HA-8	129	108
880-39266-9	PS-1	109	89
880-39266-10	PS-2	112	93
880-39266-11	HA-1	379 S1+	205 S1+
880-39266-12	HA-1	121	95
880-39266-13	HA-1	106	89
880-39266-14	HA-2	127	106
880-39266-15	HA-2	116	98
880-39266-16	HA-2	143 S1+	126
880-39266-17	HA-3	123	100
880-39266-19	HA-4	123	104
880-39266-21	PS-3	107	87
880-39266-22	PS-4	105	88
880-39266-23	PS-5	112	91
880-39266-24	PS-6	107	88
880-39266-25	PS-7	113	93
880-39266-26	PS-8	112	97
880-39266-27	PS-9	104	86
880-39266-27 MS	PS-9	112	81
880-39266-27 MSD	PS-9	127	91
880-39266-28	PS-10	124	102
880-39266-29	PS-11	124	100
880-39266-30	PS-12	101	86
880-39488-A-21-C MS	Matrix Spike	103	80
880-39488-A-21-D MSD	Matrix Spike Duplicate	96	70
LCS 880-72722/2-A	Lab Control Sample	113	120
LCS 880-73028/2-A	Lab Control Sample	105	101
LCS 880-73085/2-A	Lab Control Sample	112	110
LCS 880-73393/2-A	Lab Control Sample	103	105
LCSD 880-72722/3-A	Lab Control Sample Dup	110	111
LCSD 880-73028/3-A	Lab Control Sample Dup	98	101
LCSD 880-73085/3-A	Lab Control Sample Dup	106	109
LCSD 880-73393/3-A	Lab Control Sample Dup	102	96
MB 880-72722/1-A	Method Blank	249 S1+	223 S1+
MB 880-73028/1-A	Method Blank	231 S1+	210 S1+
MB 880-73085/1-A	Method Blank	227 S1+	206 S1+
MB 880-73393/1-A	Method Blank	127	108

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73002/5-A
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 08:20	02/13/24 11:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 08:20	02/13/24 11:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 08:20	02/13/24 11:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/13/24 08:20	02/13/24 11:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 08:20	02/13/24 11:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/13/24 08:20	02/13/24 11:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*02/13/24 08:20*	*02/13/24 11:22*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*02/13/24 08:20*	*02/13/24 11:22*	*1*

Lab Sample ID: LCS 880-73002/1-A
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1063		mg/Kg		106	70 - 130
Toluene	0.100	0.1103		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1157		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2363		mg/Kg		118	70 - 130
o-Xylene	0.100	0.1145		mg/Kg		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-73002/2-A
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73002

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1041		mg/Kg		104	70 - 130	2	35
Toluene	0.100	0.1094		mg/Kg		109	70 - 130	1	35
Ethylbenzene	0.100	0.1189		mg/Kg		119	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2319		mg/Kg		116	70 - 130	2	35
o-Xylene	0.100	0.1127		mg/Kg		113	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-39094-A-1-B MS
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09155		mg/Kg		92	70 - 130
Toluene	<0.00200	U	0.0996	0.09811		mg/Kg		98	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: 880-39094-A-1-B MS
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1006		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1963		mg/Kg		99	70 - 130
o-Xylene	<0.00200	U	0.0996	0.09523		mg/Kg		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-39094-A-1-C MSD
Matrix: Solid
Analysis Batch: 72999

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.09378		mg/Kg		95	70 - 130	2	35
Toluene	<0.00200	U	0.0990	0.09849		mg/Kg		99	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0990	0.1002		mg/Kg		101	70 - 130	0	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1976		mg/Kg		100	70 - 130	1	35
o-Xylene	<0.00200	U	0.0990	0.09587		mg/Kg		96	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: MB 880-73027/5-A
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73027

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/13/24 10:45	02/13/24 15:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 10:45	02/13/24 15:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/13/24 10:45	02/13/24 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*02/13/24 10:45*	*02/13/24 15:31*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/13/24 10:45*	*02/13/24 15:31*	*1*

Lab Sample ID: LCS 880-73027/1-A
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73027

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1067		mg/Kg		107	70 - 130
Toluene	0.100	0.09335		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.1136		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2461		mg/Kg		123	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: LCS 880-73027/1-A
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73027

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1000		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-73027/2-A
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73027

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08509		mg/Kg		85	70 - 130	23	35
Toluene			0.100	0.08631		mg/Kg		86	70 - 130	8	35
Ethylbenzene			0.100	0.08846		mg/Kg		88	70 - 130	25	35
m-Xylene & p-Xylene			0.200	0.1876		mg/Kg		94	70 - 130	27	35
o-Xylene			0.100	0.08980		mg/Kg		90	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 880-39266-1 MS
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 73027

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0996	0.08141		mg/Kg		82	70 - 130		
Toluene	<0.00200	U	0.0996	0.07035		mg/Kg		71	70 - 130		
Ethylbenzene	<0.00200	U F2	0.0996	0.07495		mg/Kg		74	70 - 130		
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.199	0.1982		mg/Kg		99	70 - 130		
o-Xylene	<0.00200	U F2	0.0996	0.07936		mg/Kg		80	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*

Lab Sample ID: 880-39266-1 MSD
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 73027

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.1084		mg/Kg		109	70 - 130	28	35
Toluene	<0.00200	U	0.0990	0.09861		mg/Kg		100	70 - 130	33	35
Ethylbenzene	<0.00200	U F2	0.0990	0.1200	F2	mg/Kg		120	70 - 130	46	35
m-Xylene & p-Xylene	<0.00401	U F2 F1	0.198	0.2673	F1	mg/Kg		135	70 - 130	30	35
o-Xylene	<0.00200	U F2	0.0990	0.1249	F2	mg/Kg		126	70 - 130	45	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: 880-39266-1 MSD
Matrix: Solid
Analysis Batch: 73041

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 73027

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130
1,4-Difluorobenzene (Surr)	87		70 - 130

Lab Sample ID: MB 880-73089/5-A
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73089

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/13/24 16:42	02/14/24 13:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/13/24 16:42	02/14/24 13:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/13/24 16:42	02/14/24 13:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	02/13/24 16:42	02/14/24 13:14	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/13/24 16:42	02/14/24 13:14	1

Lab Sample ID: LCS 880-73089/1-A
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73089

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07510		mg/Kg		75	70 - 130		
Toluene			0.100	0.1081		mg/Kg		108	70 - 130		
Ethylbenzene			0.100	0.1121		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2288		mg/Kg		114	70 - 130		
o-Xylene			0.100	0.1128		mg/Kg		113	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	84		70 - 130

Lab Sample ID: LCSD 880-73089/2-A
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73089

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	31	35
Toluene			0.100	0.1191		mg/Kg		119	70 - 130	10	35
Ethylbenzene			0.100	0.1132		mg/Kg		113	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2319		mg/Kg		116	70 - 130	1	35
o-Xylene			0.100	0.1146		mg/Kg		115	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: LCSD 880-73089/2-A
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73089

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

Lab Sample ID: 880-39266-7 MS
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: HA-8
Prep Type: Total/NA
Prep Batch: 73089

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0996	0.09547		mg/Kg		95	70 - 130
Toluene	<0.00200	U	0.0996	0.1101		mg/Kg		111	70 - 130
Ethylbenzene	<0.00200	U	0.0996	0.1032		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.199	0.2107		mg/Kg		105	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1052		mg/Kg		105	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Lab Sample ID: 880-39266-7 MSD
Matrix: Solid
Analysis Batch: 73139

Client Sample ID: HA-8
Prep Type: Total/NA
Prep Batch: 73089

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.08771		mg/Kg		87	70 - 130	8	35
Toluene	<0.00200	U	0.0990	0.1102		mg/Kg		111	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0990	0.1078		mg/Kg		108	70 - 130	4	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2246		mg/Kg		113	70 - 130	6	35
o-Xylene	<0.00200	U	0.0990	0.1119		mg/Kg		112	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

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

Lab Sample ID: MB 880-72722/1-A
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72722

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		02/09/24 10:46	02/15/24 07:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/09/24 10:46	02/15/24 07:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/09/24 10:46	02/15/24 07:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	249	S1+	70 - 130	02/09/24 10:46	02/15/24 07:31	1
o-Terphenyl	223	S1+	70 - 130	02/09/24 10:46	02/15/24 07:31	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: LCS 880-72722/2-A
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72722

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	941.1		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	966.1		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: LCSD 880-72722/3-A
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72722

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	924.3		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	989.1		mg/Kg		99	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: 880-39032-A-41-E MS
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 72722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1141		mg/Kg		109	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1437	F1	mg/Kg		140	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: 880-39032-A-41-F MSD
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 72722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	1070		mg/Kg		102	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	1391	F1	mg/Kg		136	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: 880-39032-A-41-F MSD
Matrix: Solid
Analysis Batch: 73204

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 72722

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	85		70 - 130

Lab Sample ID: MB 880-73028/1-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73028

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		02/13/24 11:11	02/14/24 18:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 18:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/13/24 11:11	02/14/24 18:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	231	S1+	70 - 130	02/13/24 11:11	02/14/24 18:51	1
o-Terphenyl	210	S1+	70 - 130	02/13/24 11:11	02/14/24 18:51	1

Lab Sample ID: LCS 880-73028/2-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73028

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	962.5		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	943.2		mg/Kg		94	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-73028/3-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73028

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	941.1		mg/Kg		94	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	919.5		mg/Kg		92	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	101		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: 880-39266-1 MS
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 73028

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	919.9		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1145		mg/Kg		112	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

Lab Sample ID: 880-39266-1 MSD
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: HA-5
Prep Type: Total/NA
Prep Batch: 73028

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	973.7		mg/Kg		93	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	1190		mg/Kg		116	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

Lab Sample ID: MB 880-73085/1-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73085

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		02/13/24 16:31	02/14/24 07:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/13/24 16:31	02/14/24 07:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/13/24 16:31	02/14/24 07:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*227*	*S1+*	*70 - 130*	*02/13/24 16:31*	*02/14/24 07:37*	*1*
o-Terphenyl	*206*	*S1+*	*70 - 130*	*02/13/24 16:31*	*02/14/24 07:37*	*1*

Lab Sample ID: LCS 880-73085/2-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1111		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1018		mg/Kg		102	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: LCS 880-73085/2-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73085

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-73085/3-A
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73085

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1089		mg/Kg		109	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	978.6		mg/Kg		98	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 880-39266-27 MS
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: PS-9
Prep Type: Total/NA
Prep Batch: 73085

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	1010	945.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1152		mg/Kg		112	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-39266-27 MSD
Matrix: Solid
Analysis Batch: 73094

Client Sample ID: PS-9
Prep Type: Total/NA
Prep Batch: 73085

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	1010	1083		mg/Kg		104	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1010	1310		mg/Kg		128	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	91		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: MB 880-73393/1-A
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73393

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		02/16/24 14:56	02/18/24 19:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/24 14:56	02/18/24 19:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/24 14:56	02/18/24 19:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*02/16/24 14:56*	*02/18/24 19:15*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/16/24 14:56*	*02/18/24 19:15*	*1*

Lab Sample ID: LCS 880-73393/2-A
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1092		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	989.9		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-73393/3-A
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73393

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1069		mg/Kg		107	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	960.5		mg/Kg		96	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: 880-39488-A-21-C MS
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1000	1067		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	<49.7	U	1000	881.6		mg/Kg		85	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Lab Sample ID: 880-39488-A-21-C MS
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 73393

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 880-39488-A-21-D MSD
Matrix: Solid
Analysis Batch: 73414

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 73393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1000	1093		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.7	U	1000	813.7		mg/Kg		78	70 - 130	8	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	70		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73009/1-A
Matrix: Solid
Analysis Batch: 73035

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			02/13/24 11:10	1

Lab Sample ID: LCS 880-73009/2-A
Matrix: Solid
Analysis Batch: 73035

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-73009/3-A
Matrix: Solid
Analysis Batch: 73035

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	248.4		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 880-39266-21 MS
Matrix: Solid
Analysis Batch: 73035

Client Sample ID: PS-3
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	63.3		249	331.6		mg/Kg		108	90 - 110

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-39266-21 MSD — **Client Sample ID: PS-3**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73035

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	63.3		249	331.8		mg/Kg		108	90 - 110	0	20

Lab Sample ID: MB 880-73030/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/13/24 21:14	1

Lab Sample ID: LCS 880-73030/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	243.3		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-73030/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	244.6		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-39266-1 MS — **Client Sample ID: HA-5**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	70.9		250	324.9		mg/Kg		102	90 - 110

Lab Sample ID: 880-39266-1 MSD — **Client Sample ID: HA-5**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	70.9		250	325.7		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-39266-11 MS — **Client Sample ID: HA-1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	10600		5030	15730		mg/Kg		103	90 - 110

Lab Sample ID: 880-39266-11 MSD — **Client Sample ID: HA-1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73081

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	10600		5030	15750		mg/Kg		103	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC VOA

Analysis Batch: 72999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-27	PS-9	Total/NA	Solid	8021B	73002
880-39266-28	PS-10	Total/NA	Solid	8021B	73002
880-39266-29	PS-11	Total/NA	Solid	8021B	73002
880-39266-30	PS-12	Total/NA	Solid	8021B	73002
MB 880-73002/5-A	Method Blank	Total/NA	Solid	8021B	73002
LCS 880-73002/1-A	Lab Control Sample	Total/NA	Solid	8021B	73002
LCSD 880-73002/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73002
880-39094-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	73002
880-39094-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	73002

Prep Batch: 73002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-27	PS-9	Total/NA	Solid	5035	
880-39266-28	PS-10	Total/NA	Solid	5035	
880-39266-29	PS-11	Total/NA	Solid	5035	
880-39266-30	PS-12	Total/NA	Solid	5035	
MB 880-73002/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73002/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73002/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-39094-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-39094-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 73027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	5035	
880-39266-3	HA-6	Total/NA	Solid	5035	
880-39266-5	HA-7	Total/NA	Solid	5035	
880-39266-9	PS-1	Total/NA	Solid	5035	
880-39266-11	HA-1	Total/NA	Solid	5035	
880-39266-12	HA-1	Total/NA	Solid	5035	
880-39266-13	HA-1	Total/NA	Solid	5035	
880-39266-16	HA-2	Total/NA	Solid	5035	
880-39266-17	HA-3	Total/NA	Solid	5035	
880-39266-19	HA-4	Total/NA	Solid	5035	
880-39266-22	PS-4	Total/NA	Solid	5035	
880-39266-23	PS-5	Total/NA	Solid	5035	
880-39266-24	PS-6	Total/NA	Solid	5035	
880-39266-26	PS-8	Total/NA	Solid	5035	
MB 880-73027/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73027/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73027/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-39266-1 MS	HA-5	Total/NA	Solid	5035	
880-39266-1 MSD	HA-5	Total/NA	Solid	5035	

Analysis Batch: 73041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	8021B	73027
880-39266-3	HA-6	Total/NA	Solid	8021B	73027
880-39266-5	HA-7	Total/NA	Solid	8021B	73027
880-39266-9	PS-1	Total/NA	Solid	8021B	73027
880-39266-11	HA-1	Total/NA	Solid	8021B	73027

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC VOA (Continued)

Analysis Batch: 73041 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-12	HA-1	Total/NA	Solid	8021B	73027
880-39266-13	HA-1	Total/NA	Solid	8021B	73027
880-39266-16	HA-2	Total/NA	Solid	8021B	73027
880-39266-17	HA-3	Total/NA	Solid	8021B	73027
880-39266-19	HA-4	Total/NA	Solid	8021B	73027
880-39266-22	PS-4	Total/NA	Solid	8021B	73027
880-39266-23	PS-5	Total/NA	Solid	8021B	73027
880-39266-24	PS-6	Total/NA	Solid	8021B	73027
880-39266-26	PS-8	Total/NA	Solid	8021B	73027
MB 880-73027/5-A	Method Blank	Total/NA	Solid	8021B	73027
LCS 880-73027/1-A	Lab Control Sample	Total/NA	Solid	8021B	73027
LCSD 880-73027/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73027
880-39266-1 MS	HA-5	Total/NA	Solid	8021B	73027
880-39266-1 MSD	HA-5	Total/NA	Solid	8021B	73027

Prep Batch: 73089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-7	HA-8	Total/NA	Solid	5035	
880-39266-10	PS-2	Total/NA	Solid	5035	
880-39266-11	HA-1	Total/NA	Solid	5035	
880-39266-14	HA-2	Total/NA	Solid	5035	
880-39266-15	HA-2	Total/NA	Solid	5035	
880-39266-21	PS-3	Total/NA	Solid	5035	
880-39266-25	PS-7	Total/NA	Solid	5035	
MB 880-73089/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73089/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73089/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-39266-7 MS	HA-8	Total/NA	Solid	5035	
880-39266-7 MSD	HA-8	Total/NA	Solid	5035	

Analysis Batch: 73139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-7	HA-8	Total/NA	Solid	8021B	73089
880-39266-10	PS-2	Total/NA	Solid	8021B	73089
880-39266-11	HA-1	Total/NA	Solid	8021B	73089
880-39266-14	HA-2	Total/NA	Solid	8021B	73089
880-39266-15	HA-2	Total/NA	Solid	8021B	73089
880-39266-21	PS-3	Total/NA	Solid	8021B	73089
880-39266-25	PS-7	Total/NA	Solid	8021B	73089
MB 880-73089/5-A	Method Blank	Total/NA	Solid	8021B	73089
LCS 880-73089/1-A	Lab Control Sample	Total/NA	Solid	8021B	73089
LCSD 880-73089/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73089
880-39266-7 MS	HA-8	Total/NA	Solid	8021B	73089
880-39266-7 MSD	HA-8	Total/NA	Solid	8021B	73089

Analysis Batch: 73161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	Total BTEX	
880-39266-3	HA-6	Total/NA	Solid	Total BTEX	
880-39266-5	HA-7	Total/NA	Solid	Total BTEX	
880-39266-7	HA-8	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC VOA (Continued)

Analysis Batch: 73161 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-9	PS-1	Total/NA	Solid	Total BTEX	
880-39266-10	PS-2	Total/NA	Solid	Total BTEX	
880-39266-11	HA-1	Total/NA	Solid	Total BTEX	
880-39266-12	HA-1	Total/NA	Solid	Total BTEX	
880-39266-13	HA-1	Total/NA	Solid	Total BTEX	
880-39266-14	HA-2	Total/NA	Solid	Total BTEX	
880-39266-15	HA-2	Total/NA	Solid	Total BTEX	
880-39266-16	HA-2	Total/NA	Solid	Total BTEX	
880-39266-17	HA-3	Total/NA	Solid	Total BTEX	
880-39266-19	HA-4	Total/NA	Solid	Total BTEX	
880-39266-21	PS-3	Total/NA	Solid	Total BTEX	
880-39266-22	PS-4	Total/NA	Solid	Total BTEX	
880-39266-23	PS-5	Total/NA	Solid	Total BTEX	
880-39266-24	PS-6	Total/NA	Solid	Total BTEX	
880-39266-25	PS-7	Total/NA	Solid	Total BTEX	
880-39266-26	PS-8	Total/NA	Solid	Total BTEX	
880-39266-27	PS-9	Total/NA	Solid	Total BTEX	
880-39266-28	PS-10	Total/NA	Solid	Total BTEX	
880-39266-29	PS-11	Total/NA	Solid	Total BTEX	
880-39266-30	PS-12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 72722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-29	PS-11	Total/NA	Solid	8015NM Prep	
880-39266-30	PS-12	Total/NA	Solid	8015NM Prep	
MB 880-72722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-72722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-72722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39032-A-41-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-39032-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 73028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	8015NM Prep	
880-39266-3	HA-6	Total/NA	Solid	8015NM Prep	
880-39266-5	HA-7	Total/NA	Solid	8015NM Prep	
880-39266-7	HA-8	Total/NA	Solid	8015NM Prep	
880-39266-9	PS-1	Total/NA	Solid	8015NM Prep	
880-39266-10	PS-2	Total/NA	Solid	8015NM Prep	
880-39266-11	HA-1	Total/NA	Solid	8015NM Prep	
880-39266-12	HA-1	Total/NA	Solid	8015NM Prep	
880-39266-13	HA-1	Total/NA	Solid	8015NM Prep	
880-39266-14	HA-2	Total/NA	Solid	8015NM Prep	
880-39266-15	HA-2	Total/NA	Solid	8015NM Prep	
880-39266-16	HA-2	Total/NA	Solid	8015NM Prep	
880-39266-17	HA-3	Total/NA	Solid	8015NM Prep	
880-39266-19	HA-4	Total/NA	Solid	8015NM Prep	
880-39266-21	PS-3	Total/NA	Solid	8015NM Prep	
880-39266-22	PS-4	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC Semi VOA (Continued)

