Chris Brand
Environmental Remediation/ Facility Decom Advisor

VIA ELECTRONIC MAIL

January 6, 2025

New Mexico Oil Conservation Division
District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: West Lovington Unit East Test Satellite
Soil Remediation/Reclamation Summary and Closure Request Report
Incident No. nLWJ1016954547
Case No. 1RP-2563

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
West Lovington Unit East Test Satellite Soil Remediation/Reclamation Summary and Closure Request Report

The Report was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC) for Chevron Midcontinent L.P.

Please do not hesitate to call Scott Foord with Arcadis at 713.953.4853, or myself at 661.401.0359, should you have any questions.

Sincerely,

Chris Brand

Encl. Soil Remediation/ Reclamation Summary and Closure Request Report
West Lovington Unit East Test Satellite

cc. Scott Foord – Arcadis
Morgan Jordan – Arcadis

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ARCADIS

Chevron Environmental Management Company

2024 Soil Remediation/ Reclamation Summary and Closure Request Report

West Lovington Unit East Test Satellite

Incident # nLWJ1016954547

Lea County, New Mexico

January 2025

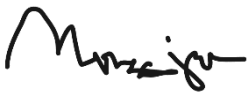
2024 Soil Remediation/Reclamation Summary and Closure Request Report

West Lovington Unit East Test Satellite
Incident # nLWJ1016954547
Lea County, New Mexico

January 2025

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1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this Soil Remediation/Reclamation Summary and Closure Request Report for Chevron Environmental Management Company (CEMC) on behalf of Chevron U.S.A. Inc., through its division Chevron North America Exploration and Production Company, for the release site known as the West Lovington Unit East Test Satellite (Site) located at coordinates: 32.861623, -103.366948.

2 Project Summary

The Site is located on state land approximately 5.75 miles south of the City of Lovington in Unit L, Section 4, Township 17 South, Range 36 East, Lea County, New Mexico. The site is located within a low karst area. A Site Location Map is included as **Figure 1** and a Topographic Map as **Figure 2**.

According to the Initial C-141 Form, on June 10, 2010, a 4-inch diameter trunk line fuse leaked and released 0.40 barrels (bbls) of oil and 5.56 bbls of produced water. The Initial C-141 Form stated that free liquids and saturated solids were reportedly removed by a third-party contractor, but no recovered volume was noted. The Initial C-141 Form was submitted to the New Mexico Oil Conservation Division (NMOCD) on June 18, 2010, and approved by NMOCD on June 18, 2010. The release was assigned Remediation Permit Number 1RP-2563 and Incident Number nLWJ1016954547.

3 Soil Assessment Activities

In September 2020, March 2023, and February and April 2024, Arcadis performed soil assessment activities to evaluate soil impacts stemming from the release. A total of twenty-nine (29) sample points (SB-1 through SB-29) were advanced to depths ranging from the surface to 7 feet below ground surface (bgs) inside and surrounding the release area to evaluate the horizontal and vertical extents of the release. Horizontal and vertical delineation was assessed in each cardinal direction to determine the potential area of concern. Arcadis used this data and field screening to guide proposed remediation activities prior to collecting any confirmation samples.

On July 23, 2024, Chevron submitted the Remediation Work Plan to the NMOCD, and on July 29, 2024, the NMOCD approved the Work Plan. The approved Work Plan is included as **Appendix A**.

4 Site Characterization

After a review of the New Mexico Office of State Engineers (NMOSE) and USGS databases, USGS well 325144103214701 located approximately 0.29 miles north of the Site was identified and gauged with a water level meter by Arcadis on May 2, 2024. Depth to water was verified at 66.80 feet bgs. As such, assessment activities completed to date and remediation/reclamation activities at the Site have been evaluated assuming a Site with a depth to groundwater as greater than 50 feet bgs for soils at depths greater than 4 feet bgs. Site characterization data is included in the approved Work Plan in **Appendix A**.

5 NMAC Regulatory Criteria

Per Table I of NMAC part 19.15.29.12, the following closure criteria apply to the Site for reclamation activities within the first 4 feet of soil:

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Oil Range Organics (ORO)	100 mg/kg
Chloride	600 mg/kg

Per Table I of NMAC part 19.15.29.12, the following closure criteria apply to the Site for remediation activities for soils at depths greater than 4 feet bgs due to depth to groundwater measured by Arcadis at 66.80 feet bgs within USGS well 325144103214701 located approximately 0.29 miles north of the Site:

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
BTEX	50 mg/kg
TPH –GRO, DRO, and ORO	2,500 mg/kg
Chloride	10,000 mg/kg

6 Remediation Activities Summary

6.1 Soil Removal

Soil remediation activities were performed from November 12 through December 6, 2024. Photo-ionization detector (PID) readings, chloride field screening with Hach field test strip results, and laboratory analytical results from the pre-remediation assessment activities were evaluated prior to and during remediation activities to determine the horizontal and vertical extent of soil impacted by the release. Horizontal and vertical delineation of the impacted soil requiring removal was based on samples collected from the perimeter and bottom of the release area. Based on these results, it was determined that the release covered an approximately 10,800 square foot (sq ft) area. Excavation activities were conducted to a maximum depth of approximately 4 feet bgs. Approximately 1,600 cubic yards of impacted soil were excavated from the release area. The limits of the excavation are presented in **Figure 3** and **Figure 4**. Excavated soil was stockpiled on-site, adjacent to the release area on 20 millimeter (mil) thick plastic sheeting and covered with 20 mil plastic sheeting during remediation activities.

The stockpiled soil was disposed offsite at the Gandy Marley Landfill located in Roswell, New Mexico as Class 2 non-hazardous material. Copies of disposal manifests can be provided upon request.

6.2 Excavation Confirmation Sampling Activities

Arcadis, personnel conducted excavation confirmation soil sampling activities from November 13 through December 07, 2024, for laboratory analyses. Following excavation of the impacted area, 5-point composite confirmation soil samples were collected from the excavation area as needed to maintain an approximate 200 square foot sample spacing or less in accordance with NMAC 19.15.29.12 D(1)(b). The excavation sidewall confirmation sample locations are depicted in **Figure 3** and excavation base confirmation samples are depicted in **Figure 4**.

The confirmation soil samples were collected for chemical analyses, placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas. The sample was analyzed for modified BTEX by EPA Method 8021B, TPH by United States Environmental Protection Agency (EPA) Method 8015, and chloride by EPA method 300. Soil sample analytical results are summarized in **Table 1**. The laboratory analytical report is included in **Appendix B.**

6.2.1 BTEX

BTEX concentrations were reported below the NMOCD reclamation and remediation standards.

6.2.2 TPH

TPH concentrations were reported below the NMOCD reclamation and remediation standards for GRO, DRO, and ORO.

6.2.3 Chloride

Chloride concentrations were reported below the NMOCD reclamation and remediation standards.

7 Restoration, Reclamation, and Re-Vegetation Activities

Prior to backfill, a 5-point composite sample was collected from the backfill material to confirm all constituents were below the NMOCD reclamation standards for BTEX, TPH, and chloride and the analytical results are included in **Table 1** and **Appendix B**. Upon receiving laboratory analytical data confirming impacted soil over the applicable restoration limits had been removed from the release area, the excavated area was backfilled with locally sourced, non-impacted "like" material suitable to establish vegetation growth as proposed in the 2024 Work Plan approved by NMOCD and the New Mexico State Land Office (SLO).

Approximately 10,800 square feet of the area of concern was restored to its near original condition. The area was contoured and/or compacted to achieve erosion control, stability, and preservation of surface water flow to the extent practicable.

The area has not been re-seeded at this time. The area will be re-seeded during the first favorable growing season with a SLO approved seed mixture based on documented soil types proximate to the site. A separate revegetation report will be submitted to the NMOCD and SLO once revegetation activities have been completed.

Photographic documentation of the remediation and reclamation activities are included in **Appendix C.**

8 Summary

Analytical results associated with the remediation activities conducted in 2024 indicate that the horizontal and vertical extent of BTEX, TPH, and chloride impact in soil above NMAC screening standards have been remediated (excavated) from the impacted area. The area was backfilled with clean/ suitable material to establish vegetation growth, graded to match the original surface conditions and drainage, and restored to its near original condition.

9 Remediation Closure Request

Remediation activities were conducted in accordance with the NMOCD standards outlined in Table I of NMAC part 19.15.29.12 utilizing 200 square foot composite areas. Impacted soil affected above the NMOCD Closure Criteria and/or NMOCD Reclamation Standard was excavated and transported to an NMOCD-approved disposal facility. Laboratory analytical results from confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the NMOCD Closure Criteria for the remediated area at the Site.

Based on laboratory analytical results and field activities conducted to date, no additional soil assessment or remediation activities are recommended at this time at the Site.

Arcadis requests remediation closure be granted to the West Lovington Unit East Test Satellite for Incident Number nLWJ1016954547.

A separate revegetation report will be submitted to the NMOCD and SLO once revegetation activities have been completed.

Tables

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU East Test Sat
Lea County, New Mexico

Sample I.D.	Sample Depth (feet bgs)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	TPH-GRO	TPH-DRO	TPH GRO + DRO	TPH MRO	Total TPH	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			10	--	--	--	**50**	--	--	**1,000**	--	**2,500**	**10,000**
Restoration Requirements < 4 feet			**10**	--	--	--	**50**	--	--	--	--	**100**	**600**
SW-1	2	11/13/24	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	86.6 F1
SW-2	2	11/13/24	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	358
SW-3	2	11/13/24	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.4	<15.0	<15.0	<15.0	<15.0	12.8
SW-4	2	11/22/24	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5	<15.1	<15.1	<15.1	<15.1	14.0
SW-5	2	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00401 *+	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	314
SW-6	2	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	94.6
SW-7	2	12/07/24	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.6	<49.6	<49.6	<49.6	<49.6	83.5
SW-8	2	12/07/24	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	322
SW-9	2	12/07/24	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	82.0
SW-10	2	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	193
B-1	4	11/13/24	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5	<15.1	<15.1	<15.1	<15.1	49.8
B-2	4	11/13/24	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	165
B-3	4	11/14/24	<0.00139	<0.00200	<0.00109	0.106	0.106	<14.5	<15.1	<15.1	<15.1	<15.1	165
B-4	4	11/14/24	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.4	<15.0	<15.0	<15.0	<15.0	1,120
B-5	4	11/14/24	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.4	<15.0	<15.0	<15.0	<15.0	1,360
B-6	4	11/14/24	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5	<15.1	<15.1	<15.1	<15.1	278
B-7	4	11/14/24	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	890
B-8	4	11/14/24	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	80.7
B-9	4	11/14/24	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,030
B-10	4	11/14/24	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,160
B-11	4	11/14/24	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	338
B-12	4	11/14/24	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	115
B-13	4	11/14/24	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	1,110 F1
B-14	4	11/14/24	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.4	<15.0	<15.0	<15.0	<15.0	733
B-15	4	11/14/24	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	42.0
B-16	4	11/14/24	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	487
B-17	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,250
B-18	4	12/07/24	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,560
B-19	4	12/07/24	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,390
B-20	4	12/07/24	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	1,220
B-21	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	1,710
B-22	4	12/07/24	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	1,530
B-23	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	1,320
B-24	4	12/07/24	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	1,740
B-25	4	12/07/24	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	1,750
B-26	4	12/07/24	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.6	<49.6	<49.6	<49.6	<49.6	1,820
B-27	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,930
B-28	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	1,000
B-29	4	12/07/24	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,850
B-30	4	12/07/24	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.7	<49.7	<49.7	<49.7	<49.7	1,560
B-31	4	12/07/24	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	2,010
B-32	4	12/07/24	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	1,830
B-33	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	1,530
B-34	4	12/07/24	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	2,080
B-35	4	12/07/24	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	1,520
B-36	4	12/07/24	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	1,820
B-37	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00401 *+	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,680 F1
B-38	4	12/07/24	<0.00202 *+	<0.00202	<0.00202	<0.00403 *+	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,870
B-39	4	12/07/24	<0.00199 *+	<0.00199	<0.00199	<0.00398 *+	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,880
B-40	4	12/07/24	<0.00202 *+	<0.00202	<0.00202	<0.00403 *+	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,780
B-41	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00401 *+	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	1,910
B-42	4	12/07/24	<0.00198 *+	<0.00198	<0.00198	<0.00396 *+	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	1,610
B-43	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00399 *+	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	3,910

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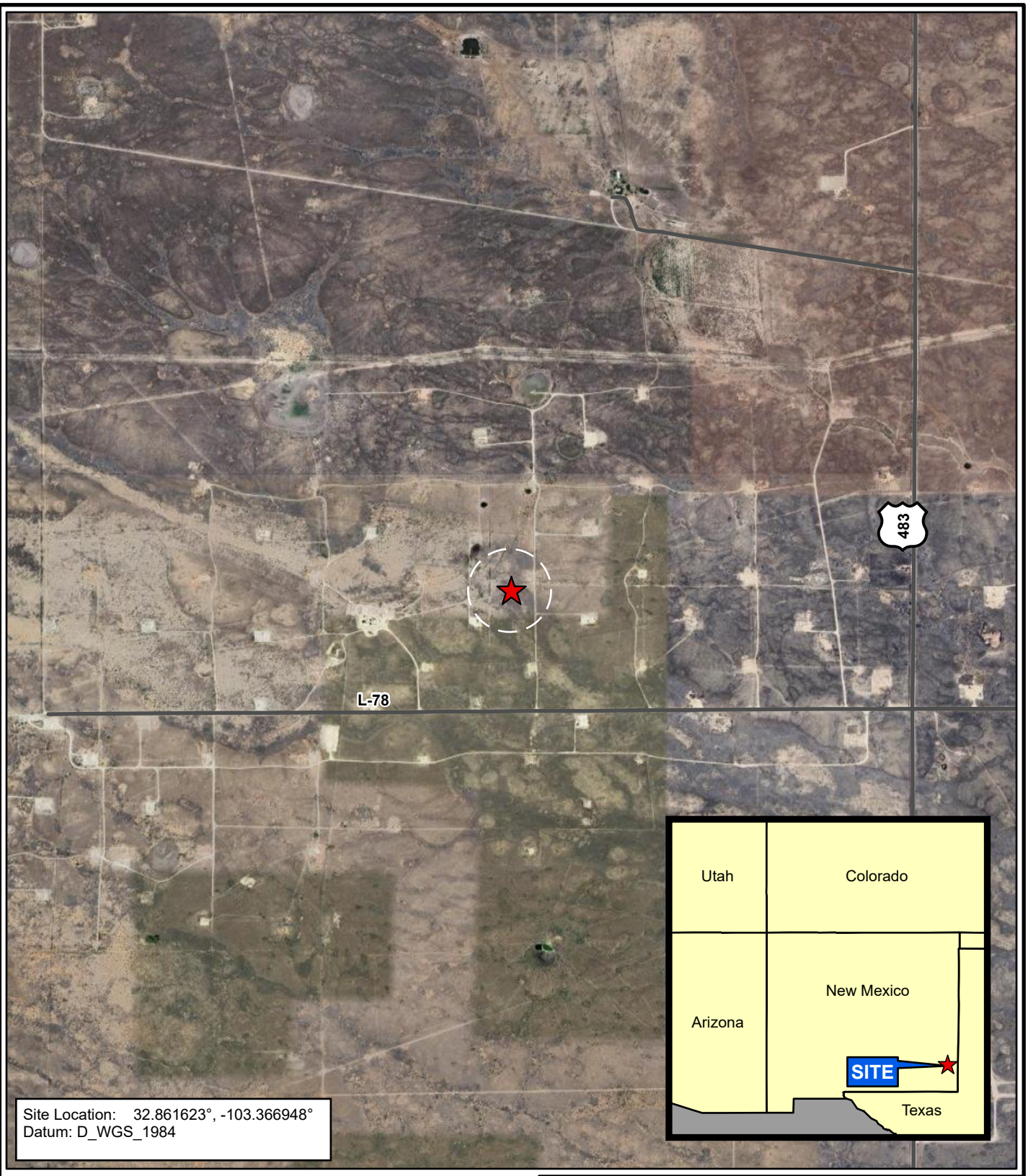
Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU East Test Sat
Lea County, New Mexico

Sample I.D.	Sample Depth (feet bgs)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	TPH-GRO	TPH-DRO	TPH GRO + DRO	TPH MRO	Total TPH	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			10	--	--	--	**50**	--	--	**1,000**	--	**2,500**	**10,000**
Restoration Requirements < 4 feet			**10**	--	--	--	**50**	--	--	--	--	**100**	**600**
B-44	4	12/07/24	<0.00198 *+	<0.00198	<0.00198	<0.00397 *+	<0.00397	<49.7	<49.7	<49.7	<49.7	<49.7	1,360
B-45	4	12/07/24	<0.00201 *+	<0.00201	<0.00201	<0.00402 *+	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,700
B-46	4	12/07/24	<0.00202 *+	<0.00202	<0.00202	<0.00404 *+	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	754
B-47	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00401 *+	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,710
B-48	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00400 *+	<0.00400	<49.8	<49.8	<49.8	<49.8	<49.8	1,880
B-49	4	12/07/24	<0.00199 *+	<0.00199	<0.00199	<0.00398 *+	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	739
B-50	4	12/07/24	<0.00202 *+	<0.00202	<0.00202	<0.00403 *+	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	443
B-51	4	12/07/24	<0.00201 *+	<0.00201	<0.00201	<0.00402 *+	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	1,040
B-52	4	12/07/24	<0.00202 *+	<0.00202	<0.00202	<0.00404 *+	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	1,580
B-53	4	12/07/24	<0.00200 *+	<0.00200	<0.00200	<0.00399 *+	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	1,740
B-54	4	12/07/24	<0.00199 *+	<0.00199	<0.00199	<0.00398 *+	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	1,710
B-55	4	12/07/24	<0.00198 *+	<0.00198	<0.00198	<0.00397 *+	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	870
Backfill	---	08/12/24	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	81

Legend:
BOLD: Values exceeding the Restoration Requirements < 4 feet criteria
F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits.
*+: Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits, high biased.
<' : indicates the analyte was not detected at or above the MDL.
mg/kg: Milligram per Kilogram
BTEX : Benzene, Toluene, Ethylbenzene, and Total Xylenes
NMAC : New Mexico Administration Code
TPH: Total Petroleum Hydrocarbons
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
TPH MRO: Total Petroluem Hydrocarbons Oil Range Organics
Total TPH: GRO + DRO + MRO
B: Base sample
SW : Sidewall sample
ft bgs: feet below ground surface

Notes:
1.Chloride analyzed by United States Environmental Protection Agency (USEPA) Method 300.0
2.TPH analyzed by USEPA Method SW846 8015B NM
3.BTEX analyzed by USEPA Method SW846 8021B