Prep Batch: 73028 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-23	PS-5	Total/NA	Solid	8015NM Prep	
880-39266-24	PS-6	Total/NA	Solid	8015NM Prep	
880-39266-25	PS-7	Total/NA	Solid	8015NM Prep	
880-39266-26	PS-8	Total/NA	Solid	8015NM Prep	
MB 880-73028/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73028/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39266-1 MS	HA-5	Total/NA	Solid	8015NM Prep	
880-39266-1 MSD	HA-5	Total/NA	Solid	8015NM Prep	

Prep Batch: 73085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-27	PS-9	Total/NA	Solid	8015NM Prep	
880-39266-28	PS-10	Total/NA	Solid	8015NM Prep	
MB 880-73085/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73085/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73085/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39266-27 MS	PS-9	Total/NA	Solid	8015NM Prep	
880-39266-27 MSD	PS-9	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	8015B NM	73028
880-39266-3	HA-6	Total/NA	Solid	8015B NM	73028
880-39266-5	HA-7	Total/NA	Solid	8015B NM	73028
880-39266-7	HA-8	Total/NA	Solid	8015B NM	73028
880-39266-9	PS-1	Total/NA	Solid	8015B NM	73028
880-39266-10	PS-2	Total/NA	Solid	8015B NM	73028
880-39266-11	HA-1	Total/NA	Solid	8015B NM	73028
880-39266-12	HA-1	Total/NA	Solid	8015B NM	73028
880-39266-13	HA-1	Total/NA	Solid	8015B NM	73028
880-39266-14	HA-2	Total/NA	Solid	8015B NM	73028
880-39266-15	HA-2	Total/NA	Solid	8015B NM	73028
880-39266-16	HA-2	Total/NA	Solid	8015B NM	73028
880-39266-17	HA-3	Total/NA	Solid	8015B NM	73028
880-39266-19	HA-4	Total/NA	Solid	8015B NM	73028
880-39266-21	PS-3	Total/NA	Solid	8015B NM	73028
880-39266-22	PS-4	Total/NA	Solid	8015B NM	73028
880-39266-23	PS-5	Total/NA	Solid	8015B NM	73028
880-39266-24	PS-6	Total/NA	Solid	8015B NM	73028
880-39266-25	PS-7	Total/NA	Solid	8015B NM	73028
880-39266-26	PS-8	Total/NA	Solid	8015B NM	73028
880-39266-27	PS-9	Total/NA	Solid	8015B NM	73085
880-39266-28	PS-10	Total/NA	Solid	8015B NM	73085
MB 880-73028/1-A	Method Blank	Total/NA	Solid	8015B NM	73028
MB 880-73085/1-A	Method Blank	Total/NA	Solid	8015B NM	73085
LCS 880-73028/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73028
LCS 880-73085/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73085
LCSD 880-73028/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73028
LCSD 880-73085/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73085
880-39266-1 MS	HA-5	Total/NA	Solid	8015B NM	73028

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC Semi VOA (Continued)

Analysis Batch: 73094 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1 MSD	HA-5	Total/NA	Solid	8015B NM	73028
880-39266-27 MS	PS-9	Total/NA	Solid	8015B NM	73085
880-39266-27 MSD	PS-9	Total/NA	Solid	8015B NM	73085

Analysis Batch: 73204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-29	PS-11	Total/NA	Solid	8015B NM	72722
880-39266-30	PS-12	Total/NA	Solid	8015B NM	72722
MB 880-72722/1-A	Method Blank	Total/NA	Solid	8015B NM	72722
LCS 880-72722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	72722
LCSD 880-72722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	72722
880-39032-A-41-E MS	Matrix Spike	Total/NA	Solid	8015B NM	72722
880-39032-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	72722

Analysis Batch: 73223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Total/NA	Solid	8015 NM	
880-39266-3	HA-6	Total/NA	Solid	8015 NM	
880-39266-5	HA-7	Total/NA	Solid	8015 NM	
880-39266-6	HA-7	Total/NA	Solid	8015 NM	
880-39266-7	HA-8	Total/NA	Solid	8015 NM	
880-39266-9	PS-1	Total/NA	Solid	8015 NM	
880-39266-10	PS-2	Total/NA	Solid	8015 NM	
880-39266-11	HA-1	Total/NA	Solid	8015 NM	
880-39266-12	HA-1	Total/NA	Solid	8015 NM	
880-39266-13	HA-1	Total/NA	Solid	8015 NM	
880-39266-14	HA-2	Total/NA	Solid	8015 NM	
880-39266-15	HA-2	Total/NA	Solid	8015 NM	
880-39266-16	HA-2	Total/NA	Solid	8015 NM	
880-39266-17	HA-3	Total/NA	Solid	8015 NM	
880-39266-19	HA-4	Total/NA	Solid	8015 NM	
880-39266-21	PS-3	Total/NA	Solid	8015 NM	
880-39266-22	PS-4	Total/NA	Solid	8015 NM	
880-39266-23	PS-5	Total/NA	Solid	8015 NM	
880-39266-24	PS-6	Total/NA	Solid	8015 NM	
880-39266-25	PS-7	Total/NA	Solid	8015 NM	
880-39266-26	PS-8	Total/NA	Solid	8015 NM	
880-39266-27	PS-9	Total/NA	Solid	8015 NM	
880-39266-28	PS-10	Total/NA	Solid	8015 NM	
880-39266-29	PS-11	Total/NA	Solid	8015 NM	
880-39266-30	PS-12	Total/NA	Solid	8015 NM	

Prep Batch: 73393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-6	HA-7	Total/NA	Solid	8015NM Prep	
MB 880-73393/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73393/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73393/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39488-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-39488-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

GC Semi VOA

Analysis Batch: 73414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-6	HA-7	Total/NA	Solid	8015B NM	73393
MB 880-73393/1-A	Method Blank	Total/NA	Solid	8015B NM	73393
LCS 880-73393/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73393
LCSD 880-73393/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73393
880-39488-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	73393
880-39488-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	73393

HPLC/IC

Leach Batch: 73009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-21	PS-3	Soluble	Solid	DI Leach	
880-39266-22	PS-4	Soluble	Solid	DI Leach	
880-39266-23	PS-5	Soluble	Solid	DI Leach	
880-39266-24	PS-6	Soluble	Solid	DI Leach	
880-39266-25	PS-7	Soluble	Solid	DI Leach	
880-39266-26	PS-8	Soluble	Solid	DI Leach	
880-39266-27	PS-9	Soluble	Solid	DI Leach	
880-39266-28	PS-10	Soluble	Solid	DI Leach	
880-39266-29	PS-11	Soluble	Solid	DI Leach	
880-39266-30	PS-12	Soluble	Solid	DI Leach	
MB 880-73009/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73009/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73009/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-39266-21 MS	PS-3	Soluble	Solid	DI Leach	
880-39266-21 MSD	PS-3	Soluble	Solid	DI Leach	

Leach Batch: 73030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Soluble	Solid	DI Leach	
880-39266-2	HA-5	Soluble	Solid	DI Leach	
880-39266-3	HA-6	Soluble	Solid	DI Leach	
880-39266-4	HA-6	Soluble	Solid	DI Leach	
880-39266-5	HA-7	Soluble	Solid	DI Leach	
880-39266-6	HA-7	Soluble	Solid	DI Leach	
880-39266-7	HA-8	Soluble	Solid	DI Leach	
880-39266-8	HA-8	Soluble	Solid	DI Leach	
880-39266-9	PS-1	Soluble	Solid	DI Leach	
880-39266-10	PS-2	Soluble	Solid	DI Leach	
880-39266-11	HA-1	Soluble	Solid	DI Leach	
880-39266-12	HA-1	Soluble	Solid	DI Leach	
880-39266-13	HA-1	Soluble	Solid	DI Leach	
880-39266-14	HA-2	Soluble	Solid	DI Leach	
880-39266-15	HA-2	Soluble	Solid	DI Leach	
880-39266-16	HA-2	Soluble	Solid	DI Leach	
880-39266-17	HA-3	Soluble	Solid	DI Leach	
880-39266-18	HA-3	Soluble	Solid	DI Leach	
880-39266-19	HA-4	Soluble	Solid	DI Leach	
880-39266-20	HA-4	Soluble	Solid	DI Leach	
MB 880-73030/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73030/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

HPLC/IC (Continued)

Leach Batch: 73030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-73030/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-39266-1 MS	HA-5	Soluble	Solid	DI Leach	
880-39266-1 MSD	HA-5	Soluble	Solid	DI Leach	
880-39266-11 MS	HA-1	Soluble	Solid	DI Leach	
880-39266-11 MSD	HA-1	Soluble	Solid	DI Leach	

Analysis Batch: 73035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-21	PS-3	Soluble	Solid	300.0	73009
880-39266-22	PS-4	Soluble	Solid	300.0	73009
880-39266-23	PS-5	Soluble	Solid	300.0	73009
880-39266-24	PS-6	Soluble	Solid	300.0	73009
880-39266-25	PS-7	Soluble	Solid	300.0	73009
880-39266-26	PS-8	Soluble	Solid	300.0	73009
880-39266-27	PS-9	Soluble	Solid	300.0	73009
880-39266-28	PS-10	Soluble	Solid	300.0	73009
880-39266-29	PS-11	Soluble	Solid	300.0	73009
880-39266-30	PS-12	Soluble	Solid	300.0	73009
MB 880-73009/1-A	Method Blank	Soluble	Solid	300.0	73009
LCS 880-73009/2-A	Lab Control Sample	Soluble	Solid	300.0	73009
LCSD 880-73009/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73009
880-39266-21 MS	PS-3	Soluble	Solid	300.0	73009
880-39266-21 MSD	PS-3	Soluble	Solid	300.0	73009

Analysis Batch: 73081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-1	HA-5	Soluble	Solid	300.0	73030
880-39266-2	HA-5	Soluble	Solid	300.0	73030
880-39266-3	HA-6	Soluble	Solid	300.0	73030
880-39266-4	HA-6	Soluble	Solid	300.0	73030
880-39266-5	HA-7	Soluble	Solid	300.0	73030
880-39266-6	HA-7	Soluble	Solid	300.0	73030
880-39266-7	HA-8	Soluble	Solid	300.0	73030
880-39266-8	HA-8	Soluble	Solid	300.0	73030
880-39266-9	PS-1	Soluble	Solid	300.0	73030
880-39266-10	PS-2	Soluble	Solid	300.0	73030
880-39266-11	HA-1	Soluble	Solid	300.0	73030
880-39266-12	HA-1	Soluble	Solid	300.0	73030
880-39266-13	HA-1	Soluble	Solid	300.0	73030
880-39266-14	HA-2	Soluble	Solid	300.0	73030
880-39266-15	HA-2	Soluble	Solid	300.0	73030
880-39266-16	HA-2	Soluble	Solid	300.0	73030
880-39266-17	HA-3	Soluble	Solid	300.0	73030
880-39266-18	HA-3	Soluble	Solid	300.0	73030
880-39266-19	HA-4	Soluble	Solid	300.0	73030
880-39266-20	HA-4	Soluble	Solid	300.0	73030
MB 880-73030/1-A	Method Blank	Soluble	Solid	300.0	73030
LCS 880-73030/2-A	Lab Control Sample	Soluble	Solid	300.0	73030
LCSD 880-73030/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73030
880-39266-1 MS	HA-5	Soluble	Solid	300.0	73030
880-39266-1 MSD	HA-5	Soluble	Solid	300.0	73030

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

HPLC/IC (Continued)

Analysis Batch: 73081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39266-11 MS	HA-1	Soluble	Solid	300.0	73030
880-39266-11 MSD	HA-1	Soluble	Solid	300.0	73030

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-5
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 15:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 15:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 19:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 19:55	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 21:28	CH	EET MID

Client Sample ID: HA-5
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 21:42	CH	EET MID

Client Sample ID: HA-6
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 16:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 16:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 20:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 20:58	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 21:47	CH	EET MID

Client Sample ID: HA-6
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 21:51	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-7
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	73041	02/13/24 18:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 18:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 02:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	73094	02/15/24 02:38	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		10			73081	02/13/24 21:56	CH	EET MID

Client Sample ID: HA-7
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-6
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			73223	02/19/24 03:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73393	02/16/24 16:51	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73414	02/19/24 03:23	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:10	CH	EET MID

Client Sample ID: HA-8
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73139	02/14/24 13:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 13:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 21:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 21:19	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:14	CH	EET MID

Client Sample ID: HA-8
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-8
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			5.02 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:19	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-1
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-9
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			4.98 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 17:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 17:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 21:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 21:40	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:24	CH	EET MID

Client Sample ID: PS-2
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-10
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			5.02 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73139	02/14/24 13:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 13:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 22:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 22:01	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:28	CH	EET MID

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1000	5 mL	5 mL	73139	02/14/24 16:40	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	73041	02/13/24 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 16:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 02:17	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	73094	02/15/24 02:17	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		20			73081	02/13/24 22:33	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	73041	02/13/24 19:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 19:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 03:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 03:20	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		5			73081	02/13/24 22:47	CH	EET MID

Client Sample ID: HA-1
Date Collected: 02/09/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-13
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			4.97 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 18:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 18:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 22:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 22:22	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 22:51	CH	EET MID

Client Sample ID: HA-2
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	73089	02/14/24 14:00	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	73139	02/14/24 16:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 16:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 22:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 22:44	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:05	CH	EET MID

Client Sample ID: HA-2
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73139	02/14/24 14:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 14:37	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-2
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-15
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			73223	02/14/24 23:05	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 23:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:10	CH	EET MID

Client Sample ID: HA-2
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-16
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	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 21:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 21:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 23:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 23:26	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:14	CH	EET MID

Client Sample ID: HA-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-17
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			5.01 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 22:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 02:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 02:59	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:19	CH	EET MID

Client Sample ID: HA-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:24	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: HA-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 22:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 22:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 23:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 23:47	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:28	CH	EET MID

Client Sample ID: HA-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-20
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	73030	02/13/24 11:21	SA	EET MID
Soluble	Analysis	300.0		1			73081	02/13/24 23:33	CH	EET MID

Client Sample ID: PS-3
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-21
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			4.98 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73139	02/14/24 14:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 14:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 00:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 00:31	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 13:05	CH	EET MID

Client Sample ID: PS-4
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-22
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			5.02 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/13/24 23:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 23:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 00:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 00:52	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 13:25	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-5
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-23
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			5.03 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/14/24 00:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 00:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 01:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 01:13	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 13:32	CH	EET MID

Client Sample ID: PS-6
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-24
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			5.01 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/14/24 00:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 00:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 01:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 01:35	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 13:52	CH	EET MID

Client Sample ID: PS-7
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-25
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			5.02 g	5 mL	73089	02/13/24 16:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73139	02/14/24 15:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 01:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 01:56	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 13:59	CH	EET MID

Client Sample ID: PS-8
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	73027	02/13/24 10:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73041	02/14/24 01:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/14/24 01:25	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-8
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-26
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			73223	02/15/24 03:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	73028	02/13/24 11:11	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/15/24 03:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 14:06	CH	EET MID

Client Sample ID: PS-9
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73002	02/13/24 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72999	02/13/24 18:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 18:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 10:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73085	02/13/24 16:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 10:09	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 14:13	CH	EET MID

Client Sample ID: PS-10
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	73002	02/13/24 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72999	02/13/24 18:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 18:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/14/24 11:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	73085	02/13/24 16:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73094	02/14/24 11:14	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 14:19	CH	EET MID

Client Sample ID: PS-11
Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-29
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			4.97 g	5 mL	73002	02/13/24 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72999	02/13/24 18:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 18:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 16:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	72722	02/15/24 09:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 16:58	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Client Sample ID: PS-11

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-29

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			5.00 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 14:26	CH	EET MID

Client Sample ID: PS-12

Date Collected: 02/12/24 00:00
Date Received: 02/13/24 09:59

Lab Sample ID: 880-39266-30

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	73002	02/13/24 10:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72999	02/13/24 19:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73161	02/13/24 19:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			73223	02/15/24 17:20	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	72722	02/15/24 09:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 17:20	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73009	02/13/24 10:30	SA	EET MID
Soluble	Analysis	300.0		1			73035	02/13/24 14:33	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Job ID: 880-39266-1
Project/Site: Cheddar RP
SDG: New Mexico

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	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: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-39266-1
SDG: New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-39266-1	HA-5	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-2	HA-5	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-3	HA-6	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-4	HA-6	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-5	HA-7	Solid	02/09/24 00:00	02/13/24 09:59	0-0.5
880-39266-6	HA-7	Solid	02/09/24 00:00	02/13/24 09:59	0.5-1
880-39266-7	HA-8	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-8	HA-8	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-9	PS-1	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-10	PS-2	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-11	HA-1	Solid	02/09/24 00:00	02/13/24 09:59	0-0.5
880-39266-12	HA-1	Solid	02/09/24 00:00	02/13/24 09:59	0.5-1
880-39266-13	HA-1	Solid	02/09/24 00:00	02/13/24 09:59	1.5-2
880-39266-14	HA-2	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-15	HA-2	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-16	HA-2	Solid	02/12/24 00:00	02/13/24 09:59	1.5-2
880-39266-17	HA-3	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-18	HA-3	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-19	HA-4	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-20	HA-4	Solid	02/12/24 00:00	02/13/24 09:59	0.5-1
880-39266-21	PS-3	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-22	PS-4	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-23	PS-5	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-24	PS-6	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-25	PS-7	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-26	PS-8	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-27	PS-9	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-28	PS-10	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-29	PS-11	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5
880-39266-30	PS-12	Solid	02/12/24 00:00	02/13/24 09:59	0-0.5

Environment Testing
Xenco

Chain of Custody

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

880-39266 Chain of Custody

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Project Manager:	Kyle Kincaid	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:	Cheddar RP
Project Number:	2023
Project Location:	New Mexico
Sampler's Name:	Kyle Kincaid
PO #:	