Figures



Legend

Site Location

Credits: ESRI Online, Google Earth

0 2,000 4,000 Feet

GRAPHIC SCALE

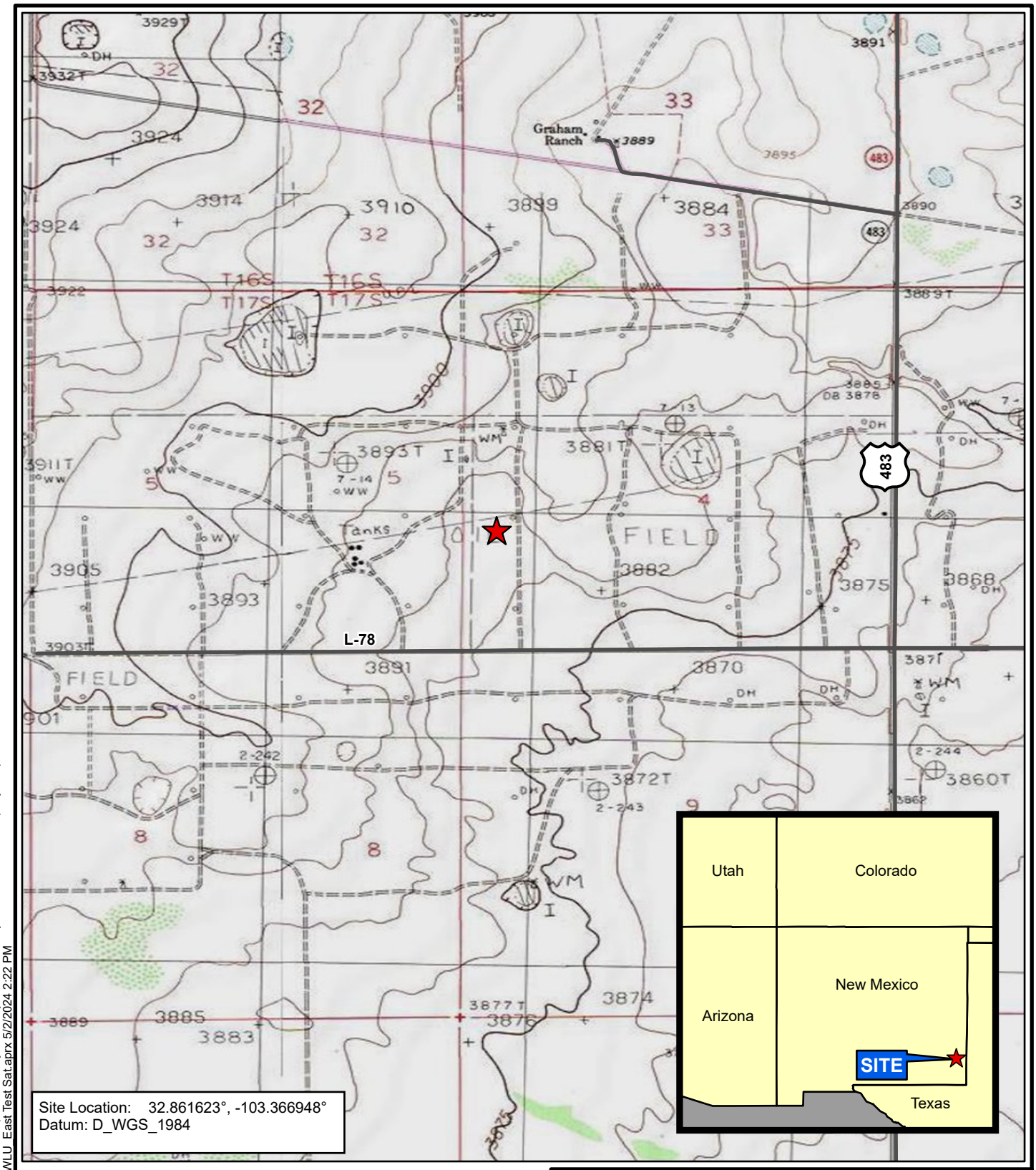
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT EAST TEST SATELLITE
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP

ARCADIS

FIGURE 1

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
T:_ENV\Chevron\WLU_East_Test_Sat_Pro\WLU_East Test Sat aprx 5/2/2024 2:22 PM



Legend

Site Location

Credits: ESRI Online, USGS 24,000 K Topo (Map Service)
Red Lake, New Mexico Quadrangle

0 2,000 4,000 Feet
GRAPHIC SCALE

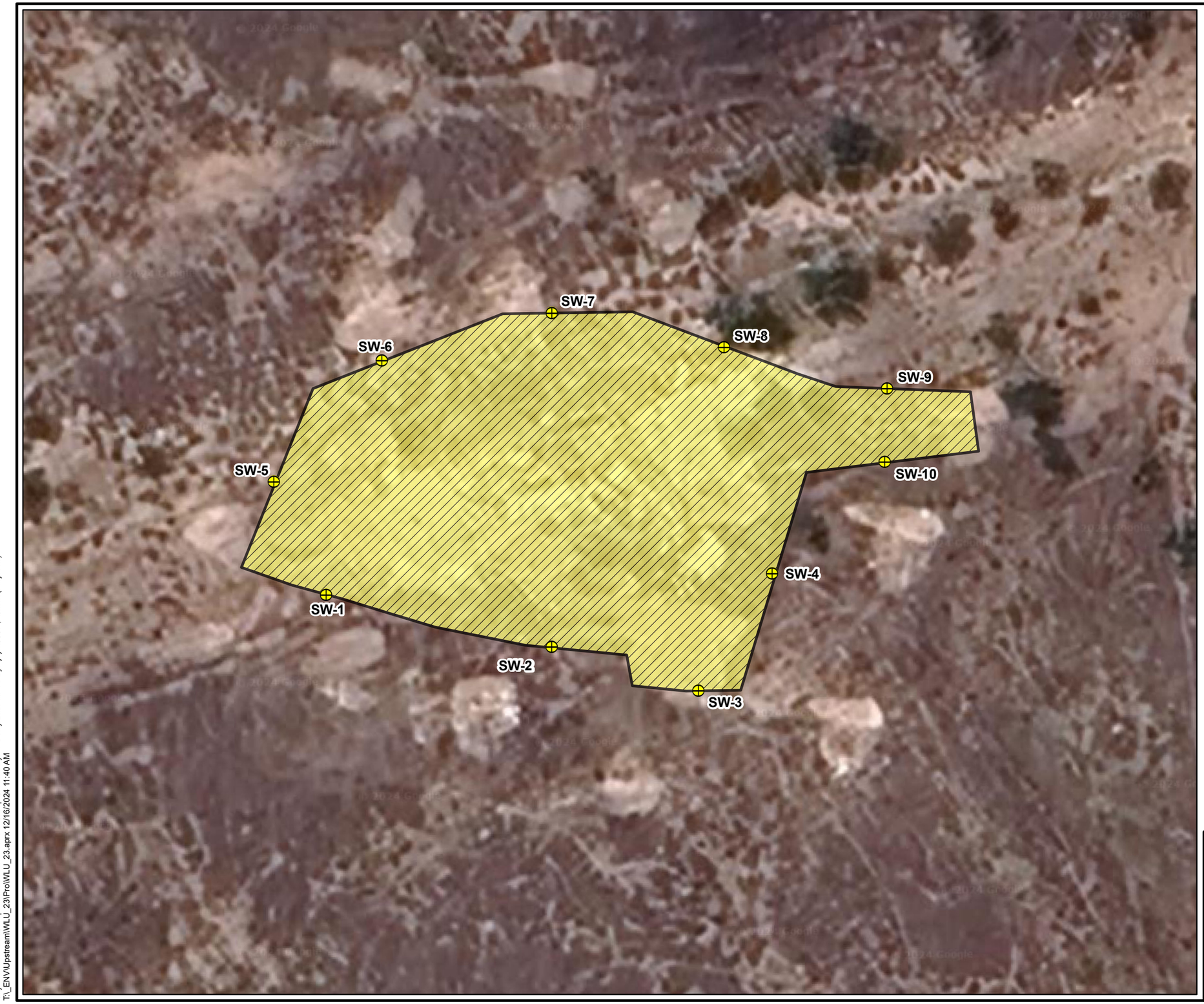
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT EAST TEST SATELLITE
LEA COUNTY, NEW MEXICO

TOPOGRAPHIC MAP

ARCADIS

FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
T:_ENV\Chevron\WLU_East_Test_Sat_Pro\WLU_East Test Sat aprx 5/2/2024 2:22 PM



LEGEND:

- Sidewall Soil Sample Location
- Excavated Area

0 25 50 Feet

GRAPHIC SCALE

Datum: D_WGS_1984
Source: ESRI Online, Google Earth
Site Location: 32.861623°, -103.366948°

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #023 (EAST TEST SATELLITE)
LEA COUNTY, NEW MEXICO

EXCAVATION SIDEWALL SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE 3

City:Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: joym8537 ; Client (Project #)
T:_ENV\Upstream\WLU_23\Pro\WLU_23 aprx 12/16/2024 11:40 AM



LEGEND:

- Base Soil Sample Location
- Excavated Area

0 25 50 Feet

GRAPHIC SCALE

Datum: D_WGS_1984
Source: ESRI Online, Google Earth
Site Location: 32.861623°, -103.366948°

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #023 (EAST TEST SATELLITE)
LEA COUNTY, NEW MEXICO

EXCAVATION BASE SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE 4

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: joym8537 ; Client (Project #)
T:_ENV\Upstream\WLU_23\ProWLU_23.aprx 12/13/2024 6:19 PM

Appendix A

Work Plan

Chris Brand
Environmental Remediation/ Facility Decom Advisor

VIA ELECTRONIC MAIL

July 23, 2024

New Mexico Oil Conservation Division
District I
1625 N. French Drive
Hobbs, New Mexico 88240

Re: West Lovington Unit East Test Satellite
Soil Remediation Work Plan
Incident No. nLWJ1016954547
Case No. 1RP-2563

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
West Lovington Unit East Test Satellite Soil Remediation Work Plan

The Work Plan was prepared by Arcadis U.S., Inc. (Arcadis) on behalf of Chevron Environmental Management Company (CEMC) for Chevron Midcontinent L.P.

Please do not hesitate to call Scott Foord with Arcadis at 713.953.4853, or myself at 661.401.0359, should you have any questions.

Sincerely,

Chris Brand

Encl. 2024 Work Plan
West Lovington Unit East Test Satellite

cc. Scott Foord – Arcadis
Morgan Jordan – Arcadis

Chris Brand
Environmental Remediation/ Facility Decom Advisor
6301 Deauville Blvd, Midland, TX 79706
Mobile 661 401 0359
chrisbrand@chevron.com

ARCADIS

Chevron Environmental Management Company

2024 Work Plan

West Lovington Unit East Test Satellite

Lea County, New Mexico

Incident # nLWJ1016954547

July 2024

2024 Work Plan

West Lovington Unit East Test Satellite
Incident # nLWJ1016954547
Lea County, New Mexico

July 2024

Prepared By:
Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620

Prepared For:
Chris Brand
Project Manager
CEMC
6301 Deauville Blvd.
Midland, TX 79706

Scott Foord, PG
Program Manager

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Contents

1 Introduction 1
2 Project Summary 1
2.1 Incident # nLWJ1016954547 1
3 Site Characterization 1
4 NMAC Regulatory Criteria 2
5 Site Assessment Activities 3
6 Proposed Work Plan 3
7 Work Plan Approval Request 4

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Table 1. Soil Analytical Results

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Figure 1. Site Location Map
Figure 2. Topographic Map
Figure 3. Proposed Excavation Map

Appendices

Appendix A. Initial C-141 Form Incident # nLWJ1016954547
Appendix B. Photo Log
Appendix C. Boring Logs
Appendix D. Site Characterization Data
Appendix E. Laboratory Analytical Reports
Appendix F. NMOCD Correspondence

2024 Work Plan
West Lovington Unit East Test Satellite

1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this Work Plan, for Chevron Environmental Management Company (CEMC) on behalf of Chevron U.S.A. Inc., through its division Chevron North America Exploration and Production Company, for the release site known as the West Lovington Unit East Test Satellite (Site) located at coordinates: 32.861623, -103.366948. Details of the release are summarized in the New Mexico Oil Conservation Division (NMOCD) Initial C-141 Form included as **Appendix A**.

2 Project Summary

The Site is located on state land approximately 5.75 miles south of the City of Lovington in Unit L, Section 4, Township 17 South, Range 36 East, Lea County, New Mexico. The site is located within a low karst area. A Site Location Map is included as **Figure 1** and a Topographic Map as **Figure 2**.

2.1 Incident # nLWJ1016954547

According to the Initial C-141 Form, on June 10, 2010, a 4-inch diameter trunk line fuse leaked and released 0.40 barrels (bbls) of oil and 5.56 bbls of produced water. The Initial C-141 Form stated that free liquids and saturated solids were reportedly removed by a third-party contractor, but no recovered volume is noted. The Initial C-141 Form was submitted to the NMOCD on June 18, 2010, and approved by NMOCD on June 18, 2010. The release was assigned remediation permit number 1RP-2563. The Initial C-141 Form is included as **Appendix A.**

3 Site Characterization

After a review of the New Mexico Office of State Engineers (NMOSE) and United States Geological Survey (USGS) databases, USGS well 325144103214701 located approximately 0.29 miles north of the Site was identified and gauged with a water level meter by Arcadis on May 2, 2024. Depth to water was verified at 66.80 feet below ground surface (bgs). Photographic documentation of gauging activities by Arcadis are included in **Appendix B (Photo No. 7 - 9)**.

The following site characteristics were determined in accordance with 19.15.29 New Mexico Administrative Code (NMAC):

- Shallowest depth to groundwater beneath the area affected by the release in ft bgs: Between 51 and 75 feet;
- Method used to determine the depth to groundwater: direct measurement;
- Distance to continuously flowing watercourse or any other significant watercourse: >5 miles;
- Distance to lakebed, sinkhole, or playa lake: Between 1,000 feet and 0.50 miles;
- Distance to occupied permanent residence, school, hospital, institution, or church: Between 1 and 5 miles;
- Distance to spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes: Between 1 and 5 miles;
- Distance to any other fresh water well or spring: Between 1,000 feet and 0.50 miles;

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- Distance to incorporated municipal boundaries or a defined municipal fresh water well field: Between 1 and 5 miles;
- Distance to wetland: Between 1,000 feet and 0.50 mile;
- Distance to subsurface mine: >5 miles;
- Distance to (non-karst) unstable area: >5 miles;
- Categorize the risk of this well/site being in a karst geology: Low;
- Distance to a 100-year floodplain: Between 1 and 5 miles; and
- Did the release impact areas not on an exploration, development, production, or storage site? Yes

The site characterization data is presented in **Appendix D**.

4 NMAC Regulatory Criteria

Per Table I of NMAC part 19.15.29.12, the following closure criteria apply to the Site for reclamation activities within the first 4 feet of soil:

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)	50 mg/kg
Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Oil Range Organics (ORO)	100 mg/kg
Chloride	600 mg/kg

Per Table I of NMAC part 19.15.29.12, the following closure criteria apply to the Site for remediation activities for soils at depths greater than 4 feet bgs due to depth to groundwater measured by Arcadis at 66.80 feet bgs within USGS well 325144103214701 located approximately 0.29 miles north of the Site:

Constituent	Limit (mg/kg)
Benzene	10 mg/kg
BTEX	50 mg/kg
TPH –GRO, DRO, and ORO	2,500 mg/kg
Chloride	10,000 mg/kg

5 Site Assessment Activities

In September 2020, March 2023, and February and April 2024, Arcadis performed site assessment activities to evaluate soil impacts stemming from the release. A total of twenty-nine (29) sample points (SB-1 through SB-29) were advanced to depths ranging from the surface to 7 feet bgs inside and surrounding the release area to evaluate the horizontal and vertical extents of the release. Soil sample locations are shown on **Figure 3**. A photo log is included in **Appendix B**. Boring logs are included in **Appendix C**. Soil samples were collected for chemical analyses, placed directly into laboratory-provided sample containers, stored on ice, and transported under the proper chain-of-custody protocol to Eurofins Laboratories in Midland, Texas.

The soil samples were analyzed for BTEX by United States Environmental Protection Agency (EPA) Method 8021B, TPH by EPA Method 8015, and chloride by EPA method 300.0. Soil samples analyzed for BTEX were reported with concentrations ranging from 0.00289 J mg/kg (S-19) to 0.00525 mg/kg (S-21). Soil samples analyzed for TPH were reported with concentrations ranging from 16.5 J mg/kg (S-9) to 618 mg/kg (S-2). Soil samples analyzed for chloride were reported with concentrations ranging from 1.78 J mg/kg (S-24) to 3,260 mg/kg (S-16).

Horizontal and vertical delineation of the area of concern was completed during assessment activities. Analytical data collected to date and field screening during proposed remediation activities will be utilized to guide remediation activities. Soil sample analytical results from assessment activities are summarized in **Table 1**. Laboratory reports for soil samples collected during the assessments, including analytical methods, results, and chain-of-custody documents, are attached in **Appendix E.** NMOCD correspondence is shown in **Appendix F.**

6 Proposed Work Plan

Based on the analytical data and the detected TPH and chloride concentrations in soil samples collected during site assessment activities, CEMC proposes to remediate the areas of concern via excavation illustrated in orange as shown in **Figure 3** and bolded in **Table 1**.

The proposed excavation area encompasses a surface area of approximately 10,500 square feet. An estimated 800 cubic yards of soil will be removed and transported to the R360 CRI Facility, which is listed as an NMOCD approved disposal facility.

In accordance with NMAC 19.15.29.12(D)(1)(b) CEMC proposes the following confirmation sampling plan to adhere with NMOCD requirements. Five-point composite confirmation soil samples will be collected from the excavation floor and sidewalls at 200 square foot intervals for analysis of BTEX by EPA Method 8260, TPH for GRO, DRO, and ORO by EPA Method 8015, and chloride by EPA Method 300.0. Lateral and vertical limits of the excavation will halt once confirmation sample analytical results are in accordance with NMAC 19.15.29.12(D)(1)(c).

Backfill material will be verified to be non-waste containing prior to backfilling the remediated area by obtaining analytical data from the backfill material supplier (R360) if available, or by collecting a five-point composite sample and analyzing for BTEX by EPA Method 8260, TPH for GRO, DRO, and ORO by EPA Method 8015, and chloride by EPA Method 300.0. Following completion of excavation activities and confirmation that the backfill material is non-waste containing, the areas will be backfilled with the clean material and graded to match the original surface conditions and drainage. Approximately 10,500 square feet of the area of concern located within the pasture area will be reclaimed to original condition and re-seeded following remediation activities.

The proposed remediation activities will be implemented within 90 days following approval of this work plan by the NMOCD. The anticipated schedule includes 30 days to setup field work and confirm sub-contractors, 30 days to complete on-site remediation activities, and 30 days to prepare a soil remediation summary and closure request report.

7 Work Plan Approval Request

Upon completion of the above proposed soil remediation activities, a final closure request report describing the remediation activities and a separate reclamation report will be submitted to the NMOCD for review. If you have any questions regarding this work plan or need additional information, please do not hesitate to contact Scott Foord at 281-725-7447 or Morgan Jordan at 281-644-9437.

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Tables

Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU East Test Sat
Lea County, New Mexico

Sample I.D.	Sample Depth (feet bgs)	Date	Total TPH (mg/kg)	Chloride (mg/kg)
NMAC Standards >4 ft			2,500	10,000
Restoration Requirements <4 ft			100	600
SB-1	0-.5'	9/1/2020	***123***	16.5
	1-2'	9/1/2020	42.4	***699***
SB-2	0-.5'	9/1/2020	***618***	169
	1-2'	9/1/2020	82.7	***1,350***
	2-3'	9/1/2020	73.7	***647***
SB-3	0-.5'	9/1/2020	61.3	4.16 J
	1-2'	9/1/2020	57.6	2.40 J
SB-4	0-.5'	9/1/2020	***122***	90.1
	1-2'	9/1/2020	***123***	***793***
	3-4'	9/1/2020	45.4	599
SB-5	0-.5'	9/1/2020	***105***	16.7
	1-2'	9/1/2020	46.8	404
	2-3'	9/1/2020	38.9	337
SB-6	0-0.5'	3/23/2023	53.7	443
	2'	3/23/2023	22.3 J	513
	4'	3/23/2023	40.1 J	***1,500***
SB-7	0-0.5'	3/23/2023	23.4 J	66.9
	2'	3/23/2023	<15.0	73.7
SB-8	0-0.5'	3/23/2023	33.5 J	76.1
	2'	3/23/2023	50.7	141
	4'	3/23/2023	33.1 J	83.2
SB-9	0-0.5'	3/23/2023	16.5 J	43.5
	2'	3/23/2023	19.5 J	56.6
	4'	3/23/2023	19.3 J	79.7
SB-10	1'	2/13/2024	--	84.1
	2'	2/13/2024	72.2	88.4
SB-11	1'	2/13/2024	--	70.2
	2'	2/13/2024	66.8	56.4
SB-12	1'	2/13/2024	--	146
	2'	2/13/2024	74.9	***830***
SB-13	1'	2/13/2024	--	80.4
	2'	2/13/2024	70.9	***1,980***
SB-14	1'	2/13/2024	--	175
	2'	2/13/2024	67.4	***2,260***
SB-15	1'	2/13/2024	--	125
	2'	2/13/2024	69.6	151
SB-16	1'	2/13/2024	--	103
	2'	2/13/2024	45.3 J	***3,260***
SB-17	1'	2/13/2024	--	134
	2'	2/13/2024	48.5 J	75.4
SB-18	1'	2/13/2024	--	92.1
	3'	2/13/2024	61.6	***2,010***
SB-19	1'	2/15/2024	--	79.6 B
	2'	2/15/2024	78.2	90.0 B
SB-20	1'	2/15/2024	--	114 B
	2'	2/15/2024	71	***1,920 B***
SB-21	1'	2/15/2024	--	358 B
	2'	2/15/2024	73.6	***2,630 B***
SB-22	1'	2/15/2024	--	109 B
	2'	2/15/2024	72.1	***1,680 B***
SB-23	0-1'	4/10/2024	--	385
	2-3'	4/10/2024	--	41.9

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU East Test Sat
Lea County, New Mexico

Sample I.D.	Sample Depth (feet bgs)	Date	Total TPH	Chloride
			(mg/kg)	(mg/kg)
NMAC Standards >4 ft			2,500	10,000
Restoration Requirements <4 ft			100	600
SB-24	0-1'	4/10/2024	--	1.78 J
	2-3'	4/10/2024	--	21.4
SB-25	0-1'	4/10/2024	--	3.70 J
	2-3'	4/10/2024	--	2.44 J
SB-26	0-1'	4/10/2024	--	5.24
	2-3'	4/10/2024	--	153
SB-27	2-3'	4/11/2024	--	4.70 J
	4-5'	4/11/2024	--	5.35
	6-7'	4/11/2024	--	22.4
SB-28	2-3'	4/11/2024	--	111
	4-5'	4/11/2024	--	490
	6-7'	4/11/2024	--	300
SB-29	2-3'	4/11/2024	--	***1,540***
	4-5'	4/11/2024	--	1,010
	6-7'	4/11/2024	--	859

F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits.