Turn Around

☐ ☑
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:	IR8	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-1.0	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.1	
Total Containers:		Corrected Temperature:	1.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Chlorides	TPH	BTEX
HA-5	S	2/12/2024		0 - 0 5	G	1	X	X	X
HA-5	S	2/12/2024		0 5 - 1	G	1	X		
HA-6	S	2/12/2024		0 - 0 5	G	1	X	X	X
HA-6	S	2/12/2024		0 5 - 1	G	1	X		
HA-7	S	2/9/2024		0 - 0 5	G	1	X	X	X
HA-7	S	2/9/2024		0 5 - 1	G	1	X		
HA-8	S	2/12/2024		0 - 0 5	G	1	X	X	X
HA-8	S	2/12/2024		0 5 - 1	G	1	X		
PS-1	S	2/12/2024		0 - 0 5	G	1	X	X	X
PS-2	S	2/12/2024		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

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 Kyle Kincaid	Jazmine	2/13	2		
3		09:59	4		
5			6		

Revised Date 08/25/2020 Rev 2020 2

[redacted] Environment Testing Xenco

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: 392166

www.xenco.com Page 2 of 3

Project Manager:	Kyle Kincaid	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:	Cheddar RP	Turn Around			
Project Number:	2023	☐	☑		
Project Location:	New Mexico	Due Date:	24 hour		
Sampler's Name:	Kyle Kincaid	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:	CF8	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.1	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.1	
Total Containers:		Corrected Temperature:	1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Chlorides	TPH	BTEX
HA-1	S	2/9/2024		0 - 0.5	G	1	X	X	X
HA-1	S	2/9/2024		0.5 - 1	G	1	X	X	X
HA-1	S	2/9/2024		1.5 - 2	G	1	X	X	X
HA-2	S	2/12/2024		0 - 0.5	G	1	X	X	X
HA-2	S	2/12/2024		0.5 - 1	G	1	X	X	X
HA-2	S	2/12/2024		1.5 - 2	G	1	X	X	X
HA-3	S	2/12/2024		0 - 0.5	G	1	X	X	X
HA-3	S	2/12/2024		0.5 - 1	G	1	X		
HA-4	S	2/12/2024		0 - 0.5	G	1	X	X	X
HA-4	S	2/12/2024		0.5 - 1	G	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

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 Kyle Kincaid	Jasmine	2/13	2		
3		9:59	4		
5			6		

Revised Date 08/25/2020 Rev 2020.2

[redacted] Environment Testing Xenco

Chain of Custody

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

Loc: 880
39266

Work Order No: 2

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Project Manager:	Kyle Kincaid	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:	Cheddar RP	Turn Around	
Project Number:	2023	☐	☑
Project Location:	New Mexico	Due Date:	24 hour
Sampler's Name:	Kyle Kincaid	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	CF6	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.1	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.1	
Total Containers:		Corrected Temperature:	1.0	

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	Pres. Code	Parameters: Chlorides	TPH	BTEX	Sample Comments
PS-3	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-4	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-5	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-6	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-7	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-8	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-9	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-10	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-11	S	2/12/2024		0 - 0.5	G	1		X	X	X	
PS-12	S	2/12/2024		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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Kyle Kincaid	[redacted]	2/13	2		
3		9:54	4		
5			6		

Revised Date 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-39266-1
SDG Number: New Mexico

Login Number: 39266
List Number: 1
Creator: Wheeler, Jazmine

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

Cheddar RP
Lea Co.

JOB NUMBER

880-40156-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

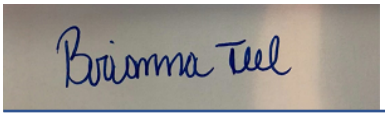
Eurofins Midland

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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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: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Qualifiers

GC VOA

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

HPLC/IC

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

Glossary

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

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Case Narrative

Client: Earth Systems Response and Restoration Job ID: 880-40156-1
Project: Cheddar RP

Job ID: 880-40156-1 Eurofins Midland

Job Narrative
880-40156-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/29/2024 4:40 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 23.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 0.5-1 (880-40156-1), CS-2 0.5-1 (880-40156-2), CS-3 0.5-1 (880-40156-3), CS-4 0.5-1 (880-40156-4), CS-5 0.5-1 (880-40156-5), CS-6 0.5-1 (880-40156-6), CS-7 0.5-1 (880-40156-7), CS-8 0.5-1 (880-40156-8), CS-9 0.5-1 (880-40156-9), CS-10 0.5-1 (880-40156-10), CS-11 0.5-1 (880-40156-11), CS-12 0.5-1 (880-40156-12), CS-13 0.5-1 (880-40156-13), CS-14 0.5-1 (880-40156-14), CS-15 0.5-1 (880-40156-15), CS-16 0.5-1 (880-40156-16), CS-17 0.5-1 (880-40156-17), CS-18 0.5-1 (880-40156-18), CS-19 0.5-1 (880-40156-19), CS-20 0.5-1 (880-40156-20), CS-21 0.5-1 (880-40156-21), CS-22 0.5-1 (880-40156-22), CS-23 0.5-1 (880-40156-23), CS-24 0.5-1 (880-40156-24) and CS-25 0.5-1 (880-40156-25).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-74453 recovered under the lower control limit for Benzene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

Method 8021B: LCS biased low. Since only an acceptable LCS or LCSD is required per the method, the LCSD shows recovery for the batch and the data has been qualified and reported.

Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-74466 and analytical batch 880-74453. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-74521 and analytical batch 880-74546 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: CS-14 0.5-1 (880-40156-14), CS-16 0.5-1 (880-40156-16) and CS-18 0.5-1 (880-40156-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The method blank for preparation batch 880-74521 and analytical batch 880-74546 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: CS-23 0.5-1 (880-40156-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The method blank for preparation batch 880-74451 and 880-74466 and analytical batch 880-74453 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Eurofins Midland

Case Narrative

Client: Earth Systems Response and Restoration Job ID: 880-40156-1
Project: Cheddar RP

Job ID: 880-40156-1 (Continued) Eurofins Midland

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-74465/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-74374 and analytical batch 880-74456 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-40156-A-1-D MS) and (880-40156-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: CS-2 0.5-1 (880-40156-2), CS-3 0.5-1 (880-40156-3) and CS-4 0.5-1 (880-40156-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: CS-8 0.5-1 (880-40156-8), CS-9 0.5-1 (880-40156-9) and CS-10 0.5-1 (880-40156-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-74465 and 880-74465 and analytical batch 880-74456 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.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-74494 and analytical batch 880-74445 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-74494/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-74494 and analytical batch 880-74445 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-74445 recovered below the lower control limit for Gasoline Range Organics (GRO)-C6-C10 and 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 880-74445/47).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-74493 and analytical batch 880-74447 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: CS-17 0.5-1 (880-40156-17) and CS-18 0.5-1 (880-40156-18). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-74493 and analytical batch 880-74447 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-1 0.5-1

Lab Sample ID: 880-40156-1
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199		mg/Kg		03/01/24 11:20	03/02/24 03:15	1
Toluene	<0.00199	U F1 F2	0.00199		mg/Kg		03/01/24 11:20	03/02/24 03:15	1
Ethylbenzene	<0.00199	U F1 F2	0.00199		mg/Kg		03/01/24 11:20	03/02/24 03:15	1
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398		mg/Kg		03/01/24 11:20	03/02/24 03:15	1
o-Xylene	<0.00199	U F1 F2	0.00199		mg/Kg		03/01/24 11:20	03/02/24 03:15	1
Xylenes, Total	<0.00398	U F1 F2	0.00398		mg/Kg		03/01/24 11:20	03/02/24 03:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*03/01/24 11:20*	*03/02/24 03:15*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/24 11:20*	*03/02/24 03:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 03:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			03/01/24 20:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/01/24 20:22	1
Diesel Range Organics (Over C10-C28)	<49.6	U *+	49.6		mg/Kg		03/01/24 13:59	03/01/24 20:22	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/01/24 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/01/24 13:59*	*03/01/24 20:22*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/01/24 13:59*	*03/01/24 20:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**227**		4.99		mg/Kg			03/01/24 18:42	1

Client Sample ID: CS-2 0.5-1

Lab Sample ID: 880-40156-2
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 03:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 03:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 03:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 11:20	03/02/24 03:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 03:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 11:20	03/02/24 03:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 03:42*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-2 0.5-1

Lab Sample ID: 880-40156-2
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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)	*109*		*70 - 130*	*03/01/24 11:20*	*03/02/24 03:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/02/24 03:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			03/01/24 21:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		03/01/24 13:59	03/01/24 21:27	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+	49.7		mg/Kg		03/01/24 13:59	03/01/24 21:27	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/01/24 13:59	03/01/24 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*03/01/24 13:59*	*03/01/24 21:27*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/01/24 13:59*	*03/01/24 21:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**195**		4.98		mg/Kg			03/01/24 18:58	1

Client Sample ID: CS-3 0.5-1

Lab Sample ID: 880-40156-3
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/01/24 11:20	03/02/24 04:09	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/01/24 11:20	03/02/24 04:09	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/01/24 11:20	03/02/24 04:09	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/01/24 11:20	03/02/24 04:09	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/01/24 11:20	03/02/24 04:09	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/01/24 11:20	03/02/24 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/01/24 11:20*	*03/02/24 04:09*	*1*
1,4-Difluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 04:09*	*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			03/02/24 04:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/01/24 21:48	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-3 0.5-1

Lab Sample ID: 880-40156-3
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/01/24 21:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		03/01/24 13:59	03/01/24 21:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/01/24 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/01/24 13:59*	*03/01/24 21:48*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/01/24 13:59*	*03/01/24 21:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**155**		4.99		mg/Kg			03/01/24 19:04	1

Client Sample ID: CS-4 0.5-1

Lab Sample ID: 880-40156-4
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/01/24 11:20	03/02/24 04:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 04:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 04:35	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/01/24 11:20	03/02/24 04:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 04:35	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/01/24 11:20	03/02/24 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*03/01/24 11:20*	*03/02/24 04:35*	*1*
1,4-Difluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 04:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/02/24 04:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**840**		49.8		mg/Kg			03/01/24 22:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/01/24 13:59	03/01/24 22:09	1
Diesel Range Organics (Over C10-C28)	**790**	***+**	49.8		mg/Kg		03/01/24 13:59	03/01/24 22:09	1
Oil Range Organics (Over C28-C36)	**49.8**		49.8		mg/Kg		03/01/24 13:59	03/01/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:09*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:09*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-4 0.5-1

Lab Sample ID: 880-40156-4
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**181**		5.04		mg/Kg			03/01/24 19:09	1

Client Sample ID: CS-5 0.5-1

Lab Sample ID: 880-40156-5
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 05:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 05:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 05:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 11:20	03/02/24 05:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 05:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 11:20	03/02/24 05:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:00*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 05:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.8**		49.6		mg/Kg			03/01/24 22:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/01/24 22:31	1
Diesel Range Organics (Over C10-C28)	**62.8**	***+**	49.6		mg/Kg		03/01/24 13:59	03/01/24 22:31	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/01/24 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:31*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**616**		5.02		mg/Kg			03/01/24 19:15	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-6 0.5-1

Lab Sample ID: 880-40156-6
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 05:26	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 05:26	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 05:26	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/01/24 11:20	03/02/24 05:26	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 05:26	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/01/24 11:20	03/02/24 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:26*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/02/24 05:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**80.4**		50.4		mg/Kg			03/01/24 22:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/01/24 22:52	1
Diesel Range Organics (Over C10-C28)	**80.4**	***+**	50.4		mg/Kg		03/01/24 13:59	03/01/24 22:52	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/01/24 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:52*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/01/24 13:59*	*03/01/24 22:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**433**		5.02		mg/Kg			03/01/24 19:31	1

Client Sample ID: CS-7 0.5-1

Lab Sample ID: 880-40156-7
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 05:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 05:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 05:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/01/24 11:20	03/02/24 05:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/01/24 11:20	03/02/24 05:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/01/24 11:20	03/02/24 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:51*	*1*

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-7 0.5-1

Lab Sample ID: 880-40156-7
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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)	*118*		*70 - 130*	*03/01/24 11:20*	*03/02/24 05:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/02/24 05:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**809**		50.5		mg/Kg			03/01/24 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/01/24 23:14	1
Diesel Range Organics (Over C10-C28)	**809**	***+**	50.5		mg/Kg		03/01/24 13:59	03/01/24 23:14	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/01/24 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:14*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1780**		25.1		mg/Kg			03/01/24 19:37	5

Client Sample ID: CS-8 0.5-1

Lab Sample ID: 880-40156-8
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 06:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 06:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 06:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/01/24 11:20	03/02/24 06:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/01/24 11:20	03/02/24 06:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/01/24 11:20	03/02/24 06:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*150*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 06:16*	*1*
1,4-Difluorobenzene (Surr)	*209*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 06:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 06:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**200**		50.3		mg/Kg			03/01/24 23:35	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-8 0.5-1

Lab Sample ID: 880-40156-8
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:35	1
Diesel Range Organics (Over C10-C28)	**200**	***+**	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:35	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:35*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**480**		5.02		mg/Kg			03/01/24 19:42	1

Client Sample ID: CS-9 0.5-1

Lab Sample ID: 880-40156-9
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/01/24 11:20	03/02/24 06:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 06:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 06:42	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/01/24 11:20	03/02/24 06:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 06:42	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/01/24 11:20	03/02/24 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 06:42*	*1*
1,4-Difluorobenzene (Surr)	*209*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 06:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/02/24 06:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**181**		50.3		mg/Kg			03/01/24 23:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:57	1
Diesel Range Organics (Over C10-C28)	**181**	***+**	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:57	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		03/01/24 13:59	03/01/24 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:57*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/01/24 13:59*	*03/01/24 23:57*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-9 0.5-1

Lab Sample ID: 880-40156-9
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**643**		4.99		mg/Kg			03/01/24 19:48	1

Client Sample ID: CS-10 0.5-1

Lab Sample ID: 880-40156-10
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 07:09	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 07:09	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 07:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/01/24 11:20	03/02/24 07:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/01/24 11:20	03/02/24 07:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/01/24 11:20	03/02/24 07:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*170*	*S1+*	*70 - 130*	*03/01/24 11:20*	*03/02/24 07:09*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*03/01/24 11:20*	*03/02/24 07:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/02/24 07:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**64.1**		50.1		mg/Kg			03/02/24 00:19	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	<50.1	U	50.1		mg/Kg		03/01/24 13:59	03/02/24 00:19	1
Diesel Range Organics (Over C10-C28)	**64.1**	***+**	50.1		mg/Kg		03/01/24 13:59	03/02/24 00:19	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/01/24 13:59	03/02/24 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/01/24 13:59*	*03/02/24 00:19*	*1*
o-Terphenyl	*118*		*70 - 130*	*03/01/24 13:59*	*03/02/24 00:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**374**		4.99		mg/Kg			03/01/24 19:53	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-11 0.5-1

Lab Sample ID: 880-40156-11
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:00	03/03/24 13:44	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:00	03/03/24 13:44	1
Ethylbenzene	<0.00199	U F1	0.00199		mg/Kg		03/02/24 11:00	03/03/24 13:44	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398		mg/Kg		03/02/24 11:00	03/03/24 13:44	1
o-Xylene	<0.00199	U F2 F1	0.00199		mg/Kg		03/02/24 11:00	03/03/24 13:44	1
Xylenes, Total	<0.00398	U F1	0.00398		mg/Kg		03/02/24 11:00	03/03/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*03/02/24 11:00*	*03/03/24 13:44*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/02/24 11:00*	*03/03/24 13:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**729**		50.4		mg/Kg			03/02/24 01:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/02/24 01:03	1
Diesel Range Organics (Over C10-C28)	**729**	***+**	50.4		mg/Kg		03/01/24 13:59	03/02/24 01:03	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/02/24 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:03*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3460**		24.9		mg/Kg			03/01/24 19:59	5

Client Sample ID: CS-12 0.5-1

Lab Sample ID: 880-40156-12
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:00	03/03/24 14:05	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:00	03/03/24 14:05	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:00	03/03/24 14:05	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:00	03/03/24 14:05	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:00	03/03/24 14:05	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:00	03/03/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*03/02/24 11:00*	*03/03/24 14:05*	*1*

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-12 0.5-1

Lab Sample ID: 880-40156-12
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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)	*91*		*70 - 130*	*03/02/24 11:00*	*03/03/24 14:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/03/24 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**93.2**		50.5		mg/Kg			03/02/24 01:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/02/24 01:25	1
Diesel Range Organics (Over C10-C28)	**93.2**	***+**	50.5		mg/Kg		03/01/24 13:59	03/02/24 01:25	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/02/24 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:25*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**		5.05		mg/Kg			03/01/24 20:16	1

Client Sample ID: CS-13 0.5-1

Lab Sample ID: 880-40156-13
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/02/24 11:00	03/03/24 14:25	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:00	03/03/24 14:25	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:00	03/03/24 14:25	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/02/24 11:00	03/03/24 14:25	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/02/24 11:00	03/03/24 14:25	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/02/24 11:00	03/03/24 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/02/24 11:00*	*03/03/24 14:25*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*03/02/24 11:00*	*03/03/24 14:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/03/24 14:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**56.5**		50.0		mg/Kg			03/02/24 01:48	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-13 0.5-1

Lab Sample ID: 880-40156-13
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/02/24 01:48	1
Diesel Range Organics (Over C10-C28)	**56.5**	*+	50.0		mg/Kg		03/01/24 13:59	03/02/24 01:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/02/24 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:48*	*1*
o-Terphenyl	*97*		*70 - 130*	*03/01/24 13:59*	*03/02/24 01:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1160**		4.98		mg/Kg			03/01/24 20:21	1

Client Sample ID: CS-14 0.5-1

Lab Sample ID: 880-40156-14
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/02/24 11:01	03/03/24 14:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 14:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 14:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/02/24 11:01	03/03/24 14:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 14:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/02/24 11:01	03/03/24 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*03/02/24 11:01*	*03/03/24 14:46*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*03/02/24 11:01*	*03/03/24 14:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/03/24 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**160**		50.0		mg/Kg			03/02/24 02:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/02/24 02:11	1
Diesel Range Organics (Over C10-C28)	**160**	*+	50.0		mg/Kg		03/01/24 13:59	03/02/24 02:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/02/24 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:11*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:11*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-14 0.5-1

Lab Sample ID: 880-40156-14
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**127**		4.96		mg/Kg			03/01/24 20:38	1

Client Sample ID: CS-15 0.5-1

Lab Sample ID: 880-40156-15
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 15:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 15:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 15:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:01	03/03/24 15:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 15:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:01	03/03/24 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*03/02/24 11:01*	*03/03/24 15:06*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/02/24 11:01*	*03/03/24 15:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 15:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**55.5**		49.6		mg/Kg			03/02/24 02:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/02/24 02:33	1
Diesel Range Organics (Over C10-C28)	**55.5**	***+**	49.6		mg/Kg		03/01/24 13:59	03/02/24 02:33	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/01/24 13:59	03/02/24 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:33*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**719**		5.04		mg/Kg			03/01/24 20:43	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-16 0.5-1

Lab Sample ID: 880-40156-16
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 15:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 15:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 15:27	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/02/24 11:01	03/03/24 15:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 15:27	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/02/24 11:01	03/03/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*03/02/24 11:01*	*03/03/24 15:27*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/02/24 11:01*	*03/03/24 15:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/03/24 15:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			03/02/24 02:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		03/01/24 13:59	03/02/24 02:55	1
Diesel Range Organics (Over C10-C28)	<50.2	U *+	50.2		mg/Kg		03/01/24 13:59	03/02/24 02:55	1
OII Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/01/24 13:59	03/02/24 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:55*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/01/24 13:59*	*03/02/24 02:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		5.00		mg/Kg			03/01/24 20:49	1