'<' indicates the analyte was not detected at or above the Method Detection Limit (MDL)

mg/kg: Milligram per Kilogram

BTEX : Benzene, Toluene, Ethylbenzene, and Total Xylenes

NMAC : New Mexico Administration Code. Criteria based off groundwater depth of less than 50 feet.

TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics

TPH MRO: Total Petroluem Hydrocarbons Motor Oil Range Organics

TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics

Total TPH: GRO + DRO + MRO

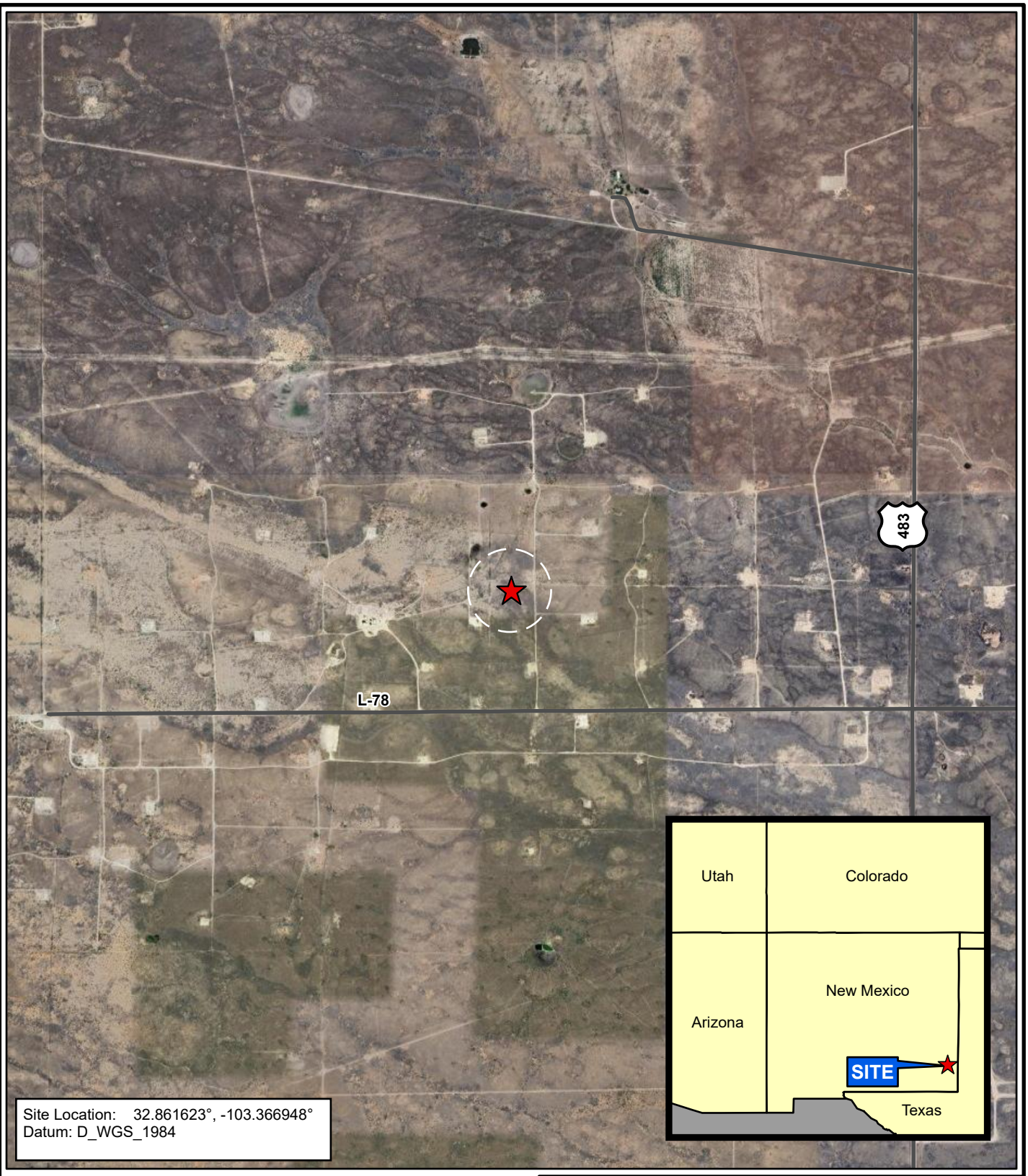
*Revised screening limit and restoration criteria within the first 4 feet below ground surface per Rule 19.15.29 effective August 14, 2018

DUP : Duplicate sample

Notes:

1. Chloride analyzed by United States Environmental Protection Agency Method 300
2. TPH analyzed by TPH by SW8015 Mod DRO/ORO Method
3. BTEX analyzed by USEPA Method 8021B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures



Legend

Site Location

Credits: ESRI Online, Google Earth

0 2,000 4,000 Feet

GRAPHIC SCALE

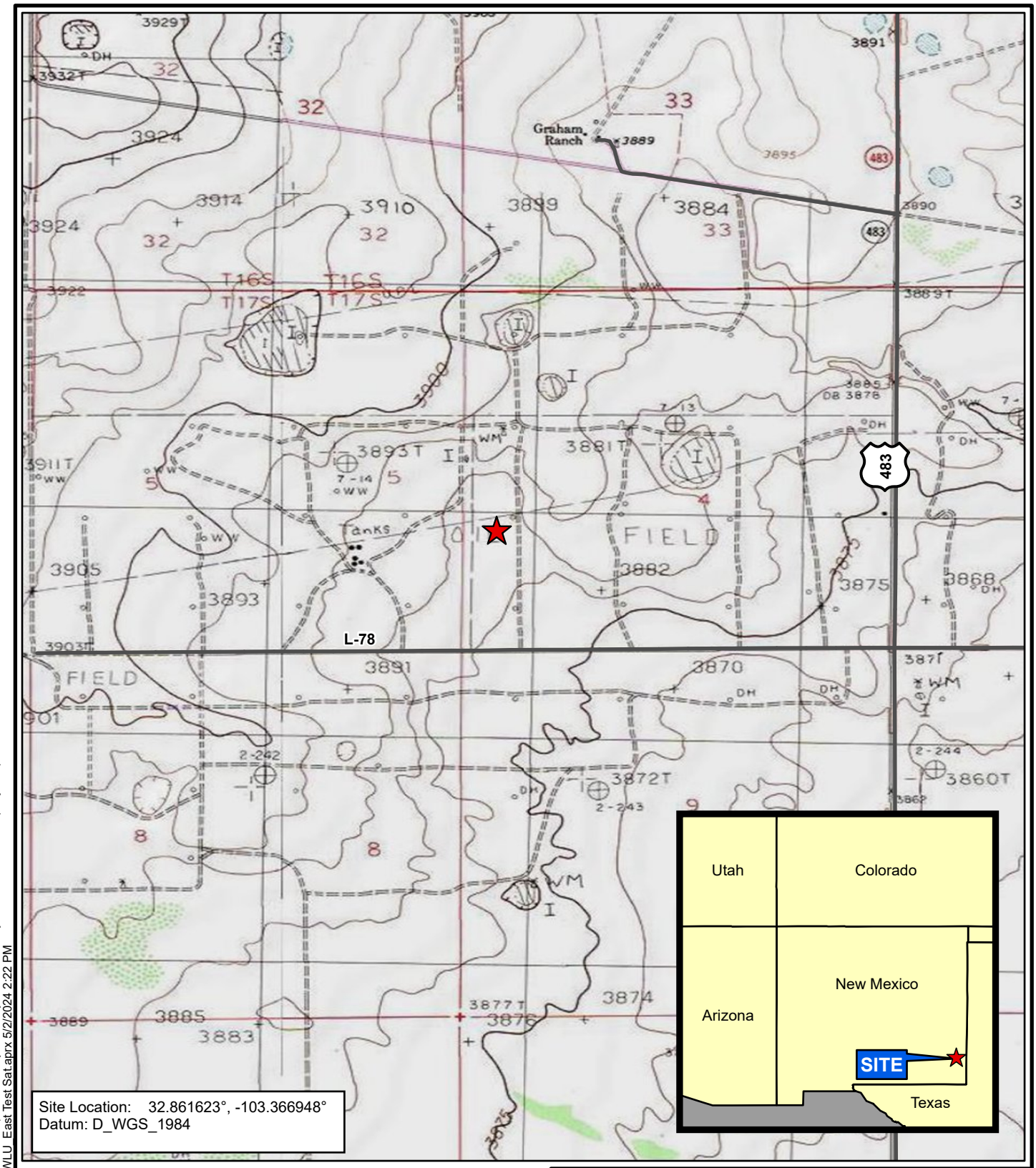
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT EAST TEST SATELLITE
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP

ARCADIS

FIGURE 1

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
T:_ENV\Chevron\WLU_East_Test_Sat_Pro\WLU_East Test Sat aprx 5/2/2024 2:22 PM



Legend

Site Location

Credits: ESRI Online, USGS 24,000 K Topo (Map Service)
Red Lake, New Mexico Quadrangle

0 2,000 4,000 Feet
GRAPHIC SCALE

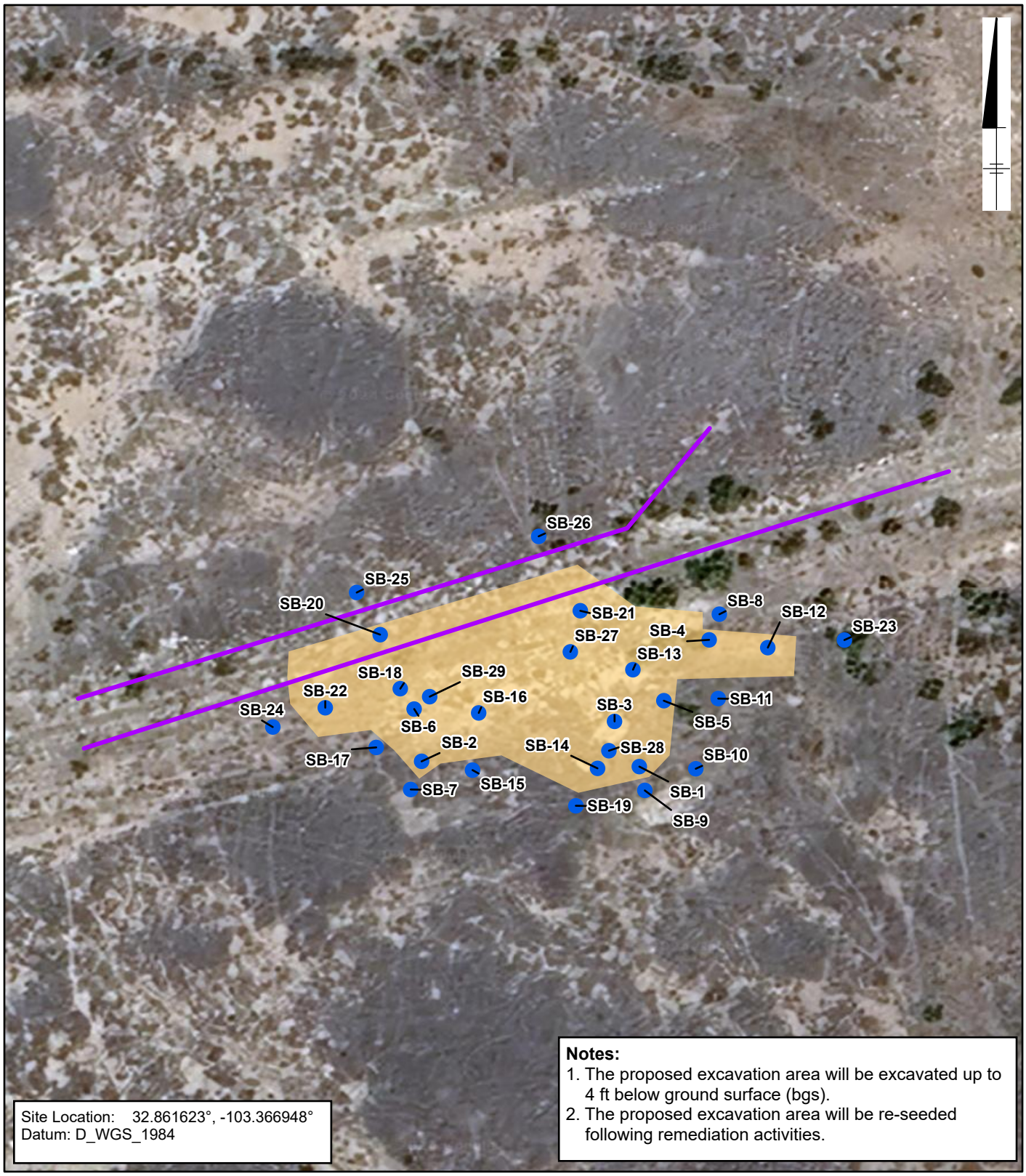
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT EAST TEST SATELLITE
LEA COUNTY, NEW MEXICO

TOPOGRAPHIC MAP

ARCADIS

FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
T:_ENV\Chevron\WLU_East_Test_Sat_Pro\WLU_East Test Sat aprx 5/2/2024 2:22 PM



Site Location: 32.861623°, -103.366948°
Datum: D_WGS_1984

Notes:
1. The proposed excavation area will be excavated up to 4 ft below ground surface (bgs).
2. The proposed excavation area will be re-seeded following remediation activities.

Legend

- Previous Assessment Sample Location
- Pipeline
- Proposed Excavation area (up to 4 ft bgs)

0 60 120 Feet
GRAPHIC SCALE

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT EAST TEST SATELLITE
LEA COUNTY, NEW MEXICO

PROPOSED EXCAVATION AND SAMPLE LOCATION MAP

ARCADIS

FIGURE 3

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
T:_ENV\Chevron\WLU_East_Test_Sat_Pro\WLU_East Test Sat aprx 5/10/2024 9:18 PM

Appendix A

Initial C-141 Form Incident # nLWJ1016954547

District I
1625 N French Dr , Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Chevron Mid-Continent LP	Contact Kim Klahsen
Address HCR 60 Box 423 Lovington, NM 88260	Telephone No. 575-396-4414 X 128 432-894-3298 (Cell)
Facility Name West Lovington Unit East Test Satellite Trunk line	Facility Type Trunkline

Surface Owner Chevron	Mineral Owner State of NM	~~Lease No.~~ B-4120-1

30025038 73

LOCATION OF RELEASE- The closest well is WLU # 23: Currently looking for coordinates

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	4	17	36					Lea

Latitude N 32degree 51.701minutes **Longitude** W 103degrees 22.019 minutes

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 0.40 bbl oil and 5.56 bbls water	Volume Recovered None
Source of Release Trunk line	Date and Hour of Occurrence 6-10-10 ~ 12:30	Date and Hour of Discovery 6-10-10~ 14:00
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? OCD- Larry Ridenour notified Mr. Leking	
By Whom? Larry Ridenour	Date and Hour 6-10-10 @ 3:50 PM by E- Mail	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
No Impact to watercourse.

Describe Cause of Problem and Remedial Action Taken.*

CHLORIDE ??

A 4 inch diameter trunk line fuse leaked resulting in a 0.4 bl oil spill and a 5.56 bbl produced water spill to soil.

Describe Area Affected and Cleanup Action Taken.*

Liquid and saturated solids were removed by a 3rd party contract company. Soil samples will be collected to determine if additional remediation will be performed to meet recommended thresholds for oil and chloride contamination in soil.

SPILL AREA ?

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: Kim Klahsen	OIL CONSERVATION DIVISION
Printed Name: Kim Klahsen	Approved by District Supervisor: Johnson ENVIRONMENTAL ENGINEER
Title: HES Specialist	Approval Date: 6-18-10 Expiration Date: 8-18-10
E-mail Address: KDKL@chevron.com	Conditions of Approval: SUBMIT FINAL C-141 W/ DOCS BY Attached ☐ IRP # 10.6.2563
Date: 6/18/10 Phone:575-396-4414	

NLOST 1016954547

Appendix B

Photo Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
1	9/01/2020

Direction Photo Taken:

Facing North

Description:

In vicinity of HA-1



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
2	9/01/2020

Direction Photo Taken:

Facing West

Description:

East side of release area



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
3	9/01/2020

Direction Photo Taken:

Facing South

Description:

Directly north of release area



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
4	9/01/2020

Direction Photo Taken:

Facing East

Description:

Release area in vicinity of HA-2, on west side



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
5	9/01/2020

Direction Photo Taken:

Facing East

Description:

Release area



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
6	9/01/2020

Direction Photo Taken:

Facing East

Description:

Center of release area



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
7	5/02/2024

Direction Photo Taken:

Facing West

Description:

USGS well 325144103214701 located approximately 0.29 miles north of the Site was gauged with a water meter by Arcadis on May 2, 2024, and depth to water was verified at 66.80 ft below ground surface (bgs).



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
8	5/02/2024

Direction Photo Taken:

Facing West

Description:

USGS well 325144103214701 being gauged by Arcadis on May 2, 2024, and depth to water was verified at 66.80 ft below ground surface (bgs).



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
WLU East Test Sat	Lea County, TX	nLWJ1016954547

Photo No.	Date:
9	5/02/2024

Direction Photo Taken:

Facing West

Description:

USGS well 325144103214701 being gauged by Arcadis on May 2, 2024. Meter lighting up for water detection at 66.80 ft below ground surface (bgs).



Appendix C

Boring Logs

Date Start/Finish: 9/1/2020 **Drilling Company:** Arcadis **Driller's Name:** Justin Steinmann **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger	**Borehole Depth:** 3' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** HA-2 **Client:** Chevron **Location:** WLU East Test Sat

DEPTH	Geologic Column	Stratigraphic Description
0		silty sand, gray brown sand, very fine to fine, mod - well sorted, subrounded, with silt, loose - friable, trace to little roots, slight organic odor at 2-3" dark brown, USCS - SM
2		silty sand, gray brown as above with trace to little clay, blocky, firm, non pliable, dry, USCS- SM.
3		sandy clay, med brown clay, slightly pliable, non plastic, firm, very slightly moist, with very fine to fine sand, loose, moderately sorted throughout, trace orange streaks throughout. USCS - SC
		End of boring 3' bgs

ARCADIS
Infrastructure · Water · Environment · Buildings

Remarks: Total Depth: 3' Below Ground Surface (bgs)

Project: 30057179 Template: LPTEMPLATE_HA_1.ldfx
Data File: HA-2 Date: 9/13/2020 Created/Edited by: AD

Date Start/Finish: 9/1/2020 **Drilling Company:** Arcadis **Driller's Name:** Justin Steinmann **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger	**Borehole Depth:** 4' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** HA-4 **Client:** Chevron **Location:** WLU East Test Sat

DEPTH	Geologic Column	Stratigraphic Description
0		silty sand, light gray/brown sand, very fine to fine grained, moderately sorted, subrounded, silty, loose, dry. USCS - SM
		sandy clay, dark brown clay, non pliable, non plastic, firm - pliable, dry, with little to some sand, fine grained, moderately to well sorted throughout, dry. USCS - CL @ 0.75' sand decreases to trace-little, clay becomes firm, mod cohesive
		clayey sand, light brown sand, very fine to fine grained, well sorted, subrounded, dry, with trace clay, loose. USCS - SC @ 2' clay becomes trace-little clay, slightly pliable, firm, mottled throughout
		clayey sand, light brown as above w/ clay decreasing to trace, sand becoming slightly cemented, friable @ 3' trace nodules clay, dark brown. USCS - SC
		Clayey sand, pink brown sand, very fine to fine, moderately to well sorted, loose, subangular, w/ clay lenses, little to some dry, non-pliable, non-plastic, orange brown trace black streaks within clay. USCS - SC @ 3.75' clay increases to some-abundant
		Sandy clay, orange brown clay, non pliable, firm, non-plastic, little to some sand, very fine, moderately sorted throughout, trace calcareous silt. USCS - CL
		End of boring 4' bgs

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Remarks: Total Depth: 4' Below Ground Surface (bgs)

Project: 30057179 Template: LPTEMPLATE_HA_1.ldfx Page: 1 of 1
Data File: HA-4 Date: 9/13/2020 Created/Edited by: AD

Date Start/Finish: 9/1/2020 **Drilling Company:** Arcadis **Driller's Name:** Justin Steinmann **Drilling Method:** Hand Auger **Sampling Method:** Hand Auger	**Borehole Depth:** 3' **Surface Elevation:** N/A **Descriptions By:** Justin Steinmann	**Well/Boring ID:** HA-5 **Client:** Chevron **Location:** WLU East Test Sat

DEPTH	Geologic Column	Stratigraphic Description
0		silty sand, gray brown sand, very fine to fine sand, sub-rounded, well sorted, silty, loose, dry, trace roots. USCS - SM
1		silty sand, dark brown, very fine to fine sand, sub-rounded, moderately to well sorted, loose - friable, dry, trace to little clay throughout. USCS - SM
2		sandy clay, medium brown clay, non-pliable, non-plastic, firm to hard, friable, dry, with some sand moderately sorted throughout, very fine. USCS - CL
3		silty sand, gray brown very fine to fine sand, subrounded, moderately to well sorted, silty, loose, friable, trace clay throughout, lenses, slightly pliable. USCS - SM
		End of boring 3' bgs

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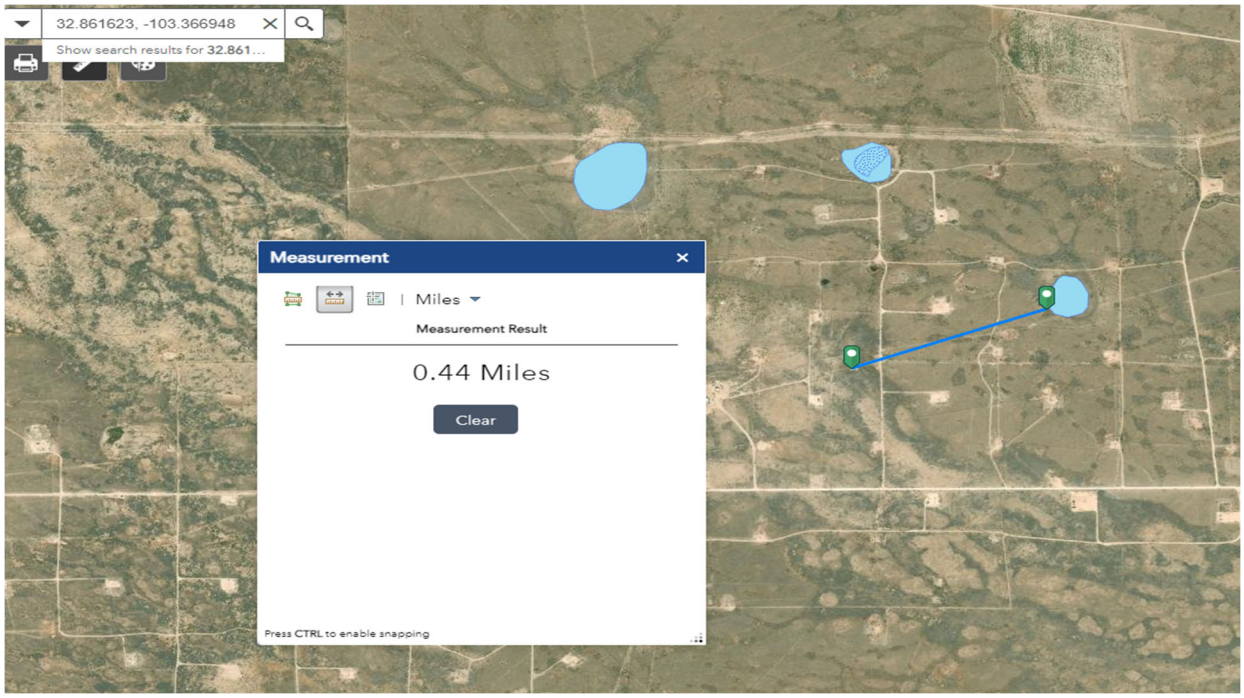
Remarks: Total Depth: 3' Below Ground Surface (bgs)

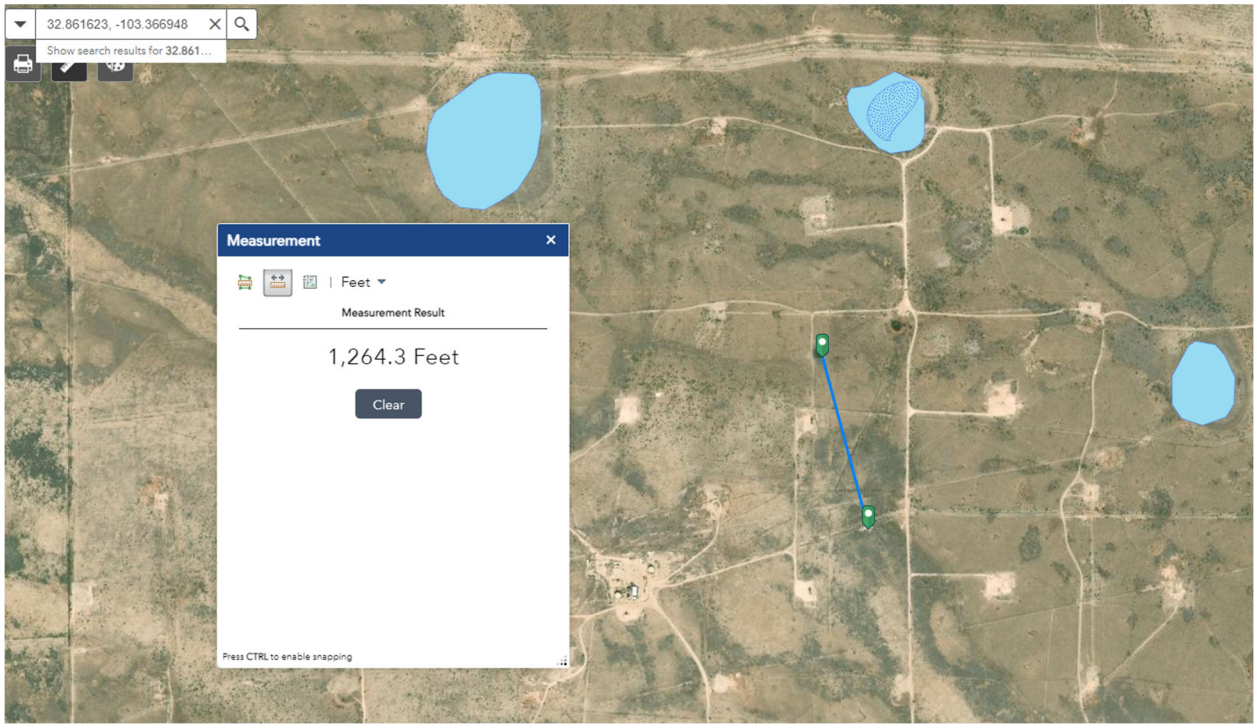
Project: 30057179 Template: LPTEMPLATE_HA_1.ldfx
Data File: HA-5 Date: 9/13/2020 Created/Edited by: AD

Appendix D

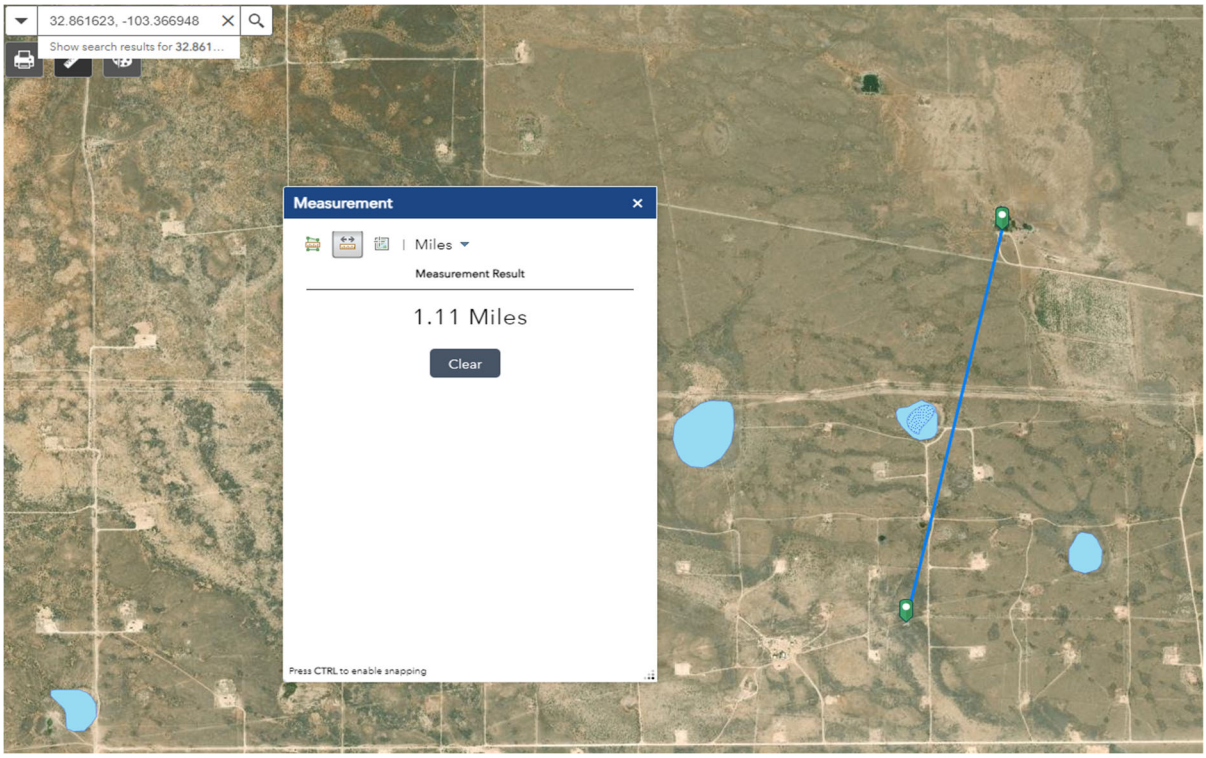
Site Characterization Data

Distance to lakebed, sinkhole, or playa lake.

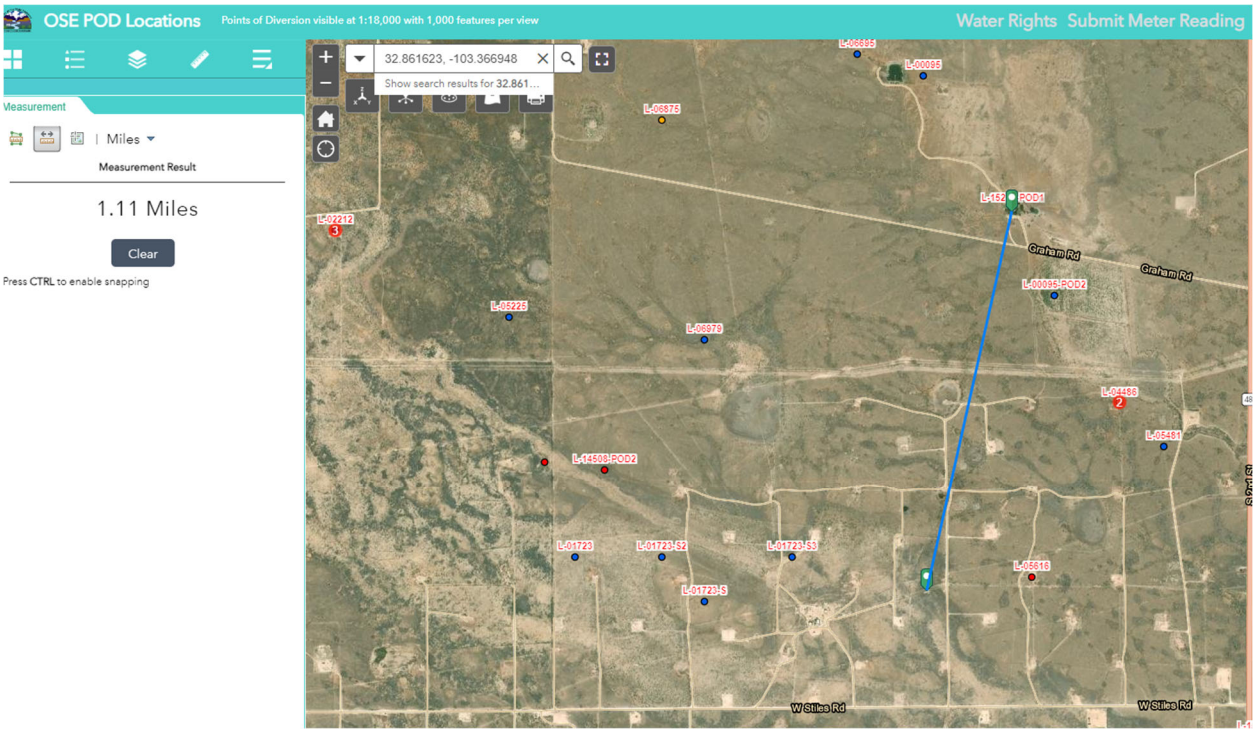




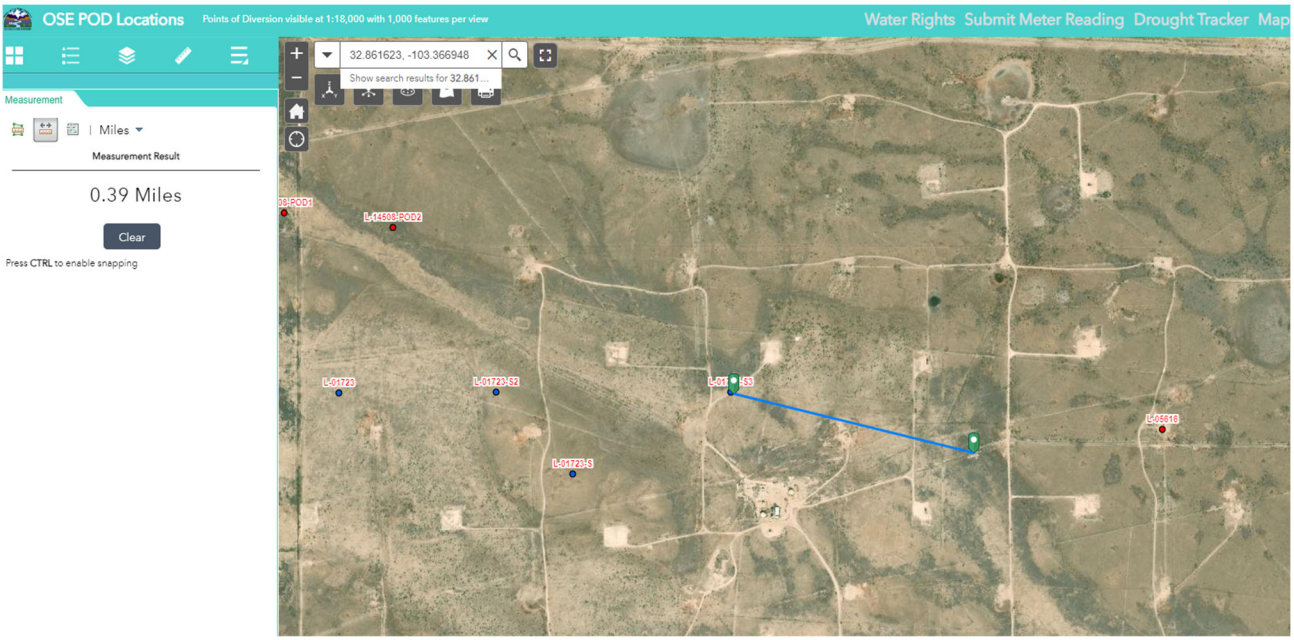
Distance to occupied permanent residence, school, hospital, institution, or church.



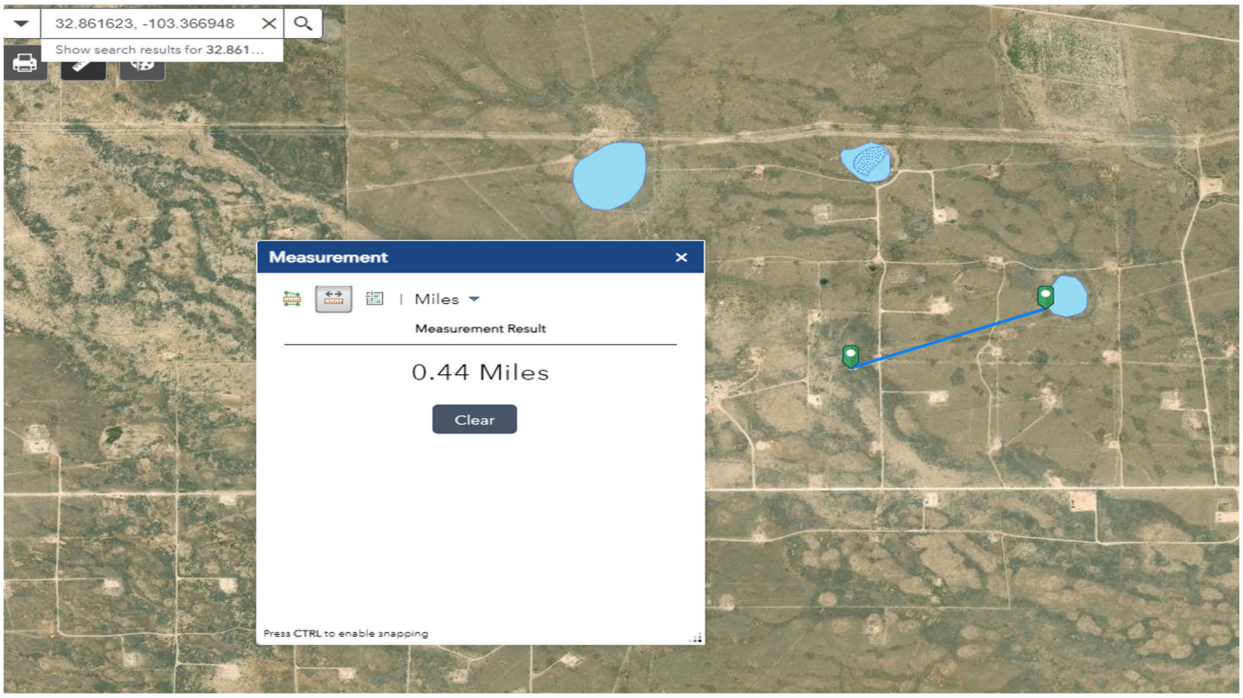
Distance to spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes (L-15262-POD1).



Distance to any other fresh water well or spring (L-01723-S3).



Distance to a wetland.