Client Sample ID: CS-17 0.5-1

Lab Sample ID: 880-40156-17
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:01	03/03/24 15:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:01	03/03/24 15:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:01	03/03/24 15:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/02/24 11:01	03/03/24 15:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/02/24 11:01	03/03/24 15:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/02/24 11:01	03/03/24 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*03/02/24 11:01*	*03/03/24 15:48*	*1*

Eurofins Midland

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-17 0.5-1

Lab Sample ID: 880-40156-17
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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)	*85*		*70 - 130*	*03/02/24 11:01*	*03/03/24 15:48*	*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			03/03/24 15:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.9**		50.4		mg/Kg			03/02/24 03:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/02/24 03:17	1
Diesel Range Organics (Over C10-C28)	**52.9**	***+**	50.4		mg/Kg		03/01/24 13:59	03/02/24 03:17	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/01/24 13:59	03/02/24 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*61*	*S1-*	*70 - 130*	*03/01/24 13:59*	*03/02/24 03:17*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*03/01/24 13:59*	*03/02/24 03:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1190**		4.95		mg/Kg			03/01/24 20:54	1

Client Sample ID: CS-18 0.5-1

Lab Sample ID: 880-40156-18
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 16:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 16:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 16:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/02/24 11:01	03/03/24 16:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/02/24 11:01	03/03/24 16:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/02/24 11:01	03/03/24 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/02/24 11:01*	*03/03/24 16:08*	*1*
1,4-Difluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*03/02/24 11:01*	*03/03/24 16:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/03/24 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**79.3**		50.5		mg/Kg			03/02/24 03:39	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-18 0.5-1

Lab Sample ID: 880-40156-18
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/02/24 03:39	1
Diesel Range Organics (Over C10-C28)	**79.3**	***+**	50.5		mg/Kg		03/01/24 13:59	03/02/24 03:39	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/01/24 13:59	03/02/24 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*60*	*S1-*	*70 - 130*	*03/01/24 13:59*	*03/02/24 03:39*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*03/01/24 13:59*	*03/02/24 03:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**710**		4.98		mg/Kg			03/01/24 21:00	1

Client Sample ID: CS-19 0.5-1

Lab Sample ID: 880-40156-19
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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		03/02/24 11:01	03/03/24 16:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 16:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 16:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/02/24 11:01	03/03/24 16:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:01	03/03/24 16:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/02/24 11:01	03/03/24 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*03/02/24 11:01*	*03/03/24 16:29*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/02/24 11:01*	*03/03/24 16:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/03/24 16:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**106**		49.7		mg/Kg			03/02/24 04:01	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		03/01/24 13:59	03/02/24 04:01	1
Diesel Range Organics (Over C10-C28)	**106**	***+**	49.7		mg/Kg		03/01/24 13:59	03/02/24 04:01	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/01/24 13:59	03/02/24 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*03/01/24 13:59*	*03/02/24 04:01*	*1*
o-Terphenyl	*78*		*70 - 130*	*03/01/24 13:59*	*03/02/24 04:01*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-19 0.5-1

Lab Sample ID: 880-40156-19
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1910**		24.8		mg/Kg			03/01/24 21:05	5

Client Sample ID: CS-20 0.5-1

Lab Sample ID: 880-40156-20
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 16:49	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 16:49	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 16:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		03/02/24 11:01	03/03/24 16:49	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/02/24 11:01	03/03/24 16:49	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		03/02/24 11:01	03/03/24 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*03/02/24 11:01*	*03/03/24 16:49*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/02/24 11:01*	*03/03/24 16:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			03/03/24 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**64.5**		49.9		mg/Kg			03/02/24 04:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/01/24 13:59	03/02/24 04:23	1
Diesel Range Organics (Over C10-C28)	**64.5**	***+**	49.9		mg/Kg		03/01/24 13:59	03/02/24 04:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/01/24 13:59	03/02/24 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/01/24 13:59*	*03/02/24 04:23*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/01/24 13:59*	*03/02/24 04:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**973**		4.96		mg/Kg			03/01/24 21:11	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-21 0.5-1

Lab Sample ID: 880-40156-21
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F2 F1 *-*1	0.00199		mg/Kg		03/01/24 11:22	03/01/24 23:20	1
Toluene	<0.00199	U F2 F1 *-*1	0.00199		mg/Kg		03/01/24 11:22	03/01/24 23:20	1
Ethylbenzene	<0.00199	U F2 F1 *-*1	0.00199		mg/Kg		03/01/24 11:22	03/01/24 23:20	1
m-Xylene & p-Xylene	<0.00398	U F2 F1 *-*1	0.00398		mg/Kg		03/01/24 11:22	03/01/24 23:20	1
o-Xylene	<0.00199	U F2 F1 *-*1	0.00199		mg/Kg		03/01/24 11:22	03/01/24 23:20	1
Xylenes, Total	<0.00398	U F2 F1 *-*1	0.00398		mg/Kg		03/01/24 11:22	03/01/24 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*03/01/24 11:22*	*03/01/24 23:20*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/01/24 11:22*	*03/01/24 23:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/01/24 23:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**106**		49.6		mg/Kg			03/01/24 22:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		03/01/24 14:04	03/01/24 22:09	1
Diesel Range Organics (Over C10-C28)	**106**		49.6		mg/Kg		03/01/24 14:04	03/01/24 22:09	1
OII Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/01/24 14:04	03/01/24 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:09*	*1*
o-Terphenyl	*83*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		5.00		mg/Kg			03/01/24 16:01	1

Client Sample ID: CS-22 0.5-1

Lab Sample ID: 880-40156-22
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201		mg/Kg		03/01/24 11:22	03/01/24 23:40	1
Toluene	<0.00201	U *- *1	0.00201		mg/Kg		03/01/24 11:22	03/01/24 23:40	1
Ethylbenzene	<0.00201	U *- *1	0.00201		mg/Kg		03/01/24 11:22	03/01/24 23:40	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		03/01/24 11:22	03/01/24 23:40	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-22 0.5-1

Lab Sample ID: 880-40156-22
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00201	U *- *1	0.00201		mg/Kg		03/01/24 11:22	03/01/24 23:40	1
Xylenes, Total	<0.00402	U *- *1	0.00402		mg/Kg		03/01/24 11:22	03/01/24 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/01/24 11:22*	*03/01/24 23:40*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*03/01/24 11:22*	*03/01/24 23:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/01/24 23:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/01/24 22:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/01/24 14:04	03/01/24 22:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/01/24 14:04	03/01/24 22:31	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/01/24 14:04	03/01/24 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:31*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**468**		4.95		mg/Kg			03/01/24 16:06	1

Client Sample ID: CS-23 0.5-1

Lab Sample ID: 880-40156-23
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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 *- *1	0.00202		mg/Kg		03/01/24 11:22	03/02/24 00:01	1
Toluene	<0.00202	U *- *1	0.00202		mg/Kg		03/01/24 11:22	03/02/24 00:01	1
Ethylbenzene	<0.00202	U *- *1	0.00202		mg/Kg		03/01/24 11:22	03/02/24 00:01	1
m-Xylene & p-Xylene	<0.00404	U *- *1	0.00404		mg/Kg		03/01/24 11:22	03/02/24 00:01	1
o-Xylene	<0.00202	U *- *1	0.00202		mg/Kg		03/01/24 11:22	03/02/24 00:01	1
Xylenes, Total	<0.00404	U *- *1	0.00404		mg/Kg		03/01/24 11:22	03/02/24 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/01/24 11:22*	*03/02/24 00:01*	*1*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*03/01/24 11:22*	*03/02/24 00:01*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-23 0.5-1

Lab Sample ID: 880-40156-23
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/02/24 00:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**70.7**		50.1		mg/Kg			03/01/24 22:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		03/01/24 14:04	03/01/24 22:52	1
Diesel Range Organics (Over C10-C28)	**70.7**		50.1		mg/Kg		03/01/24 14:04	03/01/24 22:52	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		03/01/24 14:04	03/01/24 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:52*	*1*
o-Terphenyl	*90*		*70 - 130*	*03/01/24 14:04*	*03/01/24 22:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**493**		4.95		mg/Kg			03/01/24 16:23	1

Client Sample ID: CS-24 0.5-1

Lab Sample ID: 880-40156-24
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
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 *- *1	0.00200		mg/Kg		03/01/24 11:22	03/02/24 00:22	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		03/01/24 11:22	03/02/24 00:22	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		03/01/24 11:22	03/02/24 00:22	1
m-Xylene & p-Xylene	<0.00401	U *- *1	0.00401		mg/Kg		03/01/24 11:22	03/02/24 00:22	1
o-Xylene	<0.00200	U *- *1	0.00200		mg/Kg		03/01/24 11:22	03/02/24 00:22	1
Xylenes, Total	<0.00401	U *- *1	0.00401		mg/Kg		03/01/24 11:22	03/02/24 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 11:22*	*03/02/24 00:22*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/01/24 11:22*	*03/02/24 00:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/02/24 00:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			03/01/24 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		03/01/24 14:04	03/01/24 23:14	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-24 0.5-1

Lab Sample ID: 880-40156-24
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		03/01/24 14:04	03/01/24 23:14	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/01/24 14:04	03/01/24 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/01/24 14:04*	*03/01/24 23:14*	*1*
o-Terphenyl	*86*		*70 - 130*	*03/01/24 14:04*	*03/01/24 23:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**173**		4.96		mg/Kg			03/01/24 16:29	1

Client Sample ID: CS-25 0.5-1

Lab Sample ID: 880-40156-25
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		03/01/24 11:22	03/02/24 00:42	1
Toluene	<0.00199	U *- *1	0.00199		mg/Kg		03/01/24 11:22	03/02/24 00:42	1
Ethylbenzene	<0.00199	U *- *1	0.00199		mg/Kg		03/01/24 11:22	03/02/24 00:42	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		03/01/24 11:22	03/02/24 00:42	1
o-Xylene	<0.00199	U *- *1	0.00199		mg/Kg		03/01/24 11:22	03/02/24 00:42	1
Xylenes, Total	<0.00398	U *- *1	0.00398		mg/Kg		03/01/24 11:22	03/02/24 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*03/01/24 11:22*	*03/02/24 00:42*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*03/01/24 11:22*	*03/02/24 00:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/02/24 00:42	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			03/01/24 23:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		03/01/24 14:04	03/01/24 23:35	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		03/01/24 14:04	03/01/24 23:35	1
OII Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/01/24 14:04	03/01/24 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*03/01/24 14:04*	*03/01/24 23:35*	*1*
o-Terphenyl	*82*		*70 - 130*	*03/01/24 14:04*	*03/01/24 23:35*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-25 0.5-1
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40
Sample Depth: 0.5-1

Lab Sample ID: 880-40156-25
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		5.00		mg/Kg			03/01/24 16:34	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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)
880-40156-1	CS-1 0.5-1	130	90
880-40156-1 MS	CS-1 0.5-1	146 S1+	129
880-40156-1 MSD	CS-1 0.5-1	92	40 S1-
880-40156-2	CS-2 0.5-1	136 S1+	109
880-40156-3	CS-3 0.5-1	88	138 S1+
880-40156-4	CS-4 0.5-1	85	144 S1+
880-40156-5	CS-5 0.5-1	111	87
880-40156-6	CS-6 0.5-1	88	110
880-40156-7	CS-7 0.5-1	78	118
880-40156-8	CS-8 0.5-1	150 S1+	209 S1+
880-40156-9	CS-9 0.5-1	143 S1+	209 S1+
880-40156-10	CS-10 0.5-1	170 S1+	116
880-40156-11	CS-11 0.5-1	90	92
880-40156-11 MS	CS-11 0.5-1	101	109
880-40156-11 MSD	CS-11 0.5-1	103	119
880-40156-12	CS-12 0.5-1	74	91
880-40156-13	CS-13 0.5-1	88	81
880-40156-14	CS-14 0.5-1	83	70
880-40156-15	CS-15 0.5-1	81	84
880-40156-16	CS-16 0.5-1	63 S1-	103
880-40156-17	CS-17 0.5-1	86	85
880-40156-18	CS-18 0.5-1	78	68 S1-
880-40156-19	CS-19 0.5-1	75	91
880-40156-20	CS-20 0.5-1	76	90
880-40156-21	CS-21 0.5-1	75	90
880-40156-21 MS	CS-21 0.5-1	82	70
880-40156-21 MSD	CS-21 0.5-1	118	116
880-40156-22	CS-22 0.5-1	92	84
880-40156-23	CS-23 0.5-1	78	67 S1-
880-40156-24	CS-24 0.5-1	93	88
880-40156-25	CS-25 0.5-1	86	73
LCS 880-74465/1-A	Lab Control Sample	126	116
LCS 880-74466/1-A	Lab Control Sample	95	86
LCS 880-74521/1-A	Lab Control Sample	102	118
LCSD 880-74465/2-A	Lab Control Sample Dup	124	8 S1-
LCSD 880-74466/2-A	Lab Control Sample Dup	118	116
LCSD 880-74521/2-A	Lab Control Sample Dup	102	88
MB 880-74374/5-A	Method Blank	69 S1-	122
MB 880-74451/5-A	Method Blank	77	93
MB 880-74465/5-A	Method Blank	76	125
MB 880-74466/5-A	Method Blank	75	91
MB 880-74521/5-A	Method Blank	77	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

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)
880-40156-1	CS-1 0.5-1	100	111
880-40156-1 MS	CS-1 0.5-1	102	101
880-40156-1 MSD	CS-1 0.5-1	100	100
880-40156-2	CS-2 0.5-1	112	123
880-40156-3	CS-3 0.5-1	100	109
880-40156-4	CS-4 0.5-1	101	110
880-40156-5	CS-5 0.5-1	92	100
880-40156-6	CS-6 0.5-1	91	99
880-40156-7	CS-7 0.5-1	96	100
880-40156-8	CS-8 0.5-1	91	96
880-40156-9	CS-9 0.5-1	99	104
880-40156-10	CS-10 0.5-1	109	118
880-40156-11	CS-11 0.5-1	98	105
880-40156-12	CS-12 0.5-1	91	97
880-40156-13	CS-13 0.5-1	89	97
880-40156-14	CS-14 0.5-1	105	115
880-40156-15	CS-15 0.5-1	106	114
880-40156-16	CS-16 0.5-1	97	105
880-40156-17	CS-17 0.5-1	61 S1-	65 S1-
880-40156-18	CS-18 0.5-1	60 S1-	65 S1-
880-40156-19	CS-19 0.5-1	74	78
880-40156-20	CS-20 0.5-1	90	99
880-40156-21	CS-21 0.5-1	97	83
880-40156-22	CS-22 0.5-1	106	90
880-40156-23	CS-23 0.5-1	104	90
880-40156-24	CS-24 0.5-1	101	86
880-40156-25	CS-25 0.5-1	95	82
890-6286-A-1-E MS	Matrix Spike	108	84
890-6286-A-1-F MSD	Matrix Spike Duplicate	105	84
LCS 880-74493/2-A	Lab Control Sample	96	98
LCS 880-74494/2-A	Lab Control Sample	128	131 S1+
LCSD 880-74493/3-A	Lab Control Sample Dup	110	117
LCSD 880-74494/3-A	Lab Control Sample Dup	121	112
MB 880-74493/1-A	Method Blank	123	137 S1+
MB 880-74494/1-A	Method Blank	156 S1+	135 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-74374/5-A
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/29/24 12:50	03/01/24 12:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/29/24 12:50	03/01/24 12:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/29/24 12:50	03/01/24 12:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/29/24 12:50	03/01/24 12:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/29/24 12:50	03/01/24 12:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/29/24 12:50	03/01/24 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*02/29/24 12:50*	*03/01/24 12:25*	*1*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*02/29/24 12:50*	*03/01/24 12:25*	*1*

Lab Sample ID: MB 880-74451/5-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 08:34	03/01/24 11:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 08:34	03/01/24 11:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*03/01/24 08:34*	*03/01/24 11:50*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/01/24 08:34*	*03/01/24 11:50*	*1*

Lab Sample ID: MB 880-74465/5-A
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74465

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 02:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 02:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 02:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 11:20	03/02/24 02:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:20	03/02/24 02:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 11:20	03/02/24 02:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*03/01/24 11:20*	*03/02/24 02:49*	*1*
1,4-Difluorobenzene (Surr)	*125*		*70 - 130*	*03/01/24 11:20*	*03/02/24 02:49*	*1*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: LCS 880-74465/1-A
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74465

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08180		mg/Kg		82	70 - 130		
Toluene			0.100	0.09081		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.1092		mg/Kg		109	70 - 130		
m-Xylene & p-Xylene			0.200	0.1866		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09292		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-74465/2-A
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74465

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1006		mg/Kg		101	70 - 130	21	35
Toluene			0.100	0.1026		mg/Kg		103	70 - 130	12	35
Ethylbenzene			0.100	0.1220		mg/Kg		122	70 - 130	11	35
m-Xylene & p-Xylene			0.200	0.2366		mg/Kg		118	70 - 130	24	35
o-Xylene			0.100	0.1016		mg/Kg		102	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*8*	*S1-*	*70 - 130*

Lab Sample ID: 880-40156-1 MS
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: CS-1 0.5-1
Prep Type: Total/NA
Prep Batch: 74465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1 F2	0.101	0.1413	F1	mg/Kg		140	70 - 130		
Toluene	<0.00199	U F1 F2	0.101	0.1244		mg/Kg		123	70 - 130		
Ethylbenzene	<0.00199	U F1 F2	0.101	0.1116		mg/Kg		111	70 - 130		
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.202	0.2437		mg/Kg		121	70 - 130		
o-Xylene	<0.00199	U F1 F2	0.101	0.1237		mg/Kg		123	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*

Lab Sample ID: 880-40156-1 MSD
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: CS-1 0.5-1
Prep Type: Total/NA
Prep Batch: 74465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.100	0.06416	F1 F2	mg/Kg		64	70 - 130	75	35
Toluene	<0.00199	U F1 F2	0.100	0.06611	F1 F2	mg/Kg		66	70 - 130	61	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.06487	F1 F2	mg/Kg		65	70 - 130	53	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: 880-40156-1 MSD
Matrix: Solid
Analysis Batch: 74456

Client Sample ID: CS-1 0.5-1
Prep Type: Total/NA
Prep Batch: 74465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.1090	F1 F2	mg/Kg		54	70 - 130	76	35
o-Xylene	<0.00199	U F1 F2	0.100	0.06824	F1 F2	mg/Kg		68	70 - 130	58	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*40*	*S1-*	*70 - 130*

Lab Sample ID: MB 880-74466/5-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:22	03/01/24 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:22	03/01/24 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:22	03/01/24 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/01/24 11:22	03/01/24 22:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/01/24 11:22	03/01/24 22:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/01/24 11:22	03/01/24 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*03/01/24 11:22*	*03/01/24 22:58*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/01/24 11:22*	*03/01/24 22:58*	*1*

Lab Sample ID: LCS 880-74466/1-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.01780	*-	mg/Kg		18	70 - 130
Toluene	0.100	0.03123	*-	mg/Kg		31	70 - 130
Ethylbenzene	0.100	0.02945	*-	mg/Kg		29	70 - 130
m-Xylene & p-Xylene	0.200	0.06171	*-	mg/Kg		31	70 - 130
o-Xylene	0.100	0.03494	*-	mg/Kg		35	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-74466/2-A
Matrix: Solid
Analysis Batch: 74453