Appendix E

Laboratory Analytical Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

Laboratory Job ID: 600-210633-1
Client Project/Site: Chevron - WLU East Test Sat Site

For:
ARCADIS U.S., Inc.
1004 North Big Spring
Suite 121
Midland, Texas 79701

Attn: Justin Nixon

Authorized for release by:
9/23/2020 4:46:24 PM

Sachin Kudchadkar, Senior Project Manager
(713)690-4444
Sachin.Kudchadkar@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Laboratory Job ID: 600-210633-1

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Method Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL HOU
8015D	Gasoline Range Organics (GRO) (GC)	SW846	TAL HOU
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU
2540B	Percent Moisture	SM20	TAL HOU
3546	Microwave Extraction	SW846	TAL HOU
5030C	Purge and Trap for Solids	SW846	TAL HOU
5030C	Purge and Trap Methanol Dilution	SW846	TAL HOU
DI Leach	Deionized Water Leaching Procedure (Routine)	ASTM	TAL HOU

Protocol References:

ASTM = ASTM International

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

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Job ID: 600-210633-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
600-210633-1	HA-1-S-0-.5-200901	Solid	09/01/20 11:30	09/02/20 10:35	
600-210633-2	HA-1-S-1-2-200901	Solid	09/01/20 11:42	09/02/20 10:35	
600-210633-3	HA-2-S-0-.5-200901	Solid	09/01/20 11:52	09/02/20 10:35	
600-210633-4	HA-2-S-1-2-200901	Solid	09/01/20 11:57	09/02/20 10:35	
600-210633-5	HA-2-SD-1-2-200901	Solid	09/01/20 11:57	09/02/20 10:35	
600-210633-6	HA-2-S-2-3-200901	Solid	09/01/20 12:00	09/02/20 10:35	
600-210633-7	HA-3-S-0-.5-200901	Solid	09/01/20 12:08	09/02/20 10:35	
600-210633-8	HA-3-S-1-2-200901	Solid	09/01/20 12:11	09/02/20 10:35	
600-210633-9	HA-4-S-0-.5-200901	Solid	09/01/20 12:20	09/02/20 10:35	
600-210633-10	HA-4-S-1-2-200901	Solid	09/01/20 12:37	09/02/20 10:35	
600-210633-11	HA-4-S-3-4-200901	Solid	09/01/20 12:48	09/02/20 10:35	
600-210633-12	HA-5-S-0-.5-200901	Solid	09/01/20 12:54	09/02/20 10:35	
600-210633-13	HA-5-S-1-2-200901	Solid	09/01/20 12:58	09/02/20 10:35	
600-210633-14	HA-5-S-2-3-200901	Solid	09/01/20 13:04	09/02/20 10:35	

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-1-S-0-.5-200901 — Lab Sample ID: 600-210633-1

Date Collected: 09/01/20 11:30 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 94.9**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.696	U	5.52	0.696	ug/Kg	☼	09/02/20 15:07	09/04/20 14:39	1
Ethylbenzene	1.13	U	5.52	1.13	ug/Kg	☼	09/02/20 15:07	09/04/20 14:39	1
Toluene	1.52	U	5.52	1.52	ug/Kg	☼	09/02/20 15:07	09/04/20 14:39	1
Xylenes, Total	1.25	U	5.52	1.25	ug/Kg	☼	09/02/20 15:07	09/04/20 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*	*09/02/20 15:07*	*09/04/20 14:39*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*	*09/02/20 15:07*	*09/04/20 14:39*	*1*
Dibromofluoromethane	*99*		*68 - 140*	*09/02/20 15:07*	*09/04/20 14:39*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*09/02/20 15:07*	*09/04/20 14:39*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.633	U	1.08	0.633	mg/Kg	☼	09/04/20 07:03	09/04/20 11:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*70 - 130*	*09/04/20 07:03*	*09/04/20 11:02*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**18.6**		8.73	1.80	mg/Kg	☼	09/10/20 14:35	09/15/20 19:14	1
Oil Range Organics (C28-C36)	**104**		8.73	5.26	mg/Kg	☼	09/10/20 14:35	09/15/20 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*129*		*60 - 140*	*09/10/20 14:35*	*09/15/20 19:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.5**		4.21	0.563	mg/Kg	☼		09/17/20 22:30	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**5.1**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**94.9**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-1-S-1-2-200901 — Lab Sample ID: 600-210633-2

Date Collected: 09/01/20 11:42 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 91.2**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.658	U	5.22	0.658	ug/Kg	☼	09/02/20 15:07	09/04/20 15:02	1
Ethylbenzene	1.06	U	5.22	1.06	ug/Kg	☼	09/02/20 15:07	09/04/20 15:02	1
Toluene	1.44	U	5.22	1.44	ug/Kg	☼	09/02/20 15:07	09/04/20 15:02	1
Xylenes, Total	1.18	U	5.22	1.18	ug/Kg	☼	09/02/20 15:07	09/04/20 15:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*09/02/20 15:07*	*09/04/20 15:02*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*	*09/02/20 15:07*	*09/04/20 15:02*	*1*
Dibromofluoromethane	*99*		*68 - 140*	*09/02/20 15:07*	*09/04/20 15:02*	*1*
Toluene-d8 (Surr)	*101*		*50 - 130*	*09/02/20 15:07*	*09/04/20 15:02*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-1-S-1-2-200901 — Lab Sample ID: 600-210633-2

Date Collected: 09/01/20 11:42 Matrix: Solid
Date Received: 09/02/20 10:35 Percent Solids: 91.2

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.680	U	1.16	0.680	mg/Kg	☼	09/04/20 07:03	09/04/20 11:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*70 - 130*	*09/04/20 07:03*	*09/04/20 11:27*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**7.78**	**J**	9.08	1.87	mg/Kg	☼	09/10/20 14:35	09/15/20 19:45	1
Oil Range Organics (C28-C36)	**42.4**		9.08	5.47	mg/Kg	☼	09/10/20 14:35	09/15/20 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*120*		*60 - 140*	*09/10/20 14:35*	*09/15/20 19:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**699**		21.9	2.93	mg/Kg	☼		09/17/20 23:32	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**8.8**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**91.2**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-2-S-0-.5-200901 — Lab Sample ID: 600-210633-3

Date Collected: 09/01/20 11:52 Matrix: Solid
Date Received: 09/02/20 10:35 Percent Solids: 79.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.829	U	6.58	0.829	ug/Kg	☼	09/02/20 15:07	09/04/20 15:25	1
Ethylbenzene	1.34	U	6.58	1.34	ug/Kg	☼	09/02/20 15:07	09/04/20 15:25	1
Toluene	1.82	U	6.58	1.82	ug/Kg	☼	09/02/20 15:07	09/04/20 15:25	1
Xylenes, Total	1.49	U	6.58	1.49	ug/Kg	☼	09/02/20 15:07	09/04/20 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*	*09/02/20 15:07*	*09/04/20 15:25*	*1*
4-Bromofluorobenzene	*109*		*57 - 140*	*09/02/20 15:07*	*09/04/20 15:25*	*1*
Dibromofluoromethane	*101*		*68 - 140*	*09/02/20 15:07*	*09/04/20 15:25*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*09/02/20 15:07*	*09/04/20 15:25*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.737	U	1.26	0.737	mg/Kg	☼	09/04/20 07:03	09/04/20 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*09/04/20 07:03*	*09/04/20 11:52*	*1*

Method: 8015D - Diesel Range Organics (DRO) (GC) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**104**		20.8	4.29	mg/Kg	☼	09/10/20 14:35	09/16/20 09:09	2
Oil Range Organics (C28-C36)	**514**		20.8	12.5	mg/Kg	☼	09/10/20 14:35	09/16/20 09:09	2

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-2-S-0-.5-200901 — Lab Sample ID: 600-210633-3

Date Collected: 09/01/20 11:52 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 79.3**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*60 - 140*	*09/10/20 14:35*	*09/16/20 09:09*	*2*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**169**		5.04	0.673	mg/Kg	☼		09/17/20 23:52	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20.7**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**79.3**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-2-S-1-2-200901 — Lab Sample ID: 600-210633-4

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 85.8**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.816	U	6.48	0.816	ug/Kg	☼	09/02/20 15:07	09/04/20 15:49	1
Ethylbenzene	1.32	U	6.48	1.32	ug/Kg	☼	09/02/20 15:07	09/04/20 15:49	1
Toluene	1.79	U	6.48	1.79	ug/Kg	☼	09/02/20 15:07	09/04/20 15:49	1
Xylenes, Total	1.46	U	6.48	1.46	ug/Kg	☼	09/02/20 15:07	09/04/20 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*09/02/20 15:07*	*09/04/20 15:49*	*1*
4-Bromofluorobenzene	*117*		*57 - 140*	*09/02/20 15:07*	*09/04/20 15:49*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*09/02/20 15:07*	*09/04/20 15:49*	*1*
Toluene-d8 (Surr)	*104*		*50 - 130*	*09/02/20 15:07*	*09/04/20 15:49*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.707	U	1.21	0.707	mg/Kg	☼	09/04/20 07:03	09/04/20 12:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*70 - 130*	*09/04/20 07:03*	*09/04/20 12:17*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**16.2**		9.66	1.99	mg/Kg	☼	09/10/20 14:35	09/15/20 20:47	1
Oil Range Organics (C28-C36)	**66.5**		9.66	5.82	mg/Kg	☼	09/10/20 14:35	09/15/20 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*129*		*60 - 140*	*09/10/20 14:35*	*09/15/20 20:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1350**		46.6	6.23	mg/Kg	☼		09/18/20 00:13	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.2**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**85.8**		1.0	1.0	%			09/03/20 09:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-2-SD-1-2-200901 — Lab Sample ID: 600-210633-5

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 85.9**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.765	U	6.07	0.765	ug/Kg	☼	09/02/20 15:07	09/05/20 10:19	1
Ethylbenzene	1.24	U	6.07	1.24	ug/Kg	☼	09/02/20 15:07	09/05/20 10:19	1
Toluene	1.68	U	6.07	1.68	ug/Kg	☼	09/02/20 15:07	09/05/20 10:19	1
Xylenes, Total	1.37	U	6.07	1.37	ug/Kg	☼	09/02/20 15:07	09/05/20 10:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*09/02/20 15:07*	*09/05/20 10:19*	*1*
4-Bromofluorobenzene	*114*		*57 - 140*	*09/02/20 15:07*	*09/05/20 10:19*	*1*
Dibromofluoromethane	*100*		*68 - 140*	*09/02/20 15:07*	*09/05/20 10:19*	*1*
Toluene-d8 (Surr)	*93*		*50 - 130*	*09/02/20 15:07*	*09/05/20 10:19*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.729	U	1.24	0.729	mg/Kg	☼	09/04/20 07:03	09/04/20 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*09/04/20 07:03*	*09/04/20 12:42*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**12.5**		9.60	1.98	mg/Kg	☼	09/10/20 14:35	09/15/20 21:19	1
Oil Range Organics (C28-C36)	**68.9**		9.60	5.78	mg/Kg	☼	09/10/20 14:35	09/15/20 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*133*		*60 - 140*	*09/10/20 14:35*	*09/15/20 21:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1320**		46.6	6.21	mg/Kg	☼		09/18/20 00:33	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14.1**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**85.9**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-2-S-2-3-200901 — Lab Sample ID: 600-210633-6

Date Collected: 09/01/20 12:00 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 80.7**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.748	U	5.94	0.748	ug/Kg	☼	09/02/20 15:07	09/04/20 16:34	1
Ethylbenzene	1.21	U	5.94	1.21	ug/Kg	☼	09/02/20 15:07	09/04/20 16:34	1
Toluene	1.64	U	5.94	1.64	ug/Kg	☼	09/02/20 15:07	09/04/20 16:34	1
Xylenes, Total	1.34	U	5.94	1.34	ug/Kg	☼	09/02/20 15:07	09/04/20 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*	*09/02/20 15:07*	*09/04/20 16:34*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*09/02/20 15:07*	*09/04/20 16:34*	*1*
Dibromofluoromethane	*104*		*68 - 140*	*09/02/20 15:07*	*09/04/20 16:34*	*1*
Toluene-d8 (Surr)	*101*		*50 - 130*	*09/02/20 15:07*	*09/04/20 16:34*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-2-S-2-3-200901 — Lab Sample ID: 600-210633-6

Date Collected: 09/01/20 12:00 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 80.7**

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.740	U	1.26	0.740	mg/Kg	☼	09/04/20 07:03	09/04/20 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*09/04/20 07:03*	*09/04/20 13:08*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**11.4**		10.3	2.12	mg/Kg	☼	09/10/20 14:35	09/15/20 21:50	1
Oil Range Organics (C28-C36)	**62.3**		10.3	6.19	mg/Kg	☼	09/10/20 14:35	09/15/20 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*118*		*60 - 140*	*09/10/20 14:35*	*09/15/20 21:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**647**		24.8	3.31	mg/Kg	☼		09/18/20 00:53	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.3**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**80.7**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-3-S-0-.5-200901 — Lab Sample ID: 600-210633-7

Date Collected: 09/01/20 12:08 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 84.3**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.821	U	6.52	0.821	ug/Kg	☼	09/02/20 15:07	09/04/20 16:57	1
Ethylbenzene	1.33	U	6.52	1.33	ug/Kg	☼	09/02/20 15:07	09/04/20 16:57	1
Toluene	1.80	U	6.52	1.80	ug/Kg	☼	09/02/20 15:07	09/04/20 16:57	1
Xylenes, Total	1.47	U	6.52	1.47	ug/Kg	☼	09/02/20 15:07	09/04/20 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*61 - 130*	*09/02/20 15:07*	*09/04/20 16:57*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*	*09/02/20 15:07*	*09/04/20 16:57*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*09/02/20 15:07*	*09/04/20 16:57*	*1*
Toluene-d8 (Surr)	*99*		*50 - 130*	*09/02/20 15:07*	*09/04/20 16:57*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.695	U	1.19	0.695	mg/Kg	☼	09/04/20 07:03	09/04/20 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*70 - 130*	*09/04/20 07:03*	*09/04/20 13:33*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**8.45**	**J**	9.80	2.02	mg/Kg	☼	09/10/20 14:35	09/15/20 22:21	1
Oil Range Organics (C28-C36)	**61.3**		9.80	5.90	mg/Kg	☼	09/10/20 14:35	09/15/20 22:21	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-3-S-0-.5-200901 Lab Sample ID: 600-210633-7

Date Collected: 09/01/20 12:08 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 84.3**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*122*		*60 - 140*	*09/10/20 14:35*	*09/15/20 22:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.16	J	4.75	0.634	mg/Kg	☼		09/18/20 01:55	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15.7		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	84.3		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-3-S-1-2-200901 Lab Sample ID: 600-210633-8

Date Collected: 09/01/20 12:11 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 92.4**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.713	U	5.66	0.713	ug/Kg	☼	09/02/20 15:07	09/04/20 17:20	1
Ethylbenzene	1.15	U	5.66	1.15	ug/Kg	☼	09/02/20 15:07	09/04/20 17:20	1
Toluene	1.56	U	5.66	1.56	ug/Kg	☼	09/02/20 15:07	09/04/20 17:20	1
Xylenes, Total	1.28	U	5.66	1.28	ug/Kg	☼	09/02/20 15:07	09/04/20 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*09/02/20 15:07*	*09/04/20 17:20*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*09/02/20 15:07*	*09/04/20 17:20*	*1*
Dibromofluoromethane	*105*		*68 - 140*	*09/02/20 15:07*	*09/04/20 17:20*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*09/02/20 15:07*	*09/04/20 17:20*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.647	U	1.10	0.647	mg/Kg	☼	09/04/20 07:03	09/04/20 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*70 - 130*	*09/04/20 07:03*	*09/04/20 13:58*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	10.8		8.97	1.85	mg/Kg	☼	09/10/20 14:35	09/15/20 23:24	1
Oil Range Organics (C28-C36)	46.8		8.97	5.40	mg/Kg	☼	09/10/20 14:35	09/15/20 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*103*		*60 - 140*	*09/10/20 14:35*	*09/15/20 23:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.40	J	4.33	0.578	mg/Kg	☼		09/18/20 02:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	7.6		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	92.4		1.0	1.0	%			09/03/20 09:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-4-S-0-.5-200901 — Lab Sample ID: 600-210633-9

Date Collected: 09/01/20 12:20 Matrix: Solid
Date Received: 09/02/20 10:35 Percent Solids: 81.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.793	U	6.29	0.793	ug/Kg	☼	09/02/20 15:07	09/04/20 17:43	1
Ethylbenzene	1.28	U	6.29	1.28	ug/Kg	☼	09/02/20 15:07	09/04/20 17:43	1
Toluene	1.74	U	6.29	1.74	ug/Kg	☼	09/02/20 15:07	09/04/20 17:43	1
Xylenes, Total	1.42	U	6.29	1.42	ug/Kg	☼	09/02/20 15:07	09/04/20 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*61 - 130*	*09/02/20 15:07*	*09/04/20 17:43*	*1*
4-Bromofluorobenzene	*118*		*57 - 140*	*09/02/20 15:07*	*09/04/20 17:43*	*1*
Dibromofluoromethane	*104*		*68 - 140*	*09/02/20 15:07*	*09/04/20 17:43*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*09/02/20 15:07*	*09/04/20 17:43*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.712	U	1.22	0.712	mg/Kg	☼	09/04/20 07:03	09/04/20 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*70 - 130*	*09/04/20 07:03*	*09/04/20 14:23*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**24.1**		10.2	2.10	mg/Kg	☼	09/10/20 14:35	09/15/20 23:56	1
Oil Range Organics (C28-C36)	**98.0**		10.2	6.15	mg/Kg	☼	09/10/20 14:35	09/15/20 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*132*		*60 - 140*	*09/10/20 14:35*	*09/15/20 23:56*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**90.1**		24.7	3.30	mg/Kg	☼		09/18/20 02:35	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19.0**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**81.0**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-4-S-1-2-200901 — Lab Sample ID: 600-210633-10

Date Collected: 09/01/20 12:37 Matrix: Solid
Date Received: 09/02/20 10:35 Percent Solids: 89.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.699	U	5.54	0.699	ug/Kg	☼	09/02/20 15:07	09/04/20 18:05	1
Ethylbenzene	1.13	U	5.54	1.13	ug/Kg	☼	09/02/20 15:07	09/04/20 18:05	1
Toluene	1.53	U	5.54	1.53	ug/Kg	☼	09/02/20 15:07	09/04/20 18:05	1
Xylenes, Total	1.25	U	5.54	1.25	ug/Kg	☼	09/02/20 15:07	09/04/20 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*61 - 130*	*09/02/20 15:07*	*09/04/20 18:05*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*09/02/20 15:07*	*09/04/20 18:05*	*1*
Dibromofluoromethane	*107*		*68 - 140*	*09/02/20 15:07*	*09/04/20 18:05*	*1*
Toluene-d8 (Surr)	*100*		*50 - 130*	*09/02/20 15:07*	*09/04/20 18:05*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-4-S-1-2-200901 — Lab Sample ID: 600-210633-10

Date Collected: 09/01/20 12:37 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 89.5**

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.654	U	1.12	0.654	mg/Kg	☼	09/04/20 07:03	09/04/20 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*70 - 130*	*09/04/20 07:03*	*09/04/20 14:48*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**25.8**		9.26	1.91	mg/Kg	☼	09/10/20 14:35	09/16/20 00:28	1
Oil Range Organics (C28-C36)	**97.1**		9.26	5.58	mg/Kg	☼	09/10/20 14:35	09/16/20 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*147*	*X*	*60 - 140*	*09/10/20 14:35*	*09/16/20 00:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**793**		22.4	2.98	mg/Kg	☼		09/18/20 02:56	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.5**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**89.5**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-4-S-3-4-200901 — Lab Sample ID: 600-210633-11

Date Collected: 09/01/20 12:48 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.8**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.708	U	5.62	0.708	ug/Kg	☼	09/02/20 15:07	09/04/20 18:28	1
Ethylbenzene	1.15	U	5.62	1.15	ug/Kg	☼	09/02/20 15:07	09/04/20 18:28	1
Toluene	1.55	U	5.62	1.55	ug/Kg	☼	09/02/20 15:07	09/04/20 18:28	1
Xylenes, Total	1.27	U	5.62	1.27	ug/Kg	☼	09/02/20 15:07	09/04/20 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*61 - 130*	*09/02/20 15:07*	*09/04/20 18:28*	*1*
4-Bromofluorobenzene	*119*		*57 - 140*	*09/02/20 15:07*	*09/04/20 18:28*	*1*
Dibromofluoromethane	*105*		*68 - 140*	*09/02/20 15:07*	*09/04/20 18:28*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*	*09/02/20 15:07*	*09/04/20 18:28*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.697	U	1.19	0.697	mg/Kg	☼	09/04/20 07:03	09/04/20 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*70 - 130*	*09/04/20 07:03*	*09/04/20 15:39*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**7.58**	**J**	9.12	1.88	mg/Kg	☼	09/10/20 14:35	09/16/20 01:00	1
Oil Range Organics (C28-C36)	**45.4**		9.12	5.49	mg/Kg	☼	09/10/20 14:35	09/16/20 01:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-4-S-3-4-200901 — Lab Sample ID: 600-210633-11

Date Collected: 09/01/20 12:48 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.8**

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*107*		*60 - 140*	*09/10/20 14:35*	*09/16/20 01:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**599**		22.0	2.94	mg/Kg	☼		09/18/20 03:16	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.2**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**90.8**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-5-S-0-.5-200901 — Lab Sample ID: 600-210633-12