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74466

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08219	*1	mg/Kg		82	70 - 130	129	35
Toluene	0.100	0.1015	*1	mg/Kg		101	70 - 130	106	35
Ethylbenzene	0.100	0.1206	*1	mg/Kg		121	70 - 130	121	35
m-Xylene & p-Xylene	0.200	0.2342	*1	mg/Kg		117	70 - 130	117	35
o-Xylene	0.100	0.1163	*1	mg/Kg		116	70 - 130	108	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: 880-40156-21 MS — **Client Sample ID: CS-21 0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 74453 — **Prep Batch: 74466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F2 F1 *-*1	0.101	0.01833	F1	mg/Kg		17	70 - 130
Toluene	<0.00199	U F2 F1 *-*1	0.101	0.02905	F1	mg/Kg		29	70 - 130
Ethylbenzene	<0.00199	U F2 F1 *-*1	0.101	0.02581	F1	mg/Kg		26	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1 *-*1	0.202	0.04799	F1	mg/Kg		23	70 - 130
o-Xylene	<0.00199	U F2 F1 *-*1	0.101	0.02564	F1	mg/Kg		25	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	70		70 - 130

Lab Sample ID: 880-40156-21 MSD — **Client Sample ID: CS-21 0.5-1**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 74453 — **Prep Batch: 74466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1 *-*1	0.100	0.06028	F2 F1	mg/Kg		59	70 - 130	107	35
Toluene	<0.00199	U F2 F1 *-*1	0.100	0.07312	F2	mg/Kg		73	70 - 130	86	35
Ethylbenzene	<0.00199	U F2 F1 *-*1	0.100	0.08300	F2	mg/Kg		83	70 - 130	105	35
m-Xylene & p-Xylene	<0.00398	U F2 F1 *-*1	0.200	0.1606	F2	mg/Kg		80	70 - 130	108	35
o-Xylene	<0.00199	U F2 F1 *-*1	0.100	0.08042	F2	mg/Kg		80	70 - 130	103	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: MB 880-74521/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 74546 — **Prep Batch: 74521**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:00	03/03/24 13:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:00	03/03/24 13:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:00	03/03/24 13:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/24 11:00	03/03/24 13:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/24 11:00	03/03/24 13:22	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: MB 880-74521/5-A
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74521

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/24 11:00	03/03/24 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*03/02/24 11:00*	*03/03/24 13:22*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/02/24 11:00*	*03/03/24 13:22*	*1*

Lab Sample ID: LCS 880-74521/1-A
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09200		mg/Kg		92	70 - 130
Toluene	0.100	0.1102		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1171		mg/Kg		117	70 - 130
m-Xylene & p-Xylene	0.200	0.2342		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1154		mg/Kg		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-74521/2-A
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74521

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08156		mg/Kg		82	70 - 130	12	35
Toluene	0.100	0.09980		mg/Kg		100	70 - 130	10	35
Ethylbenzene	0.100	0.1055		mg/Kg		106	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2115		mg/Kg		106	70 - 130	10	35
o-Xylene	0.100	0.1044		mg/Kg		104	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: 880-40156-11 MS
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: CS-11 0.5-1
Prep Type: Total/NA
Prep Batch: 74521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.101	0.06322	F1	mg/Kg		62	70 - 130
Toluene	<0.00199	U F1	0.101	0.06568	F1	mg/Kg		65	70 - 130
Ethylbenzene	<0.00199	U F1	0.101	0.06037	F1	mg/Kg		60	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.202	0.1155	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F2 F1	0.101	0.05892	F1	mg/Kg		58	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: 880-40156-11 MS
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: CS-11 0.5-1
Prep Type: Total/NA
Prep Batch: 74521

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-40156-11 MSD
Matrix: Solid
Analysis Batch: 74546

Client Sample ID: CS-11 0.5-1
Prep Type: Total/NA
Prep Batch: 74521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.100	0.08912		mg/Kg		88	70 - 130	34	35
Toluene	<0.00199	U F1	0.100	0.08378		mg/Kg		83	70 - 130	24	35
Ethylbenzene	<0.00199	U F1	0.100	0.06828	F1	mg/Kg		68	70 - 130	12	35
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1348	F1	mg/Kg		67	70 - 130	15	35
o-Xylene	<0.00199	U F2 F1	0.100	0.1011	F2	mg/Kg		101	70 - 130	53	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*

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

Lab Sample ID: MB 880-74493/1-A
Matrix: Solid
Analysis Batch: 74447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/01/24 19:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/01/24 19:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/24 13:59	03/01/24 19:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*123*		*70 - 130*	*03/01/24 13:59*	*03/01/24 19:16*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*03/01/24 13:59*	*03/01/24 19:16*	*1*

Lab Sample ID: LCS 880-74493/2-A
Matrix: Solid
Analysis Batch: 74447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	923.4		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1122		mg/Kg		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	*96*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: LCSD 880-74493/3-A
Matrix: Solid
Analysis Batch: 74447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74493

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1006		mg/Kg		101	70 - 130	9	20
Diesel Range Organics (Over C10-C28)			1000	1328	*+	mg/Kg		133	70 - 130	17	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 880-40156-1 MS
Matrix: Solid
Analysis Batch: 74447

Client Sample ID: CS-1 0.5-1
Prep Type: Total/NA
Prep Batch: 74493

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	962.6		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U *+	1010	1020		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*101*		*70 - 130*

Lab Sample ID: 880-40156-1 MSD
Matrix: Solid
Analysis Batch: 74447

Client Sample ID: CS-1 0.5-1
Prep Type: Total/NA
Prep Batch: 74493

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	961.7		mg/Kg		91	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.6	U *+	1010	1007		mg/Kg		95	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

Lab Sample ID: MB 880-74494/1-A
Matrix: Solid
Analysis Batch: 74445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/01/24 14:04	03/01/24 19:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/01/24 14:04	03/01/24 19:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/01/24 14:04	03/01/24 19:16	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: MB 880-74494/1-A
Matrix: Solid
Analysis Batch: 74445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 74494

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130	03/01/24 14:04	03/01/24 19:16	1
o-Terphenyl	135	S1+	70 - 130	03/01/24 14:04	03/01/24 19:16	1

Lab Sample ID: LCS 880-74494/2-A
Matrix: Solid
Analysis Batch: 74445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 74494

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	763.9		mg/Kg		76	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1101		mg/Kg		110	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	128		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: LCSD 880-74494/3-A
Matrix: Solid
Analysis Batch: 74445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 74494

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	752.7		mg/Kg		75	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1007		mg/Kg		101	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: 890-6286-A-1-E MS
Matrix: Solid
Analysis Batch: 74445

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 74494

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1010	1050		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	59.6		1010	979.5		mg/Kg		91	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	84		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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

Lab Sample ID: 890-6286-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 74445 — **Prep Batch: 74494**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	1010	902.9		mg/Kg		85	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	59.6		1010	958.6		mg/Kg		89	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-74425/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74502

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/01/24 15:17	1

Lab Sample ID: LCS 880-74425/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74502

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245.0		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-74425/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74502

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	245.5		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-6286-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	977		1250	2261		mg/Kg		103	90 - 110

Lab Sample ID: 890-6286-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 74502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	977		1250	2271		mg/Kg		104	90 - 110	0	20

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-74462/1-A
Matrix: Solid
Analysis Batch: 74503

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			03/01/24 18:25	1

Lab Sample ID: LCS 880-74462/2-A
Matrix: Solid
Analysis Batch: 74503

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	241.5		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-74462/3-A
Matrix: Solid
Analysis Batch: 74503

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	243.6		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 880-40156-1 MS
Matrix: Solid
Analysis Batch: 74503

Client Sample ID: CS-1 0.5-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	227		250	459.5		mg/Kg		93	90 - 110		

Lab Sample ID: 880-40156-1 MSD
Matrix: Solid
Analysis Batch: 74503

Client Sample ID: CS-1 0.5-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	227		250	460.2		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 880-40156-11 MS
Matrix: Solid
Analysis Batch: 74503

Client Sample ID: CS-11 0.5-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3460		1250	4789		mg/Kg		107	90 - 110		

Lab Sample ID: 880-40156-11 MSD
Matrix: Solid
Analysis Batch: 74503

Client Sample ID: CS-11 0.5-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3460		1250	4704		mg/Kg		100	90 - 110	2	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

GC VOA

Prep Batch: 74374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74374/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 74451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74451/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 74453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Total/NA	Solid	8021B	74466
880-40156-22	CS-22 0.5-1	Total/NA	Solid	8021B	74466
880-40156-23	CS-23 0.5-1	Total/NA	Solid	8021B	74466
880-40156-24	CS-24 0.5-1	Total/NA	Solid	8021B	74466
880-40156-25	CS-25 0.5-1	Total/NA	Solid	8021B	74466
MB 880-74451/5-A	Method Blank	Total/NA	Solid	8021B	74451
MB 880-74466/5-A	Method Blank	Total/NA	Solid	8021B	74466
LCS 880-74466/1-A	Lab Control Sample	Total/NA	Solid	8021B	74466
LCSD 880-74466/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74466
880-40156-21 MS	CS-21 0.5-1	Total/NA	Solid	8021B	74466
880-40156-21 MSD	CS-21 0.5-1	Total/NA	Solid	8021B	74466

Analysis Batch: 74456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	8021B	74465
880-40156-2	CS-2 0.5-1	Total/NA	Solid	8021B	74465
880-40156-3	CS-3 0.5-1	Total/NA	Solid	8021B	74465
880-40156-4	CS-4 0.5-1	Total/NA	Solid	8021B	74465
880-40156-5	CS-5 0.5-1	Total/NA	Solid	8021B	74465
880-40156-6	CS-6 0.5-1	Total/NA	Solid	8021B	74465
880-40156-7	CS-7 0.5-1	Total/NA	Solid	8021B	74465
880-40156-8	CS-8 0.5-1	Total/NA	Solid	8021B	74465
880-40156-9	CS-9 0.5-1	Total/NA	Solid	8021B	74465
880-40156-10	CS-10 0.5-1	Total/NA	Solid	8021B	74465
MB 880-74374/5-A	Method Blank	Total/NA	Solid	8021B	74374
MB 880-74465/5-A	Method Blank	Total/NA	Solid	8021B	74465
LCS 880-74465/1-A	Lab Control Sample	Total/NA	Solid	8021B	74465
LCSD 880-74465/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74465
880-40156-1 MS	CS-1 0.5-1	Total/NA	Solid	8021B	74465
880-40156-1 MSD	CS-1 0.5-1	Total/NA	Solid	8021B	74465

Prep Batch: 74465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	5035	
880-40156-2	CS-2 0.5-1	Total/NA	Solid	5035	
880-40156-3	CS-3 0.5-1	Total/NA	Solid	5035	
880-40156-4	CS-4 0.5-1	Total/NA	Solid	5035	
880-40156-5	CS-5 0.5-1	Total/NA	Solid	5035	
880-40156-6	CS-6 0.5-1	Total/NA	Solid	5035	
880-40156-7	CS-7 0.5-1	Total/NA	Solid	5035	
880-40156-8	CS-8 0.5-1	Total/NA	Solid	5035	
880-40156-9	CS-9 0.5-1	Total/NA	Solid	5035	
880-40156-10	CS-10 0.5-1	Total/NA	Solid	5035	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

GC VOA (Continued)

Prep Batch: 74465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-74465/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74465/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74465/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-40156-1 MS	CS-1 0.5-1	Total/NA	Solid	5035	
880-40156-1 MSD	CS-1 0.5-1	Total/NA	Solid	5035	

Prep Batch: 74466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Total/NA	Solid	5035	
880-40156-22	CS-22 0.5-1	Total/NA	Solid	5035	
880-40156-23	CS-23 0.5-1	Total/NA	Solid	5035	
880-40156-24	CS-24 0.5-1	Total/NA	Solid	5035	
880-40156-25	CS-25 0.5-1	Total/NA	Solid	5035	
MB 880-74466/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74466/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74466/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-40156-21 MS	CS-21 0.5-1	Total/NA	Solid	5035	
880-40156-21 MSD	CS-21 0.5-1	Total/NA	Solid	5035	

Prep Batch: 74521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-11	CS-11 0.5-1	Total/NA	Solid	5035	
880-40156-12	CS-12 0.5-1	Total/NA	Solid	5035	
880-40156-13	CS-13 0.5-1	Total/NA	Solid	5035	
880-40156-14	CS-14 0.5-1	Total/NA	Solid	5035	
880-40156-15	CS-15 0.5-1	Total/NA	Solid	5035	
880-40156-16	CS-16 0.5-1	Total/NA	Solid	5035	
880-40156-17	CS-17 0.5-1	Total/NA	Solid	5035	
880-40156-18	CS-18 0.5-1	Total/NA	Solid	5035	
880-40156-19	CS-19 0.5-1	Total/NA	Solid	5035	
880-40156-20	CS-20 0.5-1	Total/NA	Solid	5035	
MB 880-74521/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-74521/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-74521/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-40156-11 MS	CS-11 0.5-1	Total/NA	Solid	5035	
880-40156-11 MSD	CS-11 0.5-1	Total/NA	Solid	5035	

Analysis Batch: 74546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-11	CS-11 0.5-1	Total/NA	Solid	8021B	74521
880-40156-12	CS-12 0.5-1	Total/NA	Solid	8021B	74521
880-40156-13	CS-13 0.5-1	Total/NA	Solid	8021B	74521
880-40156-14	CS-14 0.5-1	Total/NA	Solid	8021B	74521
880-40156-15	CS-15 0.5-1	Total/NA	Solid	8021B	74521
880-40156-16	CS-16 0.5-1	Total/NA	Solid	8021B	74521
880-40156-17	CS-17 0.5-1	Total/NA	Solid	8021B	74521
880-40156-18	CS-18 0.5-1	Total/NA	Solid	8021B	74521
880-40156-19	CS-19 0.5-1	Total/NA	Solid	8021B	74521
880-40156-20	CS-20 0.5-1	Total/NA	Solid	8021B	74521
MB 880-74521/5-A	Method Blank	Total/NA	Solid	8021B	74521
LCS 880-74521/1-A	Lab Control Sample	Total/NA	Solid	8021B	74521

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

GC VOA (Continued)

Analysis Batch: 74546 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-74521/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	74521
880-40156-11 MS	CS-11 0.5-1	Total/NA	Solid	8021B	74521
880-40156-11 MSD	CS-11 0.5-1	Total/NA	Solid	8021B	74521

Analysis Batch: 74708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-2	CS-2 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-3	CS-3 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-4	CS-4 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-5	CS-5 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-6	CS-6 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-7	CS-7 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-8	CS-8 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-9	CS-9 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-10	CS-10 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-11	CS-11 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-12	CS-12 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-13	CS-13 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-14	CS-14 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-15	CS-15 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-16	CS-16 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-17	CS-17 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-18	CS-18 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-19	CS-19 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-20	CS-20 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-21	CS-21 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-22	CS-22 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-23	CS-23 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-24	CS-24 0.5-1	Total/NA	Solid	Total BTEX	
880-40156-25	CS-25 0.5-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 74445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Total/NA	Solid	8015B NM	74494
880-40156-22	CS-22 0.5-1	Total/NA	Solid	8015B NM	74494
880-40156-23	CS-23 0.5-1	Total/NA	Solid	8015B NM	74494
880-40156-24	CS-24 0.5-1	Total/NA	Solid	8015B NM	74494
880-40156-25	CS-25 0.5-1	Total/NA	Solid	8015B NM	74494
MB 880-74494/1-A	Method Blank	Total/NA	Solid	8015B NM	74494
LCS 880-74494/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74494
LCSD 880-74494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74494
890-6286-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	74494
890-6286-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	74494

Analysis Batch: 74447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-2	CS-2 0.5-1	Total/NA	Solid	8015B NM	74493

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

GC Semi VOA (Continued)

Analysis Batch: 74447 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-3	CS-3 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-4	CS-4 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-5	CS-5 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-6	CS-6 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-7	CS-7 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-8	CS-8 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-9	CS-9 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-10	CS-10 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-11	CS-11 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-12	CS-12 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-13	CS-13 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-14	CS-14 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-15	CS-15 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-16	CS-16 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-17	CS-17 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-18	CS-18 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-19	CS-19 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-20	CS-20 0.5-1	Total/NA	Solid	8015B NM	74493
MB 880-74493/1-A	Method Blank	Total/NA	Solid	8015B NM	74493
LCS 880-74493/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	74493
LCSD 880-74493/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	74493
880-40156-1 MS	CS-1 0.5-1	Total/NA	Solid	8015B NM	74493
880-40156-1 MSD	CS-1 0.5-1	Total/NA	Solid	8015B NM	74493

Prep Batch: 74493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-2	CS-2 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-3	CS-3 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-4	CS-4 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-5	CS-5 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-6	CS-6 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-7	CS-7 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-8	CS-8 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-9	CS-9 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-10	CS-10 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-11	CS-11 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-12	CS-12 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-13	CS-13 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-14	CS-14 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-15	CS-15 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-16	CS-16 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-17	CS-17 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-18	CS-18 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-19	CS-19 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-20	CS-20 0.5-1	Total/NA	Solid	8015NM Prep	
MB 880-74493/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74493/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74493/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-40156-1 MS	CS-1 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-1 MSD	CS-1 0.5-1	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

GC Semi VOA

Prep Batch: 74494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-22	CS-22 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-23	CS-23 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-24	CS-24 0.5-1	Total/NA	Solid	8015NM Prep	
880-40156-25	CS-25 0.5-1	Total/NA	Solid	8015NM Prep	
MB 880-74494/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-74494/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-74494/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-6286-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-6286-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 74674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Total/NA	Solid	8015 NM	
880-40156-2	CS-2 0.5-1	Total/NA	Solid	8015 NM	
880-40156-3	CS-3 0.5-1	Total/NA	Solid	8015 NM	
880-40156-4	CS-4 0.5-1	Total/NA	Solid	8015 NM	
880-40156-5	CS-5 0.5-1	Total/NA	Solid	8015 NM	
880-40156-6	CS-6 0.5-1	Total/NA	Solid	8015 NM	
880-40156-7	CS-7 0.5-1	Total/NA	Solid	8015 NM	
880-40156-8	CS-8 0.5-1	Total/NA	Solid	8015 NM	
880-40156-9	CS-9 0.5-1	Total/NA	Solid	8015 NM	
880-40156-10	CS-10 0.5-1	Total/NA	Solid	8015 NM	
880-40156-11	CS-11 0.5-1	Total/NA	Solid	8015 NM	
880-40156-12	CS-12 0.5-1	Total/NA	Solid	8015 NM	
880-40156-13	CS-13 0.5-1	Total/NA	Solid	8015 NM	
880-40156-14	CS-14 0.5-1	Total/NA	Solid	8015 NM	
880-40156-15	CS-15 0.5-1	Total/NA	Solid	8015 NM	
880-40156-16	CS-16 0.5-1	Total/NA	Solid	8015 NM	
880-40156-17	CS-17 0.5-1	Total/NA	Solid	8015 NM	
880-40156-18	CS-18 0.5-1	Total/NA	Solid	8015 NM	
880-40156-19	CS-19 0.5-1	Total/NA	Solid	8015 NM	
880-40156-20	CS-20 0.5-1	Total/NA	Solid	8015 NM	
880-40156-21	CS-21 0.5-1	Total/NA	Solid	8015 NM	
880-40156-22	CS-22 0.5-1	Total/NA	Solid	8015 NM	
880-40156-23	CS-23 0.5-1	Total/NA	Solid	8015 NM	
880-40156-24	CS-24 0.5-1	Total/NA	Solid	8015 NM	
880-40156-25	CS-25 0.5-1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 74425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Soluble	Solid	DI Leach	
880-40156-22	CS-22 0.5-1	Soluble	Solid	DI Leach	
880-40156-23	CS-23 0.5-1	Soluble	Solid	DI Leach	
880-40156-24	CS-24 0.5-1	Soluble	Solid	DI Leach	
880-40156-25	CS-25 0.5-1	Soluble	Solid	DI Leach	
MB 880-74425/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74425/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74425/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