Date Collected: 09/01/20 12:54 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.9**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.717	U	5.69	0.717	ug/Kg	☼	09/02/20 15:07	09/04/20 13:05	1
Ethylbenzene	1.16	U	5.69	1.16	ug/Kg	☼	09/02/20 15:07	09/04/20 13:05	1
Toluene	1.57	U	5.69	1.57	ug/Kg	☼	09/02/20 15:07	09/04/20 13:05	1
Xylenes, Total	1.29	U	5.69	1.29	ug/Kg	☼	09/02/20 15:07	09/04/20 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*	*09/02/20 15:07*	*09/04/20 13:05*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*	*09/02/20 15:07*	*09/04/20 13:05*	*1*
Dibromofluoromethane	*97*		*68 - 140*	*09/02/20 15:07*	*09/04/20 13:05*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*09/02/20 15:07*	*09/04/20 13:05*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.672	U	1.15	0.672	mg/Kg	☼	09/04/20 07:03	09/04/20 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*99*		*70 - 130*	*09/04/20 07:03*	*09/04/20 16:04*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**16.3**		9.10	1.87	mg/Kg	☼	09/10/20 14:35	09/16/20 01:32	1
Oil Range Organics (C28-C36)	**89.1**		9.10	5.48	mg/Kg	☼	09/10/20 14:35	09/16/20 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*138*		*60 - 140*	*09/10/20 14:35*	*09/16/20 01:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16.7**		4.40	0.587	mg/Kg	☼		09/18/20 04:17	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.1**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**90.9**		1.0	1.0	%			09/03/20 09:00	1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-5-S-1-2-200901 — Lab Sample ID: 600-210633-13

Date Collected: 09/01/20 12:58 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.6**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.724	U	5.75	0.724	ug/Kg	☼	09/02/20 15:07	09/04/20 18:51	1
Ethylbenzene	1.17	U	5.75	1.17	ug/Kg	☼	09/02/20 15:07	09/04/20 18:51	1
Toluene	1.59	U	5.75	1.59	ug/Kg	☼	09/02/20 15:07	09/04/20 18:51	1
Xylenes, Total	1.30	U	5.75	1.30	ug/Kg	☼	09/02/20 15:07	09/04/20 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*	*09/02/20 15:07*	*09/04/20 18:51*	*1*
4-Bromofluorobenzene	*115*		*57 - 140*	*09/02/20 15:07*	*09/04/20 18:51*	*1*
Dibromofluoromethane	*102*		*68 - 140*	*09/02/20 15:07*	*09/04/20 18:51*	*1*
Toluene-d8 (Surr)	*97*		*50 - 130*	*09/02/20 15:07*	*09/04/20 18:51*	*1*

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.654	U	1.12	0.654	mg/Kg	☼	09/04/20 07:03	09/04/20 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*70 - 130*	*09/04/20 07:03*	*09/04/20 16:29*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**6.60**	**J**	9.10	1.88	mg/Kg	☼	09/10/20 14:36	09/16/20 02:03	1
Oil Range Organics (C28-C36)	**46.8**		9.10	5.48	mg/Kg	☼	09/10/20 14:36	09/16/20 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*119*		*60 - 140*	*09/10/20 14:36*	*09/16/20 02:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**404**		22.1	2.95	mg/Kg	☼		09/18/20 14:24	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.4**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**90.6**		1.0	1.0	%			09/03/20 09:00	1

Client Sample ID: HA-5-S-2-3-200901 — Lab Sample ID: 600-210633-14

Date Collected: 09/01/20 13:04 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 89.1**

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.764	U	6.06	0.764	ug/Kg	☼	09/02/20 15:07	09/04/20 19:13	1
Ethylbenzene	1.24	U	6.06	1.24	ug/Kg	☼	09/02/20 15:07	09/04/20 19:13	1
Toluene	1.67	U	6.06	1.67	ug/Kg	☼	09/02/20 15:07	09/04/20 19:13	1
Xylenes, Total	1.37	U	6.06	1.37	ug/Kg	☼	09/02/20 15:07	09/04/20 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*	*09/02/20 15:07*	*09/04/20 19:13*	*1*
4-Bromofluorobenzene	*121*		*57 - 140*	*09/02/20 15:07*	*09/04/20 19:13*	*1*
Dibromofluoromethane	*101*		*68 - 140*	*09/02/20 15:07*	*09/04/20 19:13*	*1*
Toluene-d8 (Surr)	*103*		*50 - 130*	*09/02/20 15:07*	*09/04/20 19:13*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-5-S-2-3-200901 Lab Sample ID: 600-210633-14

Date Collected: 09/01/20 13:04 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 89.1**

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.685	U	1.17	0.685	mg/Kg	☼	09/04/20 07:03	09/04/20 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*70 - 130*	*09/04/20 07:03*	*09/04/20 16:54*	*1*

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	**6.89**	**J**	9.28	1.91	mg/Kg	☼	09/10/20 14:36	09/16/20 02:35	1
Oil Range Organics (C28-C36)	**38.9**		9.28	5.59	mg/Kg	☼	09/10/20 14:36	09/16/20 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*153*	*X*	*60 - 140*	*09/10/20 14:36*	*09/16/20 02:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**337**		22.5	3.00	mg/Kg	☼		09/18/20 15:25	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**10.9**		1.0	1.0	%			09/03/20 09:00	1
Percent Solids	**89.1**		1.0	1.0	%			09/03/20 09:00	1

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Qualifiers

GC/MS VOA

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

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate recovery exceeds control limits

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Job ID: 600-210633-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(61-130)	(57-140)	(68-140)	(50-130)
600-210633-1	HA-1-S-0-.5-200901	92	92	99	100
600-210633-2	HA-1-S-1-2-200901	93	102	99	101
600-210633-3	HA-2-S-0-.5-200901	89	109	101	98
600-210633-4	HA-2-S-1-2-200901	96	117	102	104
600-210633-5	HA-2-SD-1-2-200901	93	114	100	93
600-210633-6	HA-2-S-2-3-200901	95	115	104	101
600-210633-7	HA-3-S-0-.5-200901	93	113	102	99
600-210633-8	HA-3-S-1-2-200901	96	115	105	98
600-210633-9	HA-4-S-0-.5-200901	97	118	104	98
600-210633-10	HA-4-S-1-2-200901	101	115	107	100
600-210633-11	HA-4-S-3-4-200901	99	119	105	98
600-210633-12	HA-5-S-0-.5-200901	96	106	97	97
600-210633-13	HA-5-S-1-2-200901	98	115	102	97
600-210633-14	HA-5-S-2-3-200901	100	121	101	103
LCS 600-302885/3	Lab Control Sample	96	117	102	96
LCS 600-302930/3	Lab Control Sample	94	115	102	99
LCSD 600-302885/4	Lab Control Sample Dup	95	116	101	92
LCSD 600-302930/4	Lab Control Sample Dup	85	118	103	104
MB 600-302885/6	Method Blank	100	113	100	96
MB 600-302930/6	Method Blank	102	119	107	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8015D - Gasoline Range Organics (GRO) (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		TFT1
Lab Sample ID	Client Sample ID	(70-130)
600-210633-1	HA-1-S-0-.5-200901	91
600-210633-2	HA-1-S-1-2-200901	97
600-210633-3	HA-2-S-0-.5-200901	94
600-210633-4	HA-2-S-1-2-200901	99
600-210633-5	HA-2-SD-1-2-200901	96
600-210633-6	HA-2-S-2-3-200901	98
600-210633-7	HA-3-S-0-.5-200901	95
600-210633-8	HA-3-S-1-2-200901	99
600-210633-9	HA-4-S-0-.5-200901	94
600-210633-10	HA-4-S-1-2-200901	96
600-210633-11	HA-4-S-3-4-200901	98
600-210633-12	HA-5-S-0-.5-200901	99
600-210633-13	HA-5-S-1-2-200901	97
600-210633-14	HA-5-S-2-3-200901	88
LCS 600-302715/1-A	Lab Control Sample	89
LCSD 600-302715/2-A	Lab Control Sample Dup	89
MB 600-302715/3-A	Method Blank	88

Surrogate Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

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

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	OTPH (60-140)						
600-210633-1	HA-1-S-0-.5-200901	129						
600-210633-2	HA-1-S-1-2-200901	120						
600-210633-3 - DL	HA-2-S-0-.5-200901	84						
600-210633-4	HA-2-S-1-2-200901	129						
600-210633-5	HA-2-SD-1-2-200901	133						
600-210633-6	HA-2-S-2-3-200901	118						
600-210633-7	HA-3-S-0-.5-200901	122						
600-210633-8	HA-3-S-1-2-200901	103						
600-210633-9	HA-4-S-0-.5-200901	132						
600-210633-10	HA-4-S-1-2-200901	147 X						
600-210633-11	HA-4-S-3-4-200901	107						
600-210633-12	HA-5-S-0-.5-200901	138						
600-210633-13	HA-5-S-1-2-200901	119						
600-210633-14	HA-5-S-2-3-200901	153 X						
LCS 600-303251/2-A	Lab Control Sample	128						
LCSD 600-303251/3-A	Lab Control Sample Dup	118						
MB 600-303251/1-A	Method Blank	118						

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Job ID: 600-210633-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 600-302885/6
Matrix: Solid
Analysis Batch: 302885

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			09/04/20 11:07	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			09/04/20 11:07	1
Toluene	1.38	U	5.00	1.38	ug/Kg			09/04/20 11:07	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			09/04/20 11:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*61 - 130*		*09/04/20 11:07*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*		*09/04/20 11:07*	*1*
Dibromofluoromethane	*100*		*68 - 140*		*09/04/20 11:07*	*1*
Toluene-d8 (Surr)	*96*		*50 - 130*		*09/04/20 11:07*	*1*

Lab Sample ID: LCS 600-302885/3
Matrix: Solid
Analysis Batch: 302885

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	51.62		ug/Kg		103	70 - 131		
Ethylbenzene			50.0	43.51		ug/Kg		87	66 - 130		
m-Xylene & p-Xylene			50.0	43.94		ug/Kg		88	64 - 130		
o-Xylene			50.0	44.00		ug/Kg		88	62 - 130		
Toluene			50.0	44.66		ug/Kg		89	67 - 130		
Xylenes, Total			100	87.94		ug/Kg		88	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*61 - 130*
4-Bromofluorobenzene	*117*		*57 - 140*
Dibromofluoromethane	*102*		*68 - 140*
Toluene-d8 (Surr)	*96*		*50 - 130*

Lab Sample ID: LCSD 600-302885/4
Matrix: Solid
Analysis Batch: 302885

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	50.29		ug/Kg		101	70 - 131	3	30
Ethylbenzene			50.0	41.95		ug/Kg		84	66 - 130	4	30
m-Xylene & p-Xylene			50.0	40.75		ug/Kg		81	64 - 130	8	30
o-Xylene			50.0	41.40		ug/Kg		83	62 - 130	6	30
Toluene			50.0	43.03		ug/Kg		86	67 - 130	4	30
Xylenes, Total			100	82.15		ug/Kg		82	63 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*
4-Bromofluorobenzene	*116*		*57 - 140*
Dibromofluoromethane	*101*		*68 - 140*
Toluene-d8 (Surr)	*92*		*50 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Job ID: 600-210633-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 600-302930/6
Matrix: Solid
Analysis Batch: 302930

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.630	U	5.00	0.630	ug/Kg			09/05/20 09:34	1
Ethylbenzene	1.02	U	5.00	1.02	ug/Kg			09/05/20 09:34	1
Toluene	1.38	U	5.00	1.38	ug/Kg			09/05/20 09:34	1
Xylenes, Total	1.13	U	5.00	1.13	ug/Kg			09/05/20 09:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*61 - 130*		*09/05/20 09:34*	*1*
4-Bromofluorobenzene	*119*		*57 - 140*		*09/05/20 09:34*	*1*
Dibromofluoromethane	*107*		*68 - 140*		*09/05/20 09:34*	*1*
Toluene-d8 (Surr)	*98*		*50 - 130*		*09/05/20 09:34*	*1*

Lab Sample ID: LCS 600-302930/3
Matrix: Solid
Analysis Batch: 302930

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			50.0	55.49		ug/Kg		111	70 - 131		
Ethylbenzene			50.0	48.44		ug/Kg		97	66 - 130		
m-Xylene & p-Xylene			50.0	47.00		ug/Kg		94	64 - 130		
o-Xylene			50.0	48.75		ug/Kg		98	62 - 130		
Toluene			50.0	48.43		ug/Kg		97	67 - 130		
Xylenes, Total			100	95.75		ug/Kg		96	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*61 - 130*
4-Bromofluorobenzene	*115*		*57 - 140*
Dibromofluoromethane	*102*		*68 - 140*
Toluene-d8 (Surr)	*99*		*50 - 130*

Lab Sample ID: LCSD 600-302930/4
Matrix: Solid
Analysis Batch: 302930

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			50.0	49.81		ug/Kg		100	70 - 131	11	30
Ethylbenzene			50.0	45.32		ug/Kg		91	66 - 130	7	30
m-Xylene & p-Xylene			50.0	44.22		ug/Kg		88	64 - 130	6	30
o-Xylene			50.0	44.75		ug/Kg		90	62 - 130	9	30
Toluene			50.0	46.00		ug/Kg		92	67 - 130	5	30
Xylenes, Total			100	88.97		ug/Kg		89	63 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*
4-Bromofluorobenzene	*118*		*57 - 140*
Dibromofluoromethane	*103*		*68 - 140*
Toluene-d8 (Surr)	*104*		*50 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: Chevron - WLU East Test Sat Site

Job ID: 600-210633-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 600-302715/3-A
Matrix: Solid
Analysis Batch: 302845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 302715

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	0.586	U	1.00	0.586	mg/Kg		09/04/20 07:03	09/04/20 10:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*70 - 130*	*09/04/20 07:03*	*09/04/20 10:37*	*1*

Lab Sample ID: LCS 600-302715/1-A
Matrix: Solid
Analysis Batch: 302845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 302715

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics [C6 - C10]			5.04	5.121		mg/Kg		102	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*70 - 130*

Lab Sample ID: LCSD 600-302715/2-A
Matrix: Solid
Analysis Batch: 302845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 302715

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]			5.04	4.263		mg/Kg		85	70 - 130	18	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*89*		*70 - 130*

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

Lab Sample ID: MB 600-303251/1-A
Matrix: Solid
Analysis Batch: 303527

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 303251

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.70	U	8.26	1.70	mg/Kg		09/10/20 14:35	09/15/20 17:40	1
Oil Range Organics (C28-C36)	4.97	U	8.26	4.97	mg/Kg		09/10/20 14:35	09/15/20 17:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*118*		*60 - 140*	*09/10/20 14:35*	*09/15/20 17:40*	*1*

Lab Sample ID: LCS 600-303251/2-A
Matrix: Solid
Analysis Batch: 303527

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 303251

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics [C10-C28]			66.6	69.88		mg/Kg		105	66 - 134		

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

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

Lab Sample ID: LCS 600-303251/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 303527 **Prep Batch: 303251**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	128		60 - 140

Lab Sample ID: LCSD 600-303251/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 303527 **Prep Batch: 303251**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]			66.4	69.97		mg/Kg		105	66 - 134	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	118		60 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-303533/1-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 303725

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			09/17/20 21:50	1

Lab Sample ID: LCS 600-303533/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 303725

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			200	192.6		mg/Kg		96	90 - 110		

Lab Sample ID: 600-210633-1 MS **Client Sample ID: HA-1-S-0-.5-200901**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 303725

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	16.5		105	103.0		mg/Kg	☼	82	80 - 120		

Lab Sample ID: 600-210633-1 MSD **Client Sample ID: HA-1-S-0-.5-200901**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 303725

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16.5		105	103.1		mg/Kg	☼	82	80 - 120	0	20

Lab Sample ID: 600-210633-11 MS **Client Sample ID: HA-4-S-3-4-200901**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 303725

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	599		550	1043		mg/Kg	☼	81	80 - 120		

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 600-210633-11 MSD — **Client Sample ID: HA-4-S-3-4-200901**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 303725

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	599		550	1038		mg/Kg	☼	80	80 - 120	0	20

Lab Sample ID: MB 600-303533/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 303819

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.534	U	4.00	0.534	mg/Kg			09/18/20 12:19	1

Lab Sample ID: LCS 600-303533/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 303819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	200	183.7		mg/Kg		92	90 - 110

Lab Sample ID: 600-210633-13 MS — **Client Sample ID: HA-5-S-1-2-200901**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 303819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	404		552	866.6		mg/Kg	☼	84	80 - 120

Lab Sample ID: 600-210633-13 MSD — **Client Sample ID: HA-5-S-1-2-200901**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 303819

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	404		552	862.6		mg/Kg	☼	83	80 - 120	0	20

Method: 2540B - Percent Moisture

Lab Sample ID: 600-210633-10 DU — **Client Sample ID: HA-4-S-1-2-200901**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 302758

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	10.5		10.3		%		2	20
Percent Solids	89.5		89.7		%		0.2	20

Unadjusted Detection Limits

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Method: 8260C - Volatile Organic Compounds by GC/MS

Prep: 5030C

Analyte	MQL	MDL	Units
Benzene	5.00	0.630	ug/Kg
Ethylbenzene	5.00	1.02	ug/Kg
Toluene	5.00	1.38	ug/Kg
Xylenes, Total	5.00	1.13	ug/Kg

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Prep: 5030C

Analyte	MQL	MDL	Units
Gasoline Range Organics [C6 - C10]	1.00	0.586	mg/Kg

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

Prep: 3546

Analyte	MQL	MDL	Units
Diesel Range Organics [C10-C28]	8.30	1.71	mg/Kg
Oil Range Organics (C28-C36)	8.30	5.00	mg/Kg

Method: 300.0 - Anions, Ion Chromatography - Soluble

Leach: DI Leach

Analyte	MQL	MDL	Units
Chloride	4.00	0.534	mg/Kg

General Chemistry

Analyte	MQL	MDL	Units
Percent Moisture	1.0	1.0	%
Percent Solids	1.0	1.0	%

QC Association Summary

Client: ARCADIS U.S., Inc.
Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

GC/MS VOA

Prep Batch: 302716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-3	HA-2-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	5030C	
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	5030C	
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	5030C	
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	5030C	

Analysis Batch: 302885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	8260C	302716
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	8260C	302716
600-210633-3	HA-2-S-0-.5-200901	Total/NA	Solid	8260C	302716
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	8260C	302716
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	8260C	302716
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	8260C	302716
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	8260C	302716
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	8260C	302716
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	8260C	302716
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	8260C	302716
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	8260C	302716
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	8260C	302716
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	8260C	302716
MB 600-302885/6	Method Blank	Total/NA	Solid	8260C	
LCS 600-302885/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 600-302885/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

Analysis Batch: 302930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	8260C	302716
MB 600-302930/6	Method Blank	Total/NA	Solid	8260C	
LCS 600-302930/3	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 600-302930/4	Lab Control Sample Dup	Total/NA	Solid	8260C	

GC VOA

Prep Batch: 302715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-3	HA-2-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	5030C	
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	5030C	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

GC VOA (Continued)

Prep Batch: 302715 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	5030C	
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	5030C	
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	5030C	
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	5030C	
MB 600-302715/3-A	Method Blank	Total/NA	Solid	5030C	
LCS 600-302715/1-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 600-302715/2-A	Lab Control Sample Dup	Total/NA	Solid	5030C	

Analysis Batch: 302845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	8015D	302715
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-3	HA-2-S-0-.5-200901	Total/NA	Solid	8015D	302715
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	8015D	302715
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	8015D	302715
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	8015D	302715
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	8015D	302715
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	8015D	302715
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	8015D	302715
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	8015D	302715
MB 600-302715/3-A	Method Blank	Total/NA	Solid	8015D	302715
LCS 600-302715/1-A	Lab Control Sample	Total/NA	Solid	8015D	302715
LCSD 600-302715/2-A	Lab Control Sample Dup	Total/NA	Solid	8015D	302715

GC Semi VOA

Prep Batch: 303251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	3546	
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	3546	
600-210633-3 - DL	HA-2-S-0-.5-200901	Total/NA	Solid	3546	
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	3546	
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	3546	
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	3546	
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	3546	
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	3546	
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	3546	
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	3546	
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	3546	
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	3546	
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	3546	
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	3546	
MB 600-303251/1-A	Method Blank	Total/NA	Solid	3546	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

GC Semi VOA (Continued)

Prep Batch: 303251 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-303251/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 600-303251/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 303527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	8015D	303251
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-3 - DL	HA-2-S-0-.5-200901	Total/NA	Solid	8015D	303251
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	8015D	303251
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	8015D	303251
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	8015D	303251
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	8015D	303251
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	8015D	303251
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	8015D	303251
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	8015D	303251
MB 600-303251/1-A	Method Blank	Total/NA	Solid	8015D	303251
LCS 600-303251/2-A	Lab Control Sample	Total/NA	Solid	8015D	303251
LCSD 600-303251/3-A	Lab Control Sample Dup	Total/NA	Solid	8015D	303251