HPLC/IC (Continued)

Leach Batch: 74425 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6286-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-6286-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 74462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Soluble	Solid	DI Leach	
880-40156-2	CS-2 0.5-1	Soluble	Solid	DI Leach	
880-40156-3	CS-3 0.5-1	Soluble	Solid	DI Leach	
880-40156-4	CS-4 0.5-1	Soluble	Solid	DI Leach	
880-40156-5	CS-5 0.5-1	Soluble	Solid	DI Leach	
880-40156-6	CS-6 0.5-1	Soluble	Solid	DI Leach	
880-40156-7	CS-7 0.5-1	Soluble	Solid	DI Leach	
880-40156-8	CS-8 0.5-1	Soluble	Solid	DI Leach	
880-40156-9	CS-9 0.5-1	Soluble	Solid	DI Leach	
880-40156-10	CS-10 0.5-1	Soluble	Solid	DI Leach	
880-40156-11	CS-11 0.5-1	Soluble	Solid	DI Leach	
880-40156-12	CS-12 0.5-1	Soluble	Solid	DI Leach	
880-40156-13	CS-13 0.5-1	Soluble	Solid	DI Leach	
880-40156-14	CS-14 0.5-1	Soluble	Solid	DI Leach	
880-40156-15	CS-15 0.5-1	Soluble	Solid	DI Leach	
880-40156-16	CS-16 0.5-1	Soluble	Solid	DI Leach	
880-40156-17	CS-17 0.5-1	Soluble	Solid	DI Leach	
880-40156-18	CS-18 0.5-1	Soluble	Solid	DI Leach	
880-40156-19	CS-19 0.5-1	Soluble	Solid	DI Leach	
880-40156-20	CS-20 0.5-1	Soluble	Solid	DI Leach	
MB 880-74462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-74462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-74462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-40156-1 MS	CS-1 0.5-1	Soluble	Solid	DI Leach	
880-40156-1 MSD	CS-1 0.5-1	Soluble	Solid	DI Leach	
880-40156-11 MS	CS-11 0.5-1	Soluble	Solid	DI Leach	
880-40156-11 MSD	CS-11 0.5-1	Soluble	Solid	DI Leach	

Analysis Batch: 74502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-21	CS-21 0.5-1	Soluble	Solid	300.0	74425
880-40156-22	CS-22 0.5-1	Soluble	Solid	300.0	74425
880-40156-23	CS-23 0.5-1	Soluble	Solid	300.0	74425
880-40156-24	CS-24 0.5-1	Soluble	Solid	300.0	74425
880-40156-25	CS-25 0.5-1	Soluble	Solid	300.0	74425
MB 880-74425/1-A	Method Blank	Soluble	Solid	300.0	74425
LCS 880-74425/2-A	Lab Control Sample	Soluble	Solid	300.0	74425
LCSD 880-74425/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74425
890-6286-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	74425
890-6286-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	74425

Analysis Batch: 74503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-1	CS-1 0.5-1	Soluble	Solid	300.0	74462
880-40156-2	CS-2 0.5-1	Soluble	Solid	300.0	74462
880-40156-3	CS-3 0.5-1	Soluble	Solid	300.0	74462

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

HPLC/IC (Continued)

Analysis Batch: 74503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40156-4	CS-4 0.5-1	Soluble	Solid	300.0	74462
880-40156-5	CS-5 0.5-1	Soluble	Solid	300.0	74462
880-40156-6	CS-6 0.5-1	Soluble	Solid	300.0	74462
880-40156-7	CS-7 0.5-1	Soluble	Solid	300.0	74462
880-40156-8	CS-8 0.5-1	Soluble	Solid	300.0	74462
880-40156-9	CS-9 0.5-1	Soluble	Solid	300.0	74462
880-40156-10	CS-10 0.5-1	Soluble	Solid	300.0	74462
880-40156-11	CS-11 0.5-1	Soluble	Solid	300.0	74462
880-40156-12	CS-12 0.5-1	Soluble	Solid	300.0	74462
880-40156-13	CS-13 0.5-1	Soluble	Solid	300.0	74462
880-40156-14	CS-14 0.5-1	Soluble	Solid	300.0	74462
880-40156-15	CS-15 0.5-1	Soluble	Solid	300.0	74462
880-40156-16	CS-16 0.5-1	Soluble	Solid	300.0	74462
880-40156-17	CS-17 0.5-1	Soluble	Solid	300.0	74462
880-40156-18	CS-18 0.5-1	Soluble	Solid	300.0	74462
880-40156-19	CS-19 0.5-1	Soluble	Solid	300.0	74462
880-40156-20	CS-20 0.5-1	Soluble	Solid	300.0	74462
MB 880-74462/1-A	Method Blank	Soluble	Solid	300.0	74462
LCS 880-74462/2-A	Lab Control Sample	Soluble	Solid	300.0	74462
LCSD 880-74462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	74462
880-40156-1 MS	CS-1 0.5-1	Soluble	Solid	300.0	74462
880-40156-1 MSD	CS-1 0.5-1	Soluble	Solid	300.0	74462
880-40156-11 MS	CS-11 0.5-1	Soluble	Solid	300.0	74462
880-40156-11 MSD	CS-11 0.5-1	Soluble	Solid	300.0	74462

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

Client Sample ID: CS-1 0.5-1
Lab Sample ID: 880-40156-1
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 03:15	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 03:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 20:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 20:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 18:42	CH	EET MID

Client Sample ID: CS-2 0.5-1
Lab Sample ID: 880-40156-2
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 03:42	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 03:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 21:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 21:27	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 18:58	CH	EET MID

Client Sample ID: CS-3 0.5-1
Lab Sample ID: 880-40156-3
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 04:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 04:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 21:48	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:04	CH	EET MID

Client Sample ID: CS-4 0.5-1
Lab Sample ID: 880-40156-4
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 04:35	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 04:35	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-4 0.5-1

Lab Sample ID: 880-40156-4
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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			74674	03/01/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:09	CH	EET MID

Client Sample ID: CS-5 0.5-1

Lab Sample ID: 880-40156-5
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 05:00	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 05:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 22:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 22:31	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:15	CH	EET MID

Client Sample ID: CS-6 0.5-1

Lab Sample ID: 880-40156-6
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 05:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 05:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 22:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 22:52	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:31	CH	EET MID

Client Sample ID: CS-7 0.5-1

Lab Sample ID: 880-40156-7
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 05:51	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 05:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 23:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 23:14	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-7 0.5-1

Lab Sample ID: 880-40156-7
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		5			74503	03/01/24 19:37	CH	EET MID

Client Sample ID: CS-8 0.5-1

Lab Sample ID: 880-40156-8
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 06:16	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 06:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 23:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 23:35	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:42	CH	EET MID

Client Sample ID: CS-9 0.5-1

Lab Sample ID: 880-40156-9
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 06:42	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 06:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 23:57	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/01/24 23:57	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:48	CH	EET MID

Client Sample ID: CS-10 0.5-1

Lab Sample ID: 880-40156-10
Matrix: Solid
Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

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	74465	03/01/24 11:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74456	03/02/24 07:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 07:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 00:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 00:19	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 19:53	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

Client Sample ID: CS-11 0.5-1
Lab Sample ID: 880-40156-11
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 13:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 13:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 01:03	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 01:03	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		5			74503	03/01/24 19:59	CH	EET MID

Client Sample ID: CS-12 0.5-1
Lab Sample ID: 880-40156-12
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 01:25	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 01:25	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:16	CH	EET MID

Client Sample ID: CS-13 0.5-1
Lab Sample ID: 880-40156-13
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 14:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 01:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 01:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:21	CH	EET MID

Client Sample ID: CS-14 0.5-1
Lab Sample ID: 880-40156-14
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 14:46	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

Client Sample ID: CS-14 0.5-1
Lab Sample ID: 880-40156-14
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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			74674	03/02/24 02:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 02:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:38	CH	EET MID

Client Sample ID: CS-15 0.5-1
Lab Sample ID: 880-40156-15
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 15:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 02:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 02:33	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:43	CH	EET MID

Client Sample ID: CS-16 0.5-1
Lab Sample ID: 880-40156-16
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 15:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 15:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 02:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 02:55	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:49	CH	EET MID

Client Sample ID: CS-17 0.5-1
Lab Sample ID: 880-40156-17
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 15:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 15:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 03:17	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 03:17	SM	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

Client Sample ID: CS-17 0.5-1
Lab Sample ID: 880-40156-17
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 20:54	CH	EET MID

Client Sample ID: CS-18 0.5-1
Lab Sample ID: 880-40156-18
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 16:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 16:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 03:39	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 03:39	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 21:00	CH	EET MID

Client Sample ID: CS-19 0.5-1
Lab Sample ID: 880-40156-19
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 16:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 16:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 04:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 04:01	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		5			74503	03/01/24 21:05	CH	EET MID

Client Sample ID: CS-20 0.5-1
Lab Sample ID: 880-40156-20
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74521	03/02/24 11:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74546	03/03/24 16:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/03/24 16:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/02/24 04:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74493	03/01/24 13:59	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74447	03/02/24 04:23	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74462	03/01/24 09:55	CH	EET MID
Soluble	Analysis	300.0		1			74503	03/01/24 21:11	CH	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

Client Sample ID: CS-21 0.5-1
Lab Sample ID: 880-40156-21
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74466	03/01/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 23:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/01/24 23:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 22:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	74494	03/01/24 14:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74445	03/01/24 22:09	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	74425	03/01/24 11:03	SMC	EET MID
Soluble	Analysis	300.0		1			74502	03/01/24 16:01	CH	EET MID

Client Sample ID: CS-22 0.5-1
Lab Sample ID: 880-40156-22
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74466	03/01/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/01/24 23:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/01/24 23:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 22:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	74494	03/01/24 14:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74445	03/01/24 22:31	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74425	03/01/24 11:03	SMC	EET MID
Soluble	Analysis	300.0		1			74502	03/01/24 16:06	CH	EET MID

Client Sample ID: CS-23 0.5-1
Lab Sample ID: 880-40156-23
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74466	03/01/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 00:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 00:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 22:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	74494	03/01/24 14:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74445	03/01/24 22:52	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	74425	03/01/24 11:03	SMC	EET MID
Soluble	Analysis	300.0		1			74502	03/01/24 16:23	CH	EET MID

Client Sample ID: CS-24 0.5-1
Lab Sample ID: 880-40156-24
Date Collected: 02/29/24 00:00
Matrix: Solid
Date Received: 02/29/24 16:40

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	74466	03/01/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 00:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 00:22	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Client Sample ID: CS-24 0.5-1

Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

Lab Sample ID: 880-40156-24

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			74674	03/01/24 23:14	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	74494	03/01/24 14:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74445	03/01/24 23:14	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	74425	03/01/24 11:03	SMC	EET MID
Soluble	Analysis	300.0		1			74502	03/01/24 16:29	CH	EET MID

Client Sample ID: CS-25 0.5-1

Date Collected: 02/29/24 00:00
Date Received: 02/29/24 16:40

Lab Sample ID: 880-40156-25

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			5.03 g	5 mL	74466	03/01/24 11:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	74453	03/02/24 00:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74708	03/02/24 00:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			74674	03/01/24 23:35	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	74494	03/01/24 14:04	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	74445	03/01/24 23:35	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	74425	03/01/24 11:03	SMC	EET MID
Soluble	Analysis	300.0		1			74502	03/01/24 16:34	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: 880-40156-1
Project/Site: Cheddar RP
SDG: Lea Co.

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: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

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: Cheddar RP

Job ID: 880-40156-1
SDG: Lea Co.

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-40156-1	CS-1 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-2	CS-2 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-3	CS-3 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-4	CS-4 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-5	CS-5 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-6	CS-6 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-7	CS-7 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-8	CS-8 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-9	CS-9 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-10	CS-10 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-11	CS-11 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-12	CS-12 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-13	CS-13 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-14	CS-14 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-15	CS-15 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-16	CS-16 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-17	CS-17 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-18	CS-18 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-19	CS-19 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-20	CS-20 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-21	CS-21 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-22	CS-22 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-23	CS-23 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-24	CS-24 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1
880-40156-25	CS-25 0.5-1	Solid	02/29/24 00:00	02/29/24 16:40	0.5-1

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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

880-40156 Chain of Custody

Project Manager	~~Ellis Pierce~~ Mason Jones	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address	5114 West County Road 128	Address	
City, State ZIP	Midland Texas 79706	City, State ZIP	
Phone	432-888-5553	Email	epierce@earthsys net

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables EDD ☐ ADaPT ☐ Other:

Project Name	Cheddar RP	Turn Around		Pres. Code	
Project Number	2023	☐ Routine ☒ Rush			
Project Location	Lea Co.	Due Date	24 hr.		
Sampler's Name	Ellis P.	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	IR8		
Cooler Custody Seals.	Yes No (N/A)	Correction Factor	-.1		
Sample Custody Seals.	Yes No (N/A)	Temperature Reading	23.9		
Total Containers.		Corrected Temperature	23.8		

Parameters: TPH 8015 | BTEX 8021B | Chlorides 300

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
CS-1	0.5-1	S	2-29-24		0.5-1	G	1
CS-2	0.5-1						
CS-3	0.5-1						
CS-4	0.5-1						
CS-5	0.5-1						
CS-6	0.5-1						
CS-7	0.5-1						
CS-8	0.5-1						
CS-9	0.5-1						
CS-10	0.5-1	S	2-29-24		0.5-1	G	1

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

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1		2/29/24 1640	2		
			4		
			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: 401S6

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Project Manager	~~Ellis Pierce~~ Mason Jones	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address	5114 West County Road 128	Address.	
City, State ZIP	Midland Texas 79706	City, State ZIP	
Phone	432-888-5553	Email	epierce@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	Cheddar RP	Turn Around	
Project Number	2023	☐ Routine ☒ Rush	
Project Location	Lea Co.	Due Date	24 hr
Sampler's Name	Alex P	TAT starts the day received by the lab if received by 4 30pm	
PO #:			

SAMPLE RECEIPT					
Samples Received Intact.	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		

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 8015	BTEX 8021B	Chlorides 300	Sample Comments
CS-11	0.5-1	S	2-29-24		0.5'	G	1		X	X	X	
CS-12	0.5-1								X	X	X	
CS-13	0.5-1								X	X	X	
CS-14	0.5-1								X	X	X	
CS-15	0.5-1								X	X	X	
CS-16	0.5-1								X	X	X	
CS-17	0.5-1								X	X	X	
CS-18	0.5-1								X	X	X	
CS-19	0.5-1	↓	↓		↓	↓	↓		X	X	X	
CS-20	0.5-1	S	2-29-24		0.5-1	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		2/29/24 1640	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: Loc: 880 **40156**

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Page 3

Project Manager	~~Ellis Pierce~~ Mason Jones	Bill to (if different)	ESRR
Company Name	Earth Systems R&R	Company Name	
Address	5114 West County Road 128	Address	
City, State ZIP	Midland Texas 79706	City, State ZIP	
Phone	432-888-5553	Email	epierce@earthsys.net

Work Order Co.

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	Cheddar RP
Project Number	2023
Project Location	Lea Co.
Sampler's Name	Ellis P.
PO #:	

Turn Around
☐ Routine ☒ Rush
Due Date: 24 hr
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_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 8015	BTEX 8021B	Chlorides 300	Sample Comments
CS-21	0.5-1	S	2-29-24		0.5-1	G	1		X	X	X	
CS-22	0.5-1	↓	↓		↓	↓	↓		X	X	X	
CS-23	0.5-1								X	X	X	
CS-24	0.5-1								X	X	X	
CS-25	0.5-1	S	2-29-24		0.5-1	G	1		X	X	X	

ANALYSIS REQUEST

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		2/29/24 1640	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: 880-40156-1
SDG Number: Lea Co.

Login Number: 40156
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: Mason Jones
Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

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JOB DESCRIPTION

Cheddar RP
Lea, Co

JOB NUMBER

880-45381-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

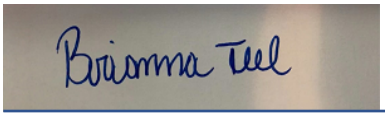
Eurofins Midland

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

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Laboratory Job ID: 880-45381-1
SDG: Lea, Co

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Earth Systems Response and Restoration Job ID: 880-45381-1
Project: Cheddar RP

Job ID: 880-45381-1 Eurofins Midland

Job Narrative
880-45381-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 6/28/2024 9:30 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 7.2°C.

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-84451 recovered above the upper control limit for Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported. The associated sample is impacted: (CCV 880-84451/33).

Method 8021B: The laboratory control sample duplicate (LCSD) for preparation batch 880-84468 and analytical batch 880-84451 recovered outside control limits for the following analytes: Ethylbenzene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-84451 recovered above the upper control limit for Ethylbenzene. 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 880-84451/64).

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

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84474 and analytical batch 880-84435 was outside the upper control limits.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84474 and analytical batch 880-84435 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.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84470 and analytical batch 880-84522 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.