HPLC/IC

Leach Batch: 303533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-2	HA-1-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-3	HA-2-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-4	HA-2-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-5	HA-2-SD-1-2-200901	Soluble	Solid	DI Leach	
600-210633-6	HA-2-S-2-3-200901	Soluble	Solid	DI Leach	
600-210633-7	HA-3-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-8	HA-3-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-9	HA-4-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-10	HA-4-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-11	HA-4-S-3-4-200901	Soluble	Solid	DI Leach	
600-210633-12	HA-5-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-13	HA-5-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-14	HA-5-S-2-3-200901	Soluble	Solid	DI Leach	
MB 600-303533/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 600-303533/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
600-210633-1 MS	HA-1-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-1 MSD	HA-1-S-0-.5-200901	Soluble	Solid	DI Leach	
600-210633-11 MS	HA-4-S-3-4-200901	Soluble	Solid	DI Leach	
600-210633-11 MSD	HA-4-S-3-4-200901	Soluble	Solid	DI Leach	
600-210633-13 MS	HA-5-S-1-2-200901	Soluble	Solid	DI Leach	
600-210633-13 MSD	HA-5-S-1-2-200901	Soluble	Solid	DI Leach	

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

HPLC/IC

Analysis Batch: 303725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-2	HA-1-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-3	HA-2-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-4	HA-2-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-5	HA-2-SD-1-2-200901	Soluble	Solid	300.0	303533
600-210633-6	HA-2-S-2-3-200901	Soluble	Solid	300.0	303533
600-210633-7	HA-3-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-8	HA-3-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-9	HA-4-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-10	HA-4-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-11	HA-4-S-3-4-200901	Soluble	Solid	300.0	303533
600-210633-12	HA-5-S-0-.5-200901	Soluble	Solid	300.0	303533
MB 600-303533/1-A	Method Blank	Soluble	Solid	300.0	303533
LCS 600-303533/2-A	Lab Control Sample	Soluble	Solid	300.0	303533
600-210633-1 MS	HA-1-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-1 MSD	HA-1-S-0-.5-200901	Soluble	Solid	300.0	303533
600-210633-11 MS	HA-4-S-3-4-200901	Soluble	Solid	300.0	303533
600-210633-11 MSD	HA-4-S-3-4-200901	Soluble	Solid	300.0	303533

Analysis Batch: 303819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-13	HA-5-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-14	HA-5-S-2-3-200901	Soluble	Solid	300.0	303533
MB 600-303533/1-A	Method Blank	Soluble	Solid	300.0	303533
LCS 600-303533/2-A	Lab Control Sample	Soluble	Solid	300.0	303533
600-210633-13 MS	HA-5-S-1-2-200901	Soluble	Solid	300.0	303533
600-210633-13 MSD	HA-5-S-1-2-200901	Soluble	Solid	300.0	303533

General Chemistry

Analysis Batch: 302758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-210633-1	HA-1-S-0-.5-200901	Total/NA	Solid	2540B	
600-210633-2	HA-1-S-1-2-200901	Total/NA	Solid	2540B	
600-210633-3	HA-2-S-0-.5-200901	Total/NA	Solid	2540B	
600-210633-4	HA-2-S-1-2-200901	Total/NA	Solid	2540B	
600-210633-5	HA-2-SD-1-2-200901	Total/NA	Solid	2540B	
600-210633-6	HA-2-S-2-3-200901	Total/NA	Solid	2540B	
600-210633-7	HA-3-S-0-.5-200901	Total/NA	Solid	2540B	
600-210633-8	HA-3-S-1-2-200901	Total/NA	Solid	2540B	
600-210633-9	HA-4-S-0-.5-200901	Total/NA	Solid	2540B	
600-210633-10	HA-4-S-1-2-200901	Total/NA	Solid	2540B	
600-210633-11	HA-4-S-3-4-200901	Total/NA	Solid	2540B	
600-210633-12	HA-5-S-0-.5-200901	Total/NA	Solid	2540B	
600-210633-13	HA-5-S-1-2-200901	Total/NA	Solid	2540B	
600-210633-14	HA-5-S-2-3-200901	Total/NA	Solid	2540B	
600-210633-10 DU	HA-4-S-1-2-200901	Total/NA	Solid	2540B	

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-1-S-0-.5-200901 Lab Sample ID: 600-210633-1

Date Collected: 09/01/20 11:30 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-1-S-0-.5-200901 Lab Sample ID: 600-210633-1

Date Collected: 09/01/20 11:30 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 94.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 14:39	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 11:02	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 19:14	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		1	303725	09/17/20 22:30	W1N	TAL HOU

Client Sample ID: HA-1-S-1-2-200901 Lab Sample ID: 600-210633-2

Date Collected: 09/01/20 11:42 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-1-S-1-2-200901 Lab Sample ID: 600-210633-2

Date Collected: 09/01/20 11:42 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 91.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 15:02	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 11:27	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 19:45	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303725	09/17/20 23:32	W1N	TAL HOU

Client Sample ID: HA-2-S-0-.5-200901 Lab Sample ID: 600-210633-3

Date Collected: 09/01/20 11:52 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-2-S-0-.5-200901 — Lab Sample ID: 600-210633-3

Date Collected: 09/01/20 11:52 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 79.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 15:25	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 11:52	WS1	TAL HOU
Total/NA	Prep	3546	DL		303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D	DL	2	303527	09/16/20 09:09	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		1	303725	09/17/20 23:52	W1N	TAL HOU

Client Sample ID: HA-2-S-1-2-200901 — Lab Sample ID: 600-210633-4

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-2-S-1-2-200901 — Lab Sample ID: 600-210633-4

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 85.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 15:49	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 12:17	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 20:47	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		10	303725	09/18/20 00:13	W1N	TAL HOU

Client Sample ID: HA-2-SD-1-2-200901 — Lab Sample ID: 600-210633-5

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-2-SD-1-2-200901 — Lab Sample ID: 600-210633-5

Date Collected: 09/01/20 11:57 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302930	09/05/20 10:19	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 12:42	WS1	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-2-SD-1-2-200901 Lab Sample ID: 600-210633-5

Date Collected: 09/01/20 11:57 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 85.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 21:19	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		10	303725	09/18/20 00:33	W1N	TAL HOU

Client Sample ID: HA-2-S-2-3-200901 Lab Sample ID: 600-210633-6

Date Collected: 09/01/20 12:00 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-2-S-2-3-200901 Lab Sample ID: 600-210633-6

Date Collected: 09/01/20 12:00 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 80.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 16:34	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 13:08	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 21:50	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303725	09/18/20 00:53	W1N	TAL HOU

Client Sample ID: HA-3-S-0-.5-200901 Lab Sample ID: 600-210633-7

Date Collected: 09/01/20 12:08 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-3-S-0-.5-200901 Lab Sample ID: 600-210633-7

Date Collected: 09/01/20 12:08 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 84.3**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 16:57	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 13:33	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 22:21	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		1	303725	09/18/20 01:55	W1N	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-3-S-1-2-200901 Lab Sample ID: 600-210633-8

Date Collected: 09/01/20 12:11 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-3-S-1-2-200901 Lab Sample ID: 600-210633-8

Date Collected: 09/01/20 12:11 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 92.4**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 17:20	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 13:58	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 23:24	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		1	303725	09/18/20 02:15	W1N	TAL HOU

Client Sample ID: HA-4-S-0-.5-200901 Lab Sample ID: 600-210633-9

Date Collected: 09/01/20 12:20 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-4-S-0-.5-200901 Lab Sample ID: 600-210633-9

Date Collected: 09/01/20 12:20 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 81.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 17:43	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 14:23	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/15/20 23:56	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303725	09/18/20 02:35	W1N	TAL HOU

Client Sample ID: HA-4-S-1-2-200901 Lab Sample ID: 600-210633-10

Date Collected: 09/01/20 12:37 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-4-S-1-2-200901 Lab Sample ID: 600-210633-10

Date Collected: 09/01/20 12:37 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 89.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 18:05	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 14:48	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/16/20 00:28	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303725	09/18/20 02:56	W1N	TAL HOU

Client Sample ID: HA-4-S-3-4-200901 Lab Sample ID: 600-210633-11

Date Collected: 09/01/20 12:48 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-4-S-3-4-200901 Lab Sample ID: 600-210633-11

Date Collected: 09/01/20 12:48 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 90.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 18:28	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 15:39	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/16/20 01:00	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303725	09/18/20 03:16	W1N	TAL HOU

Client Sample ID: HA-5-S-0-.5-200901 Lab Sample ID: 600-210633-12

Date Collected: 09/01/20 12:54 **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-5-S-0-.5-200901 Lab Sample ID: 600-210633-12

Date Collected: 09/01/20 12:54 **Matrix: Solid**
Date Received: 09/02/20 10:35 **Percent Solids: 90.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 13:05	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 16:04	WS1	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Client Sample ID: HA-5-S-0-.5-200901 — Lab Sample ID: 600-210633-12

Date Collected: 09/01/20 12:54 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.9**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			303251	09/10/20 14:35	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/16/20 01:32	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		1	303725	09/18/20 04:17	W1N	TAL HOU

Client Sample ID: HA-5-S-1-2-200901 — Lab Sample ID: 600-210633-13

Date Collected: 09/01/20 12:58 — **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-5-S-1-2-200901 — Lab Sample ID: 600-210633-13

Date Collected: 09/01/20 12:58 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 90.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 18:51	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 16:29	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:36	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/16/20 02:03	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303819	09/18/20 14:24	W1N	TAL HOU

Client Sample ID: HA-5-S-2-3-200901 — Lab Sample ID: 600-210633-14

Date Collected: 09/01/20 13:04 — **Matrix: Solid**
Date Received: 09/02/20 10:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	2540B		1	302758	09/03/20 09:00	HAS	TAL HOU

Client Sample ID: HA-5-S-2-3-200901 — Lab Sample ID: 600-210633-14

Date Collected: 09/01/20 13:04 — **Matrix: Solid**
Date Received: 09/02/20 10:35 — **Percent Solids: 89.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			302716	09/02/20 15:07	WS1	TAL HOU
Total/NA	Analysis	8260C		1	302885	09/04/20 19:13	WS1	TAL HOU
Total/NA	Prep	5030C			302715	09/04/20 07:03	WS1	TAL HOU
Total/NA	Analysis	8015D		1	302845	09/04/20 16:54	WS1	TAL HOU
Total/NA	Prep	3546			303251	09/10/20 14:36	SMB	TAL HOU
Total/NA	Analysis	8015D		1	303527	09/16/20 02:35	RJV	TAL HOU
Soluble	Leach	DI Leach			303533	09/15/20 14:09	HAS	TAL HOU
Soluble	Analysis	300.0		5	303819	09/18/20 15:25	W1N	TAL HOU

Lab Chronicle

Client: ARCADIS U.S., Inc.
Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Laboratory References:

TAL HOU = Eurofins TestAmerica, Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 600-210633-1
Project/Site: Chevron - WLU East Test Sat Site

Laboratory: Eurofins TestAmerica, Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704223-20-26	10-31-20

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
2540B		Solid	Percent Moisture
2540B		Solid	Percent Solids
8015D	3546	Solid	Oil Range Organics (C28-C36)

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Midland #264

eurofins

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78645-21182.1
Client Contact: Justin Nixon	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1004 North Big Spring Suite 121	Due Date Requested: —			
City: Midland	TAT Requested (days): Std			
State, Zip: TX, 79701				
Phone: —	PO #: 30057179			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: Chevron - WLU East Test Sat Site	Project #: 60012618			
Site: WLU East Test Sat	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015D_DRO/ ORO	8015D_GRO	8260B- BTEX	300- Chloride	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N		
HA-1-S-0-.5-200901	9/01/20	1130	G	Solid								9	
HA-1-S-1-2-200901		1142		Solid									
HA-2-S-0-.5-200901		1152		Solid									
HA-2-S-1-2-200901		1157		Solid									
HA-2-SD-1-2-200901		1157		Solid									
~~HA-2-2~~ HA-2-S-2-3-200901		1200		Solid									
HA-3-S-0-.5-200901		1208		Solid									
HA-3-S-1-2-200901		1211		Solid									
HA-4-S-0-.5-200901		1220		Solid									
HA-4-S-1-2-200901		1237		Solid									
HA-4-S-3-4-200901		1248		Solid									

600-210633 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		9/01/20 1600	Arcadis		9/2/20 1035	ETA
2		Date/Time:	Company	Received by:	Date/Time:	Company
3		Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Ver: 01/16/2019

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

Eurofins TestAmerica, Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Midland #264

eurofins

Client Information	Sampler: J. Steinmann	Lab PM: Kudchadkar, Sachin G	Carrier Tracking No(s):	COC No: 600-78645-21182.1
Client Contact: Justin Nixon	Phone: 619 851 8792	E-Mail: Sachin.Kudchadkar@Eurofinset.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1004 North Big Spring Suite 121	Due Date Requested: —	Analysis Requested		
City: Midland	TAT Requested (days): Std			
State, Zip: TX, 79701				
Phone: —	PO #: 30057179			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: Chevron - WLU East Test Sat Site	Project #: 60012618			
Site: WLU East Test Sat	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015D_DRO/ ORO	8015D_GRO	8260B- BTEX	300- Chloride	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code				N	N	N	N	N		
HA-5-S-0-.5-200901	9/01/20	1254	G	Solid								2	
HA-5-S-1-2-200901	9/01/20	1258	G	Solid								1	
HA-5-S-2-3-200901	9/01/20	1304	G	Solid								1	
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									

gs 9/01/20

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		9/01/20 1600	Arcadis		9/2/20 1035	ETA
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks

Ver: 01/16/2019

Loc: 600
210633

eurofins | Environment Testing TestAmerica

Eurofins TestAmerica Houston

Sample Receipt Checklist

'20 SEP 2 10:35

Date/Time Received: 9/2/20 10:35

JOB NUMBER: _____ CLIENT: Arcadis

UNPACKED BY: _____ CARRIER/DRIVER: Fedex

Custody Seal Present: ☒YES ☐NO Number of Coolers Received: 1

Cooler ID	Temp Blank	Trip Blank	Observed Temp (°C)	Therm ID	Therm CF	Corrected Temp (°C)
8086	Y / N	Y / N	1.1	68	+0.1	1.2
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				
	Y / N	Y / N				9/2/20
	Y / N	Y / N				

CF = correction factor

Samples received on ice? ☒YES ☐NO

LABORATORY PRESERVATION OF SAMPLES REQUIRED: ☒NO ☐YES

Base samples are>pH 12: ☐YES ☐NO Acid preserved are<pH 2: ☐YES ☐NO

TX1005 samples frozen upon receipt: ☐ YES DATE & TIME PUT IN FREEZER: _____

pH paper Lot #_____ VOA headspace acceptable (5-6mm): ☐YES ☐NO ☒NA

Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	☒YES	☐ NO

COMMENTS:

9/2/20

HS-SA-WI-013 Rev. 4A; 08/26/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc. Job Number: 600-210633-1

Login Number: 210633 **List Source: Eurofins TestAmerica, Houston**
List Number: 1
Creator: Rubio, Yuri

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Douglas Jordan
ARCADIS U.S. Inc
10205 Westheimer Rd
Suite 800
Houston, Texas 77042

Generated 4/6/2023 8:28:27 AM

JOB DESCRIPTION

WLU 23

JOB NUMBER

880-26347-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

my EOL

Eurofins Midland

Job Notes

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
4/6/2023 8:28:27 AM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Laboratory Job ID: 880-26347-1

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Definitions/Glossary

Client: ARCADIS U.S. Inc
Job ID: 880-26347-1
Project/Site: WLU 23

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Job ID: 880-26347-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-26347-1

Receipt
The samples were received on 3/24/2023 3:09 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50229 and analytical batch 880-50423 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-49838 and analytical batch 880-49908 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-49908/5), (LCS 880-49838/2-A) and (LCSD 880-49838/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-49838 and analytical batch 880-49908 contained Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-49995/5), (LCS 880-49932/2-A) and (LCSD 880-49932/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-8-S-.5'-20230323 (880-26347-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-8-S-4'-20230323 (880-26347-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-49932 and analytical batch 880-49995 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-49932 and analytical batch 880-49995 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: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-9-S-0-.5'-20230323

Lab Sample ID: 880-26347-1

Date Collected: 03/23/23 14:55
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U F1	0.00198	0.000381	mg/Kg		04/03/23 15:36	04/05/23 21:20	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		04/03/23 15:36	04/05/23 21:20	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		04/03/23 15:36	04/05/23 21:20	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		04/03/23 15:36	04/05/23 21:20	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		04/03/23 15:36	04/05/23 21:20	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		04/03/23 15:36	04/05/23 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/03/23 15:36*	*04/05/23 21:20*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*04/03/23 15:36*	*04/05/23 21:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.5**	**J**	49.9	15.0	mg/Kg			03/31/23 11:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**16.5**	**J**	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:11	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:11*	*1*
o-Terphenyl	*119*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43.5**		4.95	0.391	mg/Kg			04/04/23 20:56	1

Client Sample ID: SB-9-S-2'-20230323

Lab Sample ID: 880-26347-2

Date Collected: 03/23/23 15:00
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		04/03/23 15:36	04/06/23 01:49	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/03/23 15:36	04/06/23 01:49	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/03/23 15:36	04/06/23 01:49	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/03/23 15:36	04/06/23 01:49	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/03/23 15:36	04/06/23 01:49	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/03/23 15:36	04/06/23 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*04/03/23 15:36*	*04/06/23 01:49*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*04/03/23 15:36*	*04/06/23 01:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**19.5**	**J**	50.0	15.0	mg/Kg			03/31/23 11:54	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-9-S-2'-20230323

Lab Sample ID: 880-26347-2
Matrix: Solid
Date Collected: 03/23/23 15:00
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.5	J	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:33	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:33	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:33*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.6		5.01	0.396	mg/Kg			04/04/23 21:01	1

Client Sample ID: SB-9-S-4'-20230323

Lab Sample ID: 880-26347-3
Matrix: Solid
Date Collected: 03/23/23 15:10
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		04/03/23 15:36	04/06/23 02:10	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/03/23 15:36	04/06/23 02:10	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/03/23 15:36	04/06/23 02:10	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/03/23 15:36	04/06/23 02:10	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/03/23 15:36	04/06/23 02:10	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/03/23 15:36	04/06/23 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:10*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	19.3	J	49.9	15.0	mg/Kg			03/31/23 11:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	19.3	J	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:55	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:55	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/29/23 12:35	03/30/23 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:55*	*1*
o-Terphenyl	*104*		*70 - 130*	*03/29/23 12:35*	*03/30/23 21:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.7		5.02	0.397	mg/Kg			04/04/23 21:05	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-.5'-20230323

Lab Sample ID: 880-26347-4

Date Collected: 03/23/23 15:15
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/03/23 15:36	04/06/23 02:30	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/03/23 15:36	04/06/23 02:30	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/03/23 15:36	04/06/23 02:30	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/03/23 15:36	04/06/23 02:30	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/03/23 15:36	04/06/23 02:30	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/03/23 15:36	04/06/23 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:30*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**33.5**	**J**	49.9	15.0	mg/Kg			04/03/23 14:09	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	**33.5**	**J *+**	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 12:01	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 12:01	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*03/30/23 12:21*	*03/31/23 12:01*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*03/30/23 12:21*	*03/31/23 12:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**76.1**		4.99	0.394	mg/Kg			04/04/23 21:10	1

Client Sample ID: SB-8-S-2'-20230323

Lab Sample ID: 880-26347-5

Date Collected: 03/23/23 15:20
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389	mg/Kg		04/03/23 15:36	04/06/23 02:51	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		04/03/23 15:36	04/06/23 02:51	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		04/03/23 15:36	04/06/23 02:51	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		04/03/23 15:36	04/06/23 02:51	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		04/03/23 15:36	04/06/23 02:51	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		04/03/23 15:36	04/06/23 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:51*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/03/23 15:36*	*04/06/23 02:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.7**		49.9	15.0	mg/Kg			04/03/23 14:09	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-2'-20230323

Lab Sample ID: 880-26347-5
Matrix: Solid
Date Collected: 03/23/23 15:20
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.6	J *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:08	1
Diesel Range Organics (Over C10-C28)	24.1	J B *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:08	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:08*	*1*
o-Terphenyl	*128*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		4.98	0.393	mg/Kg			04/04/23 21:46	1