NSW-1 (880-45381-1), SSW-1 (880-45381-2), WSW-1 (880-45381-3), ESW-1 (880-45381-4), (880-45380-A-1-A), (880-45380-A-1-B MS) and (880-45380-A-1-C MSD)

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: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Client Sample ID: NSW-1

Date Collected: 06/27/24 13:00
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/28/24 10:07	06/29/24 05:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/28/24 10:07	06/29/24 05:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/28/24 10:07	06/29/24 05:42	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/28/24 10:07	06/29/24 05:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/28/24 10:07	06/29/24 05:42	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/28/24 10:07	06/29/24 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/28/24 10:07*	*06/29/24 05:42*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/28/24 10:07*	*06/29/24 05:42*	*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			06/29/24 05:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.0**		49.9		mg/Kg			06/28/24 20:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/28/24 10:47	06/28/24 20:36	1
Diesel Range Organics (Over C10-C28)	**53.0**	**F1**	49.9		mg/Kg		06/28/24 10:47	06/28/24 20:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/28/24 10:47	06/28/24 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*06/28/24 10:47*	*06/28/24 20:36*	*1*
o-Terphenyl	*89*		*70 - 130*	*06/28/24 10:47*	*06/28/24 20:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**458**		4.97		mg/Kg			06/29/24 00:32	1

Client Sample ID: SSW-1

Date Collected: 06/27/24 13:05
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:03	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:03	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:03	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/28/24 10:07	06/29/24 06:03	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:03	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/28/24 10:07	06/29/24 06:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/28/24 10:07*	*06/29/24 06:03*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/28/24 10:07*	*06/29/24 06:03*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Client Sample ID: SSW-1

Date Collected: 06/27/24 13:05
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/29/24 06:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**107**		49.8		mg/Kg			06/28/24 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/28/24 10:47	06/28/24 21:38	1
Diesel Range Organics (Over C10-C28)	**107**		49.8		mg/Kg		06/28/24 10:47	06/28/24 21:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/28/24 10:47	06/28/24 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*06/28/24 10:47*	*06/28/24 21:38*	*1*
o-Terphenyl	*87*		*70 - 130*	*06/28/24 10:47*	*06/28/24 21:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**630**		4.96		mg/Kg			06/29/24 00:38	1

Client Sample ID: WSW-1

Date Collected: 06/27/24 13:10
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:23	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/28/24 10:07	06/29/24 06:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:07	06/29/24 06:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/28/24 10:07	06/29/24 06:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*06/28/24 10:07*	*06/29/24 06:23*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/28/24 10:07*	*06/29/24 06:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/29/24 06:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**223**		50.0		mg/Kg			06/28/24 21:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/24 10:47	06/28/24 21:59	1
Diesel Range Organics (Over C10-C28)	**223**		50.0		mg/Kg		06/28/24 10:47	06/28/24 21:59	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Client Sample ID: WSW-1

Date Collected: 06/27/24 13:10
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/24 10:47	06/28/24 21:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*06/28/24 10:47*	*06/28/24 21:59*	*1*
o-Terphenyl	*76*		*70 - 130*	*06/28/24 10:47*	*06/28/24 21:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**552**		5.00		mg/Kg			06/29/24 00:44	1

Client Sample ID: ESW-1

Date Collected: 06/27/24 13:15
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:40	06/29/24 05:26	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:40	06/29/24 05:26	1
Ethylbenzene	<0.00201	U *+	0.00201		mg/Kg		06/28/24 10:40	06/29/24 05:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/28/24 10:40	06/29/24 05:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/28/24 10:40	06/29/24 05:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/28/24 10:40	06/29/24 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/28/24 10:40*	*06/29/24 05:26*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*06/28/24 10:40*	*06/29/24 05:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			06/29/24 05:26	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			06/28/24 22:20	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		06/28/24 10:47	06/28/24 22:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/28/24 10:47	06/28/24 22:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/28/24 10:47	06/28/24 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*06/28/24 10:47*	*06/28/24 22:20*	*1*
o-Terphenyl	*84*		*70 - 130*	*06/28/24 10:47*	*06/28/24 22:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**253**		5.02		mg/Kg			06/29/24 00:50	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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)
880-45369-A-21-E MS	Matrix Spike	103	92
880-45369-A-21-F MSD	Matrix Spike Duplicate	103	92
880-45381-1	NSW-1	108	90
880-45381-2	SSW-1	108	90
880-45381-3	WSW-1	109	91
880-45381-4	ESW-1	108	85
890-6855-A-21-B MS	Matrix Spike	120	91
890-6855-A-21-C MSD	Matrix Spike Duplicate	98	101
LCS 880-84467/1-A	Lab Control Sample	107	93
LCS 880-84468/1-A	Lab Control Sample	100	105
LCSD 880-84467/2-A	Lab Control Sample Dup	101	92
LCSD 880-84468/2-A	Lab Control Sample Dup	111	105
MB 880-84356/5-A	Method Blank	101	84
MB 880-84412/5-A	Method Blank	78	87
MB 880-84467/5-A	Method Blank	103	85
MB 880-84468/5-A	Method Blank	72	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-45381-1	NSW-1	89	89
880-45381-1 MS	NSW-1	87	78
880-45381-1 MSD	NSW-1	87	78
880-45381-2	SSW-1	88	87
880-45381-3	WSW-1	77	76
880-45381-4	ESW-1	83	84
LCS 880-84474/2-A	Lab Control Sample	122	113
LCSD 880-84474/3-A	Lab Control Sample Dup	122	117
MB 880-84474/1-A	Method Blank	145 S1+	151 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84356/5-A
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 11:29	06/28/24 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 11:29	06/28/24 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 11:29	06/28/24 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 11:29	06/28/24 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 11:29	06/28/24 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 11:29	06/28/24 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*06/27/24 11:29*	*06/28/24 11:20*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*06/27/24 11:29*	*06/28/24 11:20*	*1*

Lab Sample ID: MB 880-84412/5-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/27/24 16:42	06/28/24 11:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/27/24 16:42	06/28/24 11:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/27/24 16:42	06/28/24 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*06/27/24 16:42*	*06/28/24 11:23*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/27/24 16:42*	*06/28/24 11:23*	*1*

Lab Sample ID: MB 880-84467/5-A
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84467

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:07	06/28/24 22:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:07	06/28/24 22:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:07	06/28/24 22:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/28/24 10:07	06/28/24 22:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:07	06/28/24 22:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/28/24 10:07	06/28/24 22:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*06/28/24 10:07*	*06/28/24 22:20*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*06/28/24 10:07*	*06/28/24 22:20*	*1*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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

Lab Sample ID: LCS 880-84467/1-A
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84467

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1042		mg/Kg		104	70 - 130		
Toluene			0.100	0.09880		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09649		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene			0.200	0.2085		mg/Kg		104	70 - 130		
o-Xylene			0.100	0.1063		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 880-84467/2-A
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1025		mg/Kg		103	70 - 130	2	35
Toluene			0.100	0.09606		mg/Kg		96	70 - 130	3	35
Ethylbenzene			0.100	0.09293		mg/Kg		93	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2012		mg/Kg		101	70 - 130	4	35
o-Xylene			0.100	0.1000		mg/Kg		100	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 880-45369-A-21-E MS
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 84467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.09860		mg/Kg		99	70 - 130		
Toluene	<0.00199	U	0.0996	0.09181		mg/Kg		92	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.08743		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1886		mg/Kg		95	70 - 130		
o-Xylene	<0.00199	U	0.0996	0.09428		mg/Kg		95	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 880-45369-A-21-F MSD
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 84467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.09920		mg/Kg		98	70 - 130	1	35
Toluene	<0.00199	U	0.101	0.09230		mg/Kg		92	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.101	0.08755		mg/Kg		87	70 - 130	0	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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

Lab Sample ID: 880-45369-A-21-F MSD
Matrix: Solid
Analysis Batch: 84448

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 84467

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1883		mg/Kg		93	70 - 130	0	35
o-Xylene	<0.00199	U	0.101	0.09449		mg/Kg		94	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: MB 880-84468/5-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:09	06/28/24 22:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/28/24 10:09	06/28/24 22:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/28/24 10:09	06/28/24 22:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*06/28/24 10:09*	*06/28/24 22:10*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/28/24 10:09*	*06/28/24 22:10*	*1*

Lab Sample ID: LCS 880-84468/1-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1111		mg/Kg		111	70 - 130
Toluene	0.100	0.1023		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1200		mg/Kg		120	70 - 130
m-Xylene & p-Xylene	0.200	0.2246		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-84468/2-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84468

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1115		mg/Kg		112	70 - 130	0	35
Toluene	0.100	0.1072		mg/Kg		107	70 - 130	5	35
Ethylbenzene	0.100	0.1319	*+	mg/Kg		132	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2462		mg/Kg		123	70 - 130	9	35
o-Xylene	0.100	0.1156		mg/Kg		116	70 - 130	10	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-6855-A-21-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 84451 — **Prep Batch: 84468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.09843		mg/Kg		99	70 - 130
Toluene	<0.00199	U	0.0996	0.09677		mg/Kg		97	70 - 130
Ethylbenzene	<0.00199	U *+	0.0996	0.1277		mg/Kg		128	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2290		mg/Kg		115	70 - 130
o-Xylene	<0.00199	U	0.0996	0.1087		mg/Kg		109	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 890-6855-A-21-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 84451 — **Prep Batch: 84468**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.09307		mg/Kg		92	70 - 130	6	35
Toluene	<0.00199	U	0.101	0.08590		mg/Kg		85	70 - 130	12	35
Ethylbenzene	<0.00199	U *+	0.101	0.09514		mg/Kg		94	70 - 130	29	35
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1713		mg/Kg		85	70 - 130	29	35
o-Xylene	<0.00199	U	0.101	0.08088		mg/Kg		80	70 - 130	29	35

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

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

Lab Sample ID: MB 880-84474/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 84435 — **Prep Batch: 84474**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/24 10:47	06/28/24 19:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/28/24 10:47	06/28/24 19:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/24 10:47	06/28/24 19:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	145	S1+	70 - 130	06/28/24 10:47	06/28/24 19:33	1
o-Terphenyl	151	S1+	70 - 130	06/28/24 10:47	06/28/24 19:33	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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

Lab Sample ID: LCS 880-84474/2-A
Matrix: Solid
Analysis Batch: 84435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84474

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	949.5		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	951.8		mg/Kg		95	70 - 130		

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

Lab Sample ID: LCSD 880-84474/3-A
Matrix: Solid
Analysis Batch: 84435

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84474

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	950.6		mg/Kg		95	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	938.2		mg/Kg		94	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 880-45381-1 MS
Matrix: Solid
Analysis Batch: 84435

Client Sample ID: NSW-1
Prep Type: Total/NA
Prep Batch: 84474

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	968.8		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	53.0	F1	999	534.1	F1	mg/Kg		48	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*78*		*70 - 130*

Lab Sample ID: 880-45381-1 MSD
Matrix: Solid
Analysis Batch: 84435

Client Sample ID: NSW-1
Prep Type: Total/NA
Prep Batch: 84474

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	988.4		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	53.0	F1	999	536.8	F1	mg/Kg		48	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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

Lab Sample ID: 880-45381-1 MSD
Matrix: Solid
Analysis Batch: 84435

Client Sample ID: NSW-1
Prep Type: Total/NA
Prep Batch: 84474

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	78		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84470/1-A
Matrix: Solid
Analysis Batch: 84522

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/28/24 23:21	1

Lab Sample ID: LCS 880-84470/2-A
Matrix: Solid
Analysis Batch: 84522

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	232.9		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-84470/3-A
Matrix: Solid
Analysis Batch: 84522

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	233.5		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 880-45380-A-1-B MS
Matrix: Solid
Analysis Batch: 84522

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	4620	F1	2520	6522	F1	mg/Kg		75	90 - 110		

Lab Sample ID: 880-45380-A-1-C MSD
Matrix: Solid
Analysis Batch: 84522

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	4620	F1	2520	6426	F1	mg/Kg		72	90 - 110	1	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

GC VOA

Prep Batch: 84356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84356/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 84412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84412/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 84448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	8021B	84467
880-45381-2	SSW-1	Total/NA	Solid	8021B	84467
880-45381-3	WSW-1	Total/NA	Solid	8021B	84467
MB 880-84356/5-A	Method Blank	Total/NA	Solid	8021B	84356
MB 880-84467/5-A	Method Blank	Total/NA	Solid	8021B	84467
LCS 880-84467/1-A	Lab Control Sample	Total/NA	Solid	8021B	84467
LCSD 880-84467/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84467
880-45369-A-21-E MS	Matrix Spike	Total/NA	Solid	8021B	84467
880-45369-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	84467

Analysis Batch: 84451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-4	ESW-1	Total/NA	Solid	8021B	84468
MB 880-84412/5-A	Method Blank	Total/NA	Solid	8021B	84412
MB 880-84468/5-A	Method Blank	Total/NA	Solid	8021B	84468
LCS 880-84468/1-A	Lab Control Sample	Total/NA	Solid	8021B	84468
LCSD 880-84468/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84468
890-6855-A-21-B MS	Matrix Spike	Total/NA	Solid	8021B	84468
890-6855-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	84468

Prep Batch: 84467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	5035	
880-45381-2	SSW-1	Total/NA	Solid	5035	
880-45381-3	WSW-1	Total/NA	Solid	5035	
MB 880-84467/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84467/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84467/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45369-A-21-E MS	Matrix Spike	Total/NA	Solid	5035	
880-45369-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 84468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-4	ESW-1	Total/NA	Solid	5035	
MB 880-84468/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84468/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84468/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6855-A-21-B MS	Matrix Spike	Total/NA	Solid	5035	
890-6855-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 84680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

GC VOA (Continued)

Analysis Batch: 84680 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-2	SSW-1	Total/NA	Solid	Total BTEX	
880-45381-3	WSW-1	Total/NA	Solid	Total BTEX	
880-45381-4	ESW-1	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 84435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	8015B NM	84474
880-45381-2	SSW-1	Total/NA	Solid	8015B NM	84474
880-45381-3	WSW-1	Total/NA	Solid	8015B NM	84474
880-45381-4	ESW-1	Total/NA	Solid	8015B NM	84474
MB 880-84474/1-A	Method Blank	Total/NA	Solid	8015B NM	84474
LCS 880-84474/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84474
LCSD 880-84474/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84474
880-45381-1 MS	NSW-1	Total/NA	Solid	8015B NM	84474
880-45381-1 MSD	NSW-1	Total/NA	Solid	8015B NM	84474

Prep Batch: 84474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	8015NM Prep	
880-45381-2	SSW-1	Total/NA	Solid	8015NM Prep	
880-45381-3	WSW-1	Total/NA	Solid	8015NM Prep	
880-45381-4	ESW-1	Total/NA	Solid	8015NM Prep	
MB 880-84474/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84474/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84474/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45381-1 MS	NSW-1	Total/NA	Solid	8015NM Prep	
880-45381-1 MSD	NSW-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Total/NA	Solid	8015 NM	
880-45381-2	SSW-1	Total/NA	Solid	8015 NM	
880-45381-3	WSW-1	Total/NA	Solid	8015 NM	
880-45381-4	ESW-1	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 84470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Soluble	Solid	DI Leach	
880-45381-2	SSW-1	Soluble	Solid	DI Leach	
880-45381-3	WSW-1	Soluble	Solid	DI Leach	
880-45381-4	ESW-1	Soluble	Solid	DI Leach	
MB 880-84470/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84470/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84470/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45380-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-45380-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

HPLC/IC

Analysis Batch: 84522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-45381-1	NSW-1	Soluble	Solid	300.0	84470
880-45381-2	SSW-1	Soluble	Solid	300.0	84470
880-45381-3	WSW-1	Soluble	Solid	300.0	84470
880-45381-4	ESW-1	Soluble	Solid	300.0	84470
MB 880-84470/1-A	Method Blank	Soluble	Solid	300.0	84470
LCS 880-84470/2-A	Lab Control Sample	Soluble	Solid	300.0	84470
LCSD 880-84470/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84470
880-45380-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	84470
880-45380-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	84470

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Client Sample ID: NSW-1
Date Collected: 06/27/24 13:00
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	84467	06/28/24 10:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84448	06/29/24 05:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84680	06/29/24 05:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			84764	06/28/24 20:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84474	06/28/24 10:47	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84435	06/28/24 20:36	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84470	06/28/24 10:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84522	06/29/24 00:32	SMC	EET MID

Client Sample ID: SSW-1
Date Collected: 06/27/24 13:05
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84467	06/28/24 10:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84448	06/29/24 06:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84680	06/29/24 06:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			84764	06/28/24 21:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84474	06/28/24 10:47	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84435	06/28/24 21:38	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	84470	06/28/24 10:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84522	06/29/24 00:38	SMC	EET MID

Client Sample ID: WSW-1
Date Collected: 06/27/24 13:10
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	84467	06/28/24 10:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84448	06/29/24 06:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84680	06/29/24 06:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			84764	06/28/24 21:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84474	06/28/24 10:47	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84435	06/28/24 21:59	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	84470	06/28/24 10:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84522	06/29/24 00:44	SMC	EET MID

Client Sample ID: ESW-1
Date Collected: 06/27/24 13:15
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	84468	06/28/24 10:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84451	06/29/24 05:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84680	06/29/24 05:26	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Client Sample ID: ESW-1

Date Collected: 06/27/24 13:15
Date Received: 06/28/24 09:30

Lab Sample ID: 880-45381-4

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			84764	06/28/24 22:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84474	06/28/24 10:47	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84435	06/28/24 22:20	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	84470	06/28/24 10:32	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84522	06/29/24 00:50	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Laboratory: Eurofins Midland

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

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

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

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

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: Cheddar RP

Job ID: 880-45381-1
SDG: Lea, Co

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-45381-1	NSW-1	Solid	06/27/24 13:00	06/28/24 09:30
880-45381-2	SSW-1	Solid	06/27/24 13:05	06/28/24 09:30
880-45381-3	WSW-1	Solid	06/27/24 13:10	06/28/24 09:30
880-45381-4	ESW-1	Solid	06/27/24 13:15	06/28/24 09:30

eurofins | Environment Testing Xenco

Chain of Custody

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

Work O 880-45381 Chain of Custody

www.xenco.com Page _____ of _____

Project Manager:	Mason Jones	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, mjones@earthsys.net

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Cheddar RP	Turn Around	☐ Routine ☒ Rush
Project Number:	2023	Due Date:	24hr
Project Location:	Lea Co.	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Machin Davis		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	7.3
Total Containers:		Corrected Temperature:	7.2

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	Parameters: TPH (8015)	BTEX (8021B)	Chloride (EPA 300)	Sample Comments
NSW-1	S	6/27/24	13:00	0-0.5	C	1	X	X	X	
SSW-1			13:05				X	X	X	
WSW-1			13:10				X	X	X	
ESW-1			13:15				X	X	X	
				NFE						

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed
Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6/28/24 0915	4		
3			6		
5					

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 880-45381-1
SDG Number: Lea, Co

Login Number: 45381
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

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

Kristopher Williams

Subject: FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 332023

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 2:52 PM
To: Adrian Urquidi <adrian.urquidi@goodnightmidstream.com>
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 332023

To whom it may concern (c/o Adrian Urduidi for GOODNIGHT MIDSTREAM PERMIAN, LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2404035912,
for the following reasons:

- **Remediation closure denied. In the Site Characterization section of closure report, it states: "There is an identified soil boring drilled within 0.25 miles east of the site in May 2023 with no indication of groundwater encountered within 80 ft. of the surface." This information seems to refer to C-4742-POD1 which is in "pending" status with NM OSE. Per 19.15.29.11(A)2 NMAC, the soil boring log needs to be provided for this information, or the release would need to meet the strictest Table 1 Closure Criteria due to no wells being located within.5 miles of the site that have data less than 25 years old. When the Remediation Plan questions were answered with your submittal, you said the estimated surface area that will be remediated is 27,400 ft2 which would require you to collect 137 confirmation samples. Based on Figure 4 provided, the approximate sampling surface area is 8,800 ft2 which would require you to collect at least 36 confirmation samples. Only 25 samples were collected.**
- **Per 19.15.29.12(D) NMAC, confirmation soil samples must consist of five-point composite samples from the side wall and base and individual grab samples from any wet or discolored areas, representing a surface area of no more than 200 ft2 unless otherwise approved. Also under the Remediation Plan questions, you answered "0" to "What is the estimated surface area (in square feet) that will be reclaimed" and "What is the estimated volume (in cubic yards) that will be reclaimed." Even though the release occurred on pad, the release area will need to be reclaimed and meet the requirements of 19.15.29.13 NMAC at time of plugging and abandonment. These answers should be updated to reflect this. Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1)(a) NMAC. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D(1)(a) NMAC.**
- **Submit updated closure report by 5/11/24.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 332023.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Shelly Wells
Environmental Specialist-A
505-469-7520
Shelly.Wells@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Mike A. Hamman, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 760735
File Nbr: C 04839

May. 29, 2024

ADRIAN URQUIDI
GOODNIGHT MIDSTREAM PERMIAN LL
11612 TOWER ROAD
MIDLAND, TX 79707

Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.

* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.

* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.

* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Rodolfo Chavez
(575)622-6521

Enclosure

explore

File No. C-04839 POD1

NEW MEXICO OFFICE OF THE STATE ENGINEER

WR-07 APPLICATION FOR PERMIT TO DRILL

A WELL WITH NO WATER RIGHT

(check applicable boxes):

For fees, see State Engineer website: http://www.ose.state.nm.us/

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well*(Pump test)	☐ Construction Site/Public Works Dewatering	☐ Other(Describe):
☐ Monitoring Well	☐ Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

*New Mexico Environment Department-Drinking Water Bureau (NMED-DWB) will be notified if a proposed exploratory well is used for public water supply.

☐ Check here if the borehole is anything other than vertifical (directional boring or angle boring) and include a schematic of your design.

☒ Temporary Request - Requested Start Date: 5/13/2024 Requested End Date: 6/13/2024

Plugging Plan of Operations Submitted? ☒ Yes ☐ No

Note: if there is known artesian conditions, contamination or high mineral content at the drilling location, include the borehole log or a well log from an existing well at that location. If this information is not submitted, check box and attach form WD-09 to this form. ☐

1. APPLICANT(S)

Name: Goodnight Midstream Permian, LLC	Name:
Contact or Agent: Adrian Urquidi — check here if Agent ☐	Contact or Agent: — check here if Agent ☐
Mailing Address: 11612 Tower Road	Mailing Address:
City: Midland	City:
State: TX Zip Code: 79707	State: Zip Code:
Phone: Phone (Work): 432-530-9517 ☐ Home ☒ Cell	Phone: Phone (Work): ☐ Home ☐ Cell
E-mail (optional): adrian.urquidi@goodnightmidstream.com	E-mail (optional):

OSE DIT MAY 20 2024 AM 9:40

STATE ENGINEER OFFICE SANTA FE, NM 2024 MAY 15 AM 11:50

FOR OSE INTERNAL USE — Application for Permit, Form WR-07, Rev 02/29/2024

File No.: C-04839	Trn. No.: 760735	Receipt No.: C-51168
Trans Description (optional):		
Sub-Basin: CUB	PCW/LOG Due Date: 5/29/25	

2. WELL(S) Describe the well(s) applicable to this application.

Location **Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).**
District II (Roswell), District V (Aztec) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

■ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
C-04839 POD1	-103.687718	32.445802	UL-M, Sec. 28, T21S, R32E

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ■ No If yes, how many_____

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: BLM

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ■ No
If yes, how many_____

Approximate depth of well (feet): 55	Outside diameter of well casing (inches): N/A
Driller Name: Hungry Horse, LLC	Driller License Number: 1755

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

The bore will be drilled according to NMOCD, as no water wells exist within a half mile of the release site. As per NMOCD, drill 55' bore, wait 72 hours, and gauge for presence of water. If water is present driller will notify NMOSE and NMOCD for guidance on possibly converting the bore to a monitoring well. If no water is present the bore will be plugged.

OSE DII MAY 15 2024 AM 11:50

OSE DII MAY 20 2024 PM 3:40

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Version 02/29/2024

File No.: C-04839 POD1	Trn No.: 760735

4. **SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory*: Is proposed well a future public water supply well? ☐ Yes ☒ NO If Yes, an application must be filed with NMED-DWB, concurrently. ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring*: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

(* if exploration or monitoring drilling activity is required by NMED, then you must also submit the NMED Work Plan)

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Adrian Urquidi

Print Name(s)

affirm that the foregoing statements are true to the best of (my,our) knowledge and belief.

Adrian Urquidi Digitally signed by Adrian Urquidi Date: 2024.05.08 10:39:35 -05'00'

Applicant Signature

Adrian Urquidi Digitally signed by Adrian Urquidi Date: 2024 05 08 10:40 25 -05'00'

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☑ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 29th day of May 20 24, for the State Engineer,

MIKE A. HAMMAN, P.E., State Engineer

By: K.Parekh Signature — KASHYAP PAREKH Print

Title: WATER RESOURCE MANAGER I Print

2024 MAY 15 A11:53

GREAT SEAL OF THE STATE OF NEW MEXICO 1912

FOR OSE INTERNAL USE Application for Permit, Form WR-07 Revision 07/29/2024

File No. C-04839 POD1 Trn No.: 760735

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

17-16 Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.

17-1A Depth of the well shall not exceed the thickness of the valley fill.

17-4 No water shall be appropriated and beneficially used under this permit.

17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.

Trn Desc: C 04839 POD1

File Number: C 04839
Trn Number: 760735

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

17-C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.
The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.

17-Q The State Engineer retains jurisdiction over this permit.

17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL (Continued)

LOG The Point of Diversion C 04839 POD1 must be completed and the Well Log filed on or before 05/29/2025.

IT IS THE PERMITTEE'S RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 05/20/2024 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 29 day of May A.D., 2024

Mike A. Hamman, P.E., State Engineer

By: K-Parekh
KASHYAP PAREKH

Trn Desc: C 04839 POD1

File Number: C 04839
Trn Number: 760735

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – SANTA FE OFFICE

OFFICIAL RECEIPT NUMBER: 6 - 51168 DATE: 5/15/2024 FILE NO.: TBD

TOTAL: $5.00 RECEIVED: Five + 00/100 DOLLARS CHECK NO.: 46696 CASH: N/A

PAYOR: Hungry Horse, LLC ADDRESS: P.O. Box 1058 CITY: Hobbs STATE: NM

ZIP: 88241 RECEIVED BY: JRomero

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1. Change of Ownership of Water Right	$ 2.00
___	2. Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3. Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4. Application for Replacement 72-12-1 Well	$ 75.00
___	5. Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6. Application for Stock Well	$ 5.00
___	7. Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8. Declaration of Water Right	$ 1.00
___	9. Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10. Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13. Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14. Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
1	15. Application for Test, Expl. Observ. Well	$ 5.00
___	16. Application for Extension of Time	$ 25.00
___	17. Proof of Application to Beneficial Use	$ 25.00
___	18. Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1. Change of Ownership of a Water Right	$ 5.00
___	2. Declaration of Water Right	$ 10.00
___	3. Amended Declaration	$ 25.00
___	4. Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5. Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6. Application to Change Point of Diversion	$ 100.00
___	7. Application to Change Place and/or Purpose of Use	$ 100.00
___	8. Application to Appropriate	$ 25.00
___	9. Notice of Intent to Appropriate	$ 25.00
___	10. Application for Extension of Time	$ 50.00
___	11. Supplemental Well to a Surface Right	$ 100.00
___	12. Return Flow Credit	$ 100.00
___	13. Proof of Completion of Works	$ 25.00
___	14. Proof of Application of Water to Beneficial Use	$ 25.00
___	15. Water Development Plan	$ 100.00
___	16. Declaration of Livestock Water Impoundment	$ 10.00
___	17. Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1. Application for Well Driller's License	$ 50.00
___	2. Application for Renewal of Well Driller's License	$ 50.00
___	3. Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. Other $_____

G. Comments:

All fees are non-refundable.

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL

Mike A. Hamman, P.E.
State Engineer

DISTRICT II
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623-8559

May 29, 2024

Goodnight Midstream Permian, LLC
11612 Tower Road
Midland Tx 79707

RE: Well Plugging Plan of Operations for well no. C-4839-POD1

Greetings:

Enclosed is your copy of the Well Plugging Plan of Operations for the above referenced well subject to the attached Conditions of Approval. The proposed method of operation is found to be acceptable and in accordance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 30, 2017 by the State Engineer. subject to the attached Conditions of Approval.

Within 30 days after the well is plugged, the well driller is required to file a complete plugging record with the OSE and the permit holder.

Sincerely,

Samantha Davis
Water Resources Professional III

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: C4839 Pool 1

Name of well owner: Goodnight Midstream Permian, LLC

Mailing address: 11612 Tower Road County:

City: Midland State: TX Zip code: 79707

Phone number: 432-530-9517 E-mail: adrian.urquidi@goodnightmidstream.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Hungry Horse, LLC

New Mexico Well Driller License No.: 1755 Expiration Date: 10/14/2025

IV. WELL INFORMATION: ☐ **Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.**

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 26 min, 44.89 sec
Longitude: 103 deg, 41 min, 15.78 sec, NAD 83

2) Reason(s) for plugging well(s):

No water present

3) Was well used for any type of monitoring program? yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? no If yes, provide additional detail, including analytical results and/or laboratory report(s): N/A

5) Static water level: >100 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 55' feet

7) Inside diameter of innermost casing: N/A inches.

8) Casing material: N/A

9) The well was constructed with:

__[ ]__ an open-hole production interval, state the open interval: N/A

__[ ]__ a well screen or perforated pipe, state the screened interval(s): N/A

10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A

11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? N/A If yes, please describe:

N/A

12) Has all pumping equipment and associated piping been removed from the well? N/A If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING: [ ]

If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

The bore will be plugged with native material to 10 feet bgs, then grouted to the surface.

2) Will well head be cut-off below land surface after plugging? N/A

OSE DII MAY 20 2024 AM 9:47

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe from the cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 2 bags

4) Type of Cement proposed: bentonite pellets

5) Proposed cement grout mix: N/A gallons of water per 94 pound sack of Portland cement.

6) Will the grout be: _____ batch-mixed and delivered to the site

__X__ mixed on site

7) Grout additives requested, and percent by dry weight relative to cement:

N/A

8) Additional notes and calculations:

N/A

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

72 hours after drilling, the well (32.445802, -103.687718) will be gauged for the presence of water. If water is present the NMOSE and NMOCD will be notified for guidance on possible conversion to monitor well. If no water is present the well will be plugged according to NMOSE Well Plugging Handbook, Appendix A, Permit Condition 6E. Within 20 days of well plugging, driller will submit Well Plugging Record WD-11 to NMOSE. The maximum period of time for completion of the operation will be 30 days.

VIII. SIGNATURE:

I, Adrian Urquidi, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Adrian Urquidi Digitally signed by Adrian Urquidi Date: 2024.05.08 10:50:30 -05'00'

Signature of Applicant Date

IX. ACTION OF THE STATE ENGINEER:

RECEIVED MAY 20 2024 [illegible]

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions.

____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 29th day of May 2024

Mike A. Hamman, P.E., New Mexico State Engineer

By: Samantha Davis

Water Resources Professional III

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	10	0	
Bottom of proposed sealant of grout placement (ft bgl)	55	10	
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	
Proposed abandonment sealant (manufacturer and trade name)	native soil	bentonite	

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
ROSWELL
1900 West Second St.
Roswell, New Mexico 88201
Phone: (575) 622-6521
Fax: (575) 623- 8559

Applicant has identified a well, listed below, to be plugged.
Hungry Horse LLC (WD-1755)
will perform the plugging.

Permittee: Goodnight midstream Permian, LLC
NMOSE Permit Number: C-4839-POD1

NMOSE File	Casing diameter (inches)	Well depth (feet bgl)	Approximate static water level (feet bgl)	Latitude	Longitude
C-4839-POD1	2 inch	55'	Unknown	32 26 44.89	103 41 15.78

Specific Plugging Conditions of Approval for Well located in Lea County.

1. Water well drilling and well drilling activities, including well plugging, are regulated under 19.27.4 NMAC, which requires any person engaged in the business of well drilling within New Mexico to obtain a Well Driller License issued by the New Mexico Office of the State Engineer (NMOSE). Therefore, the firm of a New Mexico licensed Well Driller shall perform the well plugging.

2. Theoretical volume of sealant required for abandonment of the 2.0 inch diameter (I.D.) casing is approximately 2 bags per well. Total minimum volume of necessary sealant shall be calculated upon sounding the actual pluggable depth of well, which is estimated at 10 feet below ground surface (b.g.s.).

3. Bentonite chips are the approved sealant. When bentonite chips are added above static water level, a minimum of 5-gallons of fresh water shall be added to the borehole per 50-lb of bentonite chips.

4. Placement of the sealant within the wells shall be by tremie pipe extending to near well bottom and kept below top of the slurry column as the well is plugged from bottom-upwards in a manner that displaces the standing water column. The tremie shall be incrementally removed to retain the tremie bottom a limited distance above the top of the rising column of chips throughout the plugging process.

5. Any open annulus encountered surrounding the casing shall also be sealed by the placement of the approved sealant. When plugging shallow wells with no construction or environmental concerns, and if the well record on a well to be plugged shows a proper 20-foot annular seal, a plugging plan can propose the use of clean fill material to a nominal 30 feet bgs, then placing an OSE approved sealant to surface. Lacking that information, we would require an excavation of at least 2-feet which shall then be filled in its entirety with sealant to surface.

6. Wells that do not encounter a water bearing stratum shall be immediately plugged by filling the well with drill cuttings or clean native fill to within ten (10) feet of land surface and by plugging the remaining ten (10) feet of the well to land surface with a plug of a sealing material approved by the State Engineer.

7. Should the NMED, or another regulatory agency sharing jurisdiction of the project authorize, or by regulation require a more stringent well plugging procedure than herein acknowledged, the more-stringent procedure should be followed. This, in part, includes provisions regarding pre-authorization to proceed, contaminant remediation, inspection, pulling/perforating of casing, or prohibition of free discharge of any fluid from the borehole during or related to the plugging process.

8. NMOSE witnessing of the plugging of the non-artesian well will not be required.

9. Any deviation from this plan must obtain an approved variance from this office prior to implementation.

10. A Well Plugging Record itemizing actual abandonment process and materials used shall be filed with the State Engineer within 30 days after completion of well plugging. For the plugging record, please resurvey coordinate location for well and note coordinate system for GPS unit. Please attach a copy of these plugging conditions.

The NMOSE Well Plugging Plan of Operations is hereby approved with the aforesaid conditions applied.

Witness my hand and seal this 29th day of May, 2024

Mike A. Hamman, P.E. State Engineer

By: _____

Samantha Davis
Water Resources Professional III

Re: [EXTERNAL] Earth Systems Soil Boring - Goodnight Cheddar RP

Taylor, Shelly J <sjtaylor@blm.gov>
Fri 4/19/2024 1:32 PM
To:Mason Jones <mjones@earthsys.net>

Approval granted to install a borehole on the pad site only to determine depth to groundwater.

Respectfully,

Shelly J Taylor

Assistant Field Manager
Lands & Minerals - Acting

Bureau of Land Management
Pecos District/Roswell Field Office
2909 W 2nd St
Roswell, NM 88201

Direct 575.627.0250
Mobile 575.200.0614
sjtaylor@blm.gov

From: Mason Jones <mjones@earthsys.net>
Sent: Friday, April 19, 2024 10:40 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Subject: RE: [EXTERNAL] Earth Systems Soil Boring - Goodnight Cheddar RP

Company: Goodnight
Site name: Cheddar RP
Coordinates: 32.447083, -103.688556

Mason Jones | Operations Manager
5114 West C.R. 128 | Midland, Texas 79706
M 432-310-4945 | mjones@earthsys.net

Earth Systems
Response & Restoration

From: Taylor, Shelly J <sjtaylor@blm.gov>
Sent: Friday, April 19, 2024 11:33 AM
To: Mason Jones <mjones@earthsys.net>
Subject: Re: [EXTERNAL] Earth Systems Soil Boring - Goodnight Cheddar RP

Need the site name please.

Respectfully,

Shelly J Taylor
Assistant Field Manager
Lands & Minerals - Acting

Bureau of Land Management
Pecos District/Roswell Field Office
2909 W 2nd St
Roswell, NM 88201

Direct 575.627.0250
Mobile 575.200.0614
sjtaylor@blm.gov

From: Mason Jones <mjones@earthsys.net>
Sent: Friday, April 19, 2024 10:07 AM
To: Taylor, Shelly J <sjtaylor@blm.gov>
Subject: [EXTERNAL] Earth Systems Soil Boring - Goodnight Cheddar RP

Good Morning Shelly,

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 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.
Mason

Mason Jones | Operations Manager
5114 West C.R. 128 | Midland, Texas 79706
M 432-310-4945 | mjones@earthsys.net


Earth Systems
Response & Restoration

Kristopher Williams

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, June 24, 2024 8:26 AM
To: Kristopher Williams
Cc: Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Confirmation Sampling Notification: Cheddar RP - Incident ID: nAPP2404035912

Good morning Kris,

Due to the OCD Permitting connectivity issues of 6/20-6/21, a variance to the two business day notification for confirmation sampling is approved for NAPP2404035912 CHEDDAR NORTH HGB WATER LEG RELEASE for June 24, 2024. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Kristopher Williams <kwilliams@earthsys.net>
Sent: Saturday, June 22, 2024 8:46 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Confirmation Sampling Notification: Cheddar RP - Incident ID: nAPP2404035912

Good Morning,
Due to the notification portal page not currently operating, I wanted to provide a written notification of confirmation sampling for the Cheddar RP location (Incident ID: nAPP2404035912).

We will be collecting four (4) additional sidewall samples, as requested by the NMOCD, on Monday June 24th at approx.. 12pm. The location is located at GPS coordinates 32.447083°, -103.688556°. If you have any questions, please contact me at the number below.
Respectfully,
Kris

Kris Williams, CHMM, REM

Principal / Texas Operations Manager
E: kwilliams@earthsys.net
P: 325-665-3604
W: earthsys.net

Earth Systems
Response & Restoration

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2404035912**
Incident Name	**NAPP2404035912 CHEDDAR NORTH HGB WATER LEG RELEASE @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	CHEDDAR NORTH HGB WATER LEG RELEASE
Date Release Discovered	02/09/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Other | Production Tank | Produced Water | Released: 10 BBL | Recovered: 4 BBL | Lost: 6 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

Sante Fe Main Office
Phone: (505) 476-3441

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

QUESTIONS (continued)

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Adrian Urduidi Title: HSE Representative Email: adrian.urquidi@goodnightmidstream.com Date: 05/02/2024

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
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Santa Fe, NM 87505

QUESTIONS (continued)

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	10600
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	21500
GRO+DRO	(EPA SW-846 Method 8015M)	17600
BTEX	(EPA SW-846 Method 8021B or 8260B)	409
Benzene	(EPA SW-846 Method 8021B or 8260B)	5.7
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		02/28/2024
On what date will (or did) the final sampling or liner inspection occur		06/27/2024
On what date will (or was) the remediation complete(d)		06/27/2024
What is the estimated surface area (in square feet) that will be reclaimed		27400
What is the estimated volume (in cubic yards) that will be reclaimed		2000
What is the estimated surface area (in square feet) that will be remediated		27400
What is the estimated volume (in cubic yards) that will be remediated		500
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

QUESTIONS (continued)

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	SUNDANCE PARABO [fEEM0112334085]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Ralph Tijerina Title: Director of EH&S Email: rtijerina@goodnightmidstream.com Date: 11/14/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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QUESTIONS

Deferral Requests Only *Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	OGRID: 372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**356848**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**06/27/2024**
What was the (estimated) number of samples that were to be gathered	**4**
What was the sampling surface area in square feet	**200**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	27400
What was the total volume (cubic yards) remediated	500
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	The site was remediated according to the site closure criteria and has been backfilled with clean, locally sourced material.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Ralph Tijerina Title: Director of EH&S Email: rtijerina@goodnightmidstream.com Date: 11/14/2024

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QUESTIONS (continued)

Operator:	OGRID:
GOODNIGHT MIDSTREAM PERMIAN, LLC 5910 North Central Expressway Dallas, TX 75206	372311
	Action Number: 403236
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

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CONDITIONS

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CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/26/2024