Client Sample ID: SB-8-S-4'-20230323

Lab Sample ID: 880-26347-6
Matrix: Solid
Date Collected: 03/23/23 15:25
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		04/03/23 15:36	04/06/23 03:11	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		04/03/23 15:36	04/06/23 03:11	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		04/03/23 15:36	04/06/23 03:11	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		04/03/23 15:36	04/06/23 03:11	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		04/03/23 15:36	04/06/23 03:11	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		04/03/23 15:36	04/06/23 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:11*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	33.1	J	49.9	15.0	mg/Kg			04/03/23 14:09	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	33.1	J *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:30	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:30	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:30*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.2		5.03	0.397	mg/Kg			04/04/23 22:00	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-7-S-.5'-20230323

Lab Sample ID: 880-26347-7

Date Collected: 03/23/23 15:30
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/03/23 15:36	04/06/23 03:32	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/03/23 15:36	04/06/23 03:32	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/03/23 15:36	04/06/23 03:32	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/03/23 15:36	04/06/23 03:32	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/03/23 15:36	04/06/23 03:32	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/03/23 15:36	04/06/23 03:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:32*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**23.4**	**J**	49.9	15.0	mg/Kg			04/03/23 14:09	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	**23.4**	**J *+**	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:51	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:51	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:51*	*1*
o-Terphenyl	*129*		*70 - 130*	*03/30/23 12:21*	*03/31/23 13:51*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.9**		5.01	0.396	mg/Kg			04/04/23 22:05	1

Client Sample ID: SB-7-S-2'-20230323

Lab Sample ID: 880-26347-8

Date Collected: 03/23/23 15:35
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		04/03/23 15:36	04/06/23 03:53	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		04/03/23 15:36	04/06/23 03:53	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		04/03/23 15:36	04/06/23 03:53	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		04/03/23 15:36	04/06/23 03:53	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		04/03/23 15:36	04/06/23 03:53	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		04/03/23 15:36	04/06/23 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:53*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*04/03/23 15:36*	*04/06/23 03:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.9	15.0	mg/Kg			04/03/23 14:09	1

Eurofins Midland

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-7-S-2'-20230323

Lab Sample ID: 880-26347-8
Matrix: Solid
Date Collected: 03/23/23 15:35
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:13	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:13	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:13*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73.7**		5.01	0.396	mg/Kg			04/04/23 22:09	1

Client Sample ID: SB-8-S-.5'-20230323

Lab Sample ID: 880-26347-9
Matrix: Solid
Date Collected: 03/23/23 15:40
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		04/03/23 15:36	04/06/23 04:13	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/03/23 15:36	04/06/23 04:13	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/03/23 15:36	04/06/23 04:13	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/03/23 15:36	04/06/23 04:13	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/03/23 15:36	04/06/23 04:13	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/03/23 15:36	04/06/23 04:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:13*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**53.7**		50.0	15.0	mg/Kg			04/03/23 14:09	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	**26.2**	**J *+**	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:35	1
Diesel Range Organics (Over C10-C28)	**27.5**	**J B *+**	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:35	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:35*	*1*
o-Terphenyl	*126*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**443**		4.97	0.393	mg/Kg			04/04/23 22:14	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-2'-20230323

Lab Sample ID: 880-26347-10
Matrix: Solid
Date Collected: 03/23/23 15:45
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		04/03/23 15:36	04/06/23 04:34	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/03/23 15:36	04/06/23 04:34	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/03/23 15:36	04/06/23 04:34	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/03/23 15:36	04/06/23 04:34	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/03/23 15:36	04/06/23 04:34	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/03/23 15:36	04/06/23 04:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:34*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**22.3**	**J**	50.0	15.0	mg/Kg			04/03/23 14:09	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	**22.3**	**J *+**	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:56	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:56	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:56*	*1*
o-Terphenyl	*130*		*70 - 130*	*03/30/23 12:21*	*03/31/23 14:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**513**		4.95	0.391	mg/Kg			04/04/23 22:27	1

Client Sample ID: SB-8-S-4'-20230323

Lab Sample ID: 880-26347-11
Matrix: Solid
Date Collected: 03/23/23 15:50
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00200	0.000386	mg/Kg		04/03/23 15:36	04/06/23 04:54	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		04/03/23 15:36	04/06/23 04:54	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		04/03/23 15:36	04/06/23 04:54	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		04/03/23 15:36	04/06/23 04:54	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		04/03/23 15:36	04/06/23 04:54	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		04/03/23 15:36	04/06/23 04:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:54*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/03/23 15:36*	*04/06/23 04:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**40.1**	**J**	49.9	15.0	mg/Kg			04/03/23 14:09	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-4'-20230323

Lab Sample ID: 880-26347-11

Date Collected: 03/23/23 15:50
Matrix: Solid
Date Received: 03/24/23 15:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**40.1**	**J *+**	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 15:18	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 15:18	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*03/30/23 12:21*	*03/31/23 15:18*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*03/30/23 12:21*	*03/31/23 15:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**		25.2	1.99	mg/Kg			04/04/23 22:32	5

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26347-1	SB-9-S-0-.5'-20230323	107	86
880-26347-1 MS	SB-9-S-0-.5'-20230323	122	87
880-26347-1 MSD	SB-9-S-0-.5'-20230323	117	91
880-26347-2	SB-9-S-2'-20230323	99	87
880-26347-3	SB-9-S-4'-20230323	110	97
880-26347-4	SB-8-S-.5'-20230323	116	99
880-26347-5	SB-8-S-2'-20230323	119	95
880-26347-6	SB-8-S-4'-20230323	107	92
880-26347-7	SB-7-S-.5'-20230323	110	93
880-26347-8	SB-7-S-2'-20230323	108	85
880-26347-9	SB-8-S-.5'-20230323	111	90
880-26347-10	SB-8-S-2'-20230323	118	95
880-26347-11	SB-8-S-4'-20230323	123	89
LCS 880-50229/1-A	Lab Control Sample	108	89
LCSD 880-50229/2-A	Lab Control Sample Dup	108	85
MB 880-50229/5-A	Method Blank	97	78

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)
880-26347-1	SB-9-S-0-.5'-20230323	100	119
880-26347-2	SB-9-S-2'-20230323	90	109
880-26347-3	SB-9-S-4'-20230323	87	104
880-26347-4	SB-8-S-.5'-20230323	107	133 S1+
880-26347-4 MS	SB-8-S-.5'-20230323	112	122
880-26347-4 MSD	SB-8-S-.5'-20230323	109	119
880-26347-5	SB-8-S-2'-20230323	104	128
880-26347-6	SB-8-S-4'-20230323	102	125
880-26347-7	SB-7-S-.5'-20230323	103	129
880-26347-8	SB-7-S-2'-20230323	101	125
880-26347-9	SB-8-S-.5'-20230323	102	126
880-26347-10	SB-8-S-2'-20230323	104	130
880-26347-11	SB-8-S-4'-20230323	122	149 S1+
LCS 880-49838/2-A	Lab Control Sample	122	149 S1+
LCS 880-49932/2-A	Lab Control Sample	139 S1+	159 S1+
LCSD 880-49838/3-A	Lab Control Sample Dup	120	143 S1+
LCSD 880-49932/3-A	Lab Control Sample Dup	167 S1+	187 S1+
MB 880-49838/1-A	Method Blank	120	141 S1+
MB 880-49932/1-A	Method Blank	104	130

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50229/5-A
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50229

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/03/23 15:36	04/05/23 20:58	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/03/23 15:36	04/05/23 20:58	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/03/23 15:36	04/05/23 20:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/03/23 15:36	04/05/23 20:58	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/03/23 15:36	04/05/23 20:58	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/03/23 15:36	04/05/23 20:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*04/03/23 15:36*	*04/05/23 20:58*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*04/03/23 15:36*	*04/05/23 20:58*	*1*

Lab Sample ID: LCS 880-50229/1-A
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50229

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07768		mg/Kg		78	70 - 130
Toluene	0.100	0.09031		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09161		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1957		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09986		mg/Kg		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 880-50229/2-A
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50229

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07797		mg/Kg		78	70 - 130	0	35
Toluene	0.100	0.09036		mg/Kg		90	70 - 130	0	35
Ethylbenzene	0.100	0.09239		mg/Kg		92	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1975		mg/Kg		99	70 - 130	1	35
o-Xylene	0.100	0.1009		mg/Kg		101	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: 880-26347-1 MS
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: SB-9-S-0-.5'-20230323
Prep Type: Total/NA
Prep Batch: 50229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000381	U F1	0.0998	0.06725	F1	mg/Kg		67	70 - 130
Toluene	<0.000451	U	0.0998	0.08105		mg/Kg		81	70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

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

Lab Sample ID: 880-26347-1 MS
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: SB-9-S-0-.5'-20230323
Prep Type: Total/NA
Prep Batch: 50229

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000559	U	0.0998	0.08311		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	<0.00100	U	0.200	0.1774		mg/Kg		89	70 - 130
o-Xylene	<0.000341	U	0.0998	0.08992		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-26347-1 MSD
Matrix: Solid
Analysis Batch: 50423

Client Sample ID: SB-9-S-0-.5'-20230323
Prep Type: Total/NA
Prep Batch: 50229

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000381	U F1	0.100	0.07093		mg/Kg		71	70 - 130	5	35
Toluene	<0.000451	U	0.100	0.08218		mg/Kg		82	70 - 130	1	35
Ethylbenzene	<0.000559	U	0.100	0.08167		mg/Kg		82	70 - 130	2	35
m-Xylene & p-Xylene	<0.00100	U	0.200	0.1693		mg/Kg		84	70 - 130	5	35
o-Xylene	<0.000341	U	0.100	0.08650		mg/Kg		86	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

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

Lab Sample ID: MB 880-49838/1-A
Matrix: Solid
Analysis Batch: 49908

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 49838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 08:23	1
Diesel Range Organics (Over C10-C28)	22.09	J	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 08:23	1
OII Range Organics (Over C28-C36)	20.40	J	50.0	15.0	mg/Kg		03/29/23 12:35	03/30/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*03/29/23 12:35*	*03/30/23 08:23*	*1*
o-Terphenyl	*141*	*S1+*	*70 - 130*	*03/29/23 12:35*	*03/30/23 08:23*	*1*

Lab Sample ID: LCS 880-49838/2-A
Matrix: Solid
Analysis Batch: 49908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	856.5		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	885.5		mg/Kg		89	70 - 130

Eurofins Midland

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

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

Lab Sample ID: LCS 880-49838/2-A
Matrix: Solid
Analysis Batch: 49908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49838

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	149	S1+	70 - 130

Lab Sample ID: LCSD 880-49838/3-A
Matrix: Solid
Analysis Batch: 49908

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 49838

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	870.2		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	886.2		mg/Kg		89	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	143	S1+	70 - 130

Lab Sample ID: MB 880-49932/1-A
Matrix: Solid
Analysis Batch: 49995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 49932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1
Diesel Range Organics (Over C10-C28)	19.53	J	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 09:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	03/30/23 12:21	03/31/23 09:25	1
o-Terphenyl	130		70 - 130	03/30/23 12:21	03/31/23 09:25	1

Lab Sample ID: LCS 880-49932/2-A
Matrix: Solid
Analysis Batch: 49995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49932

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1204		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1703	*+	mg/Kg		170	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	139	S1+	70 - 130
o-Terphenyl	159	S1+	70 - 130

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

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

Lab Sample ID: LCSD 880-49932/3-A
Matrix: Solid
Analysis Batch: 49995

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 49932

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1476	*+	mg/Kg		148	70 - 130	20	20
Diesel Range Organics (Over C10-C28)			1000	2050	*+	mg/Kg		205	70 - 130	18	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*167*	*S1+*	*70 - 130*
o-Terphenyl	*187*	*S1+*	*70 - 130*

Lab Sample ID: 880-26347-4 MS
Matrix: Solid
Analysis Batch: 49995

Client Sample ID: SB-8-S-.5'-20230323
Prep Type: Total/NA
Prep Batch: 49932

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	33.5	J *+	999	982.9		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	<15.0	U *+	999	1170		mg/Kg		117	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*122*		*70 - 130*

Lab Sample ID: 880-26347-4 MSD
Matrix: Solid
Analysis Batch: 49995

Client Sample ID: SB-8-S-.5'-20230323
Prep Type: Total/NA
Prep Batch: 49932

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	33.5	J *+	999	949.3		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<15.0	U *+	999	1153		mg/Kg		115	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*119*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50169/1-A
Matrix: Solid
Analysis Batch: 50389

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/04/23 18:53	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50169/2-A
Matrix: Solid
Analysis Batch: 50389

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	252.0		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-50169/3-A
Matrix: Solid
Analysis Batch: 50389

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.6		mg/Kg		99	90 - 110	2	20

Lab Sample ID: MB 880-50170/1-A
Matrix: Solid
Analysis Batch: 50390

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/04/23 21:32	1

Lab Sample ID: LCS 880-50170/2-A
Matrix: Solid
Analysis Batch: 50390

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	248.0		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-50170/3-A
Matrix: Solid
Analysis Batch: 50390

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.1		mg/Kg		98	90 - 110	1	20

Lab Sample ID: 880-26347-5 MS
Matrix: Solid
Analysis Batch: 50390

Client Sample ID: SB-8-S-2'-20230323
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	141		249	394.4		mg/Kg		102	90 - 110		

Lab Sample ID: 880-26347-5 MSD
Matrix: Solid
Analysis Batch: 50390

Client Sample ID: SB-8-S-2'-20230323
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	141		249	388.4		mg/Kg		99	90 - 110	2	20

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

GC VOA

Prep Batch: 50229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Total/NA	Solid	5030B	
880-26347-2	SB-9-S-2'-20230323	Total/NA	Solid	5030B	
880-26347-3	SB-9-S-4'-20230323	Total/NA	Solid	5030B	
880-26347-4	SB-8-S-.5'-20230323	Total/NA	Solid	5030B	
880-26347-5	SB-8-S-2'-20230323	Total/NA	Solid	5030B	
880-26347-6	SB-8-S-4'-20230323	Total/NA	Solid	5030B	
880-26347-7	SB-7-S-.5'-20230323	Total/NA	Solid	5030B	
880-26347-8	SB-7-S-2'-20230323	Total/NA	Solid	5030B	
880-26347-9	SB-8-S-.5'-20230323	Total/NA	Solid	5030B	
880-26347-10	SB-8-S-2'-20230323	Total/NA	Solid	5030B	
880-26347-11	SB-8-S-4'-20230323	Total/NA	Solid	5030B	
MB 880-50229/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-50229/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-50229/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-26347-1 MS	SB-9-S-0-.5'-20230323	Total/NA	Solid	5030B	
880-26347-1 MSD	SB-9-S-0-.5'-20230323	Total/NA	Solid	5030B	

Analysis Batch: 50423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Total/NA	Solid	8021B	50229
880-26347-2	SB-9-S-2'-20230323	Total/NA	Solid	8021B	50229
880-26347-3	SB-9-S-4'-20230323	Total/NA	Solid	8021B	50229
880-26347-4	SB-8-S-.5'-20230323	Total/NA	Solid	8021B	50229
880-26347-5	SB-8-S-2'-20230323	Total/NA	Solid	8021B	50229
880-26347-6	SB-8-S-4'-20230323	Total/NA	Solid	8021B	50229
880-26347-7	SB-7-S-.5'-20230323	Total/NA	Solid	8021B	50229
880-26347-8	SB-7-S-2'-20230323	Total/NA	Solid	8021B	50229
880-26347-9	SB-8-S-.5'-20230323	Total/NA	Solid	8021B	50229
880-26347-10	SB-8-S-2'-20230323	Total/NA	Solid	8021B	50229
880-26347-11	SB-8-S-4'-20230323	Total/NA	Solid	8021B	50229
MB 880-50229/5-A	Method Blank	Total/NA	Solid	8021B	50229
LCS 880-50229/1-A	Lab Control Sample	Total/NA	Solid	8021B	50229
LCSD 880-50229/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50229
880-26347-1 MS	SB-9-S-0-.5'-20230323	Total/NA	Solid	8021B	50229
880-26347-1 MSD	SB-9-S-0-.5'-20230323	Total/NA	Solid	8021B	50229

GC Semi VOA

Prep Batch: 49838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-2	SB-9-S-2'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-3	SB-9-S-4'-20230323	Total/NA	Solid	8015NM Prep	
MB 880-49838/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49838/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49838/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Total/NA	Solid	8015B NM	49838
880-26347-2	SB-9-S-2'-20230323	Total/NA	Solid	8015B NM	49838

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

GC Semi VOA (Continued)

Analysis Batch: 49908 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-3	SB-9-S-4'-20230323	Total/NA	Solid	8015B NM	49838
MB 880-49838/1-A	Method Blank	Total/NA	Solid	8015B NM	49838
LCS 880-49838/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49838
LCSD 880-49838/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49838

Prep Batch: 49932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-4	SB-8-S-.5'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-5	SB-8-S-2'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-6	SB-8-S-4'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-7	SB-7-S-.5'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-8	SB-7-S-2'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-9	SB-8-S-.5'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-10	SB-8-S-2'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-11	SB-8-S-4'-20230323	Total/NA	Solid	8015NM Prep	
MB 880-49932/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49932/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49932/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26347-4 MS	SB-8-S-.5'-20230323	Total/NA	Solid	8015NM Prep	
880-26347-4 MSD	SB-8-S-.5'-20230323	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-4	SB-8-S-.5'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-5	SB-8-S-2'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-6	SB-8-S-4'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-7	SB-7-S-.5'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-8	SB-7-S-2'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-9	SB-8-S-.5'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-10	SB-8-S-2'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-11	SB-8-S-4'-20230323	Total/NA	Solid	8015B NM	49932
MB 880-49932/1-A	Method Blank	Total/NA	Solid	8015B NM	49932
LCS 880-49932/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49932
LCSD 880-49932/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49932
880-26347-4 MS	SB-8-S-.5'-20230323	Total/NA	Solid	8015B NM	49932
880-26347-4 MSD	SB-8-S-.5'-20230323	Total/NA	Solid	8015B NM	49932

Analysis Batch: 50032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Total/NA	Solid	8015 NM	
880-26347-2	SB-9-S-2'-20230323	Total/NA	Solid	8015 NM	
880-26347-3	SB-9-S-4'-20230323	Total/NA	Solid	8015 NM	
880-26347-4	SB-8-S-.5'-20230323	Total/NA	Solid	8015 NM	
880-26347-5	SB-8-S-2'-20230323	Total/NA	Solid	8015 NM	
880-26347-6	SB-8-S-4'-20230323	Total/NA	Solid	8015 NM	
880-26347-7	SB-7-S-.5'-20230323	Total/NA	Solid	8015 NM	
880-26347-8	SB-7-S-2'-20230323	Total/NA	Solid	8015 NM	
880-26347-9	SB-8-S-.5'-20230323	Total/NA	Solid	8015 NM	
880-26347-10	SB-8-S-2'-20230323	Total/NA	Solid	8015 NM	
880-26347-11	SB-8-S-4'-20230323	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

HPLC/IC

Leach Batch: 50169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Soluble	Solid	DI Leach	
880-26347-2	SB-9-S-2'-20230323	Soluble	Solid	DI Leach	
880-26347-3	SB-9-S-4'-20230323	Soluble	Solid	DI Leach	
880-26347-4	SB-8-S-.5'-20230323	Soluble	Solid	DI Leach	
MB 880-50169/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50169/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50169/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 50170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-5	SB-8-S-2'-20230323	Soluble	Solid	DI Leach	
880-26347-6	SB-8-S-4'-20230323	Soluble	Solid	DI Leach	
880-26347-7	SB-7-S-.5'-20230323	Soluble	Solid	DI Leach	
880-26347-8	SB-7-S-2'-20230323	Soluble	Solid	DI Leach	
880-26347-9	SB-8-S-.5'-20230323	Soluble	Solid	DI Leach	
880-26347-10	SB-8-S-2'-20230323	Soluble	Solid	DI Leach	
880-26347-11	SB-8-S-4'-20230323	Soluble	Solid	DI Leach	
MB 880-50170/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50170/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50170/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-26347-5 MS	SB-8-S-2'-20230323	Soluble	Solid	DI Leach	
880-26347-5 MSD	SB-8-S-2'-20230323	Soluble	Solid	DI Leach	

Analysis Batch: 50389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-1	SB-9-S-0-.5'-20230323	Soluble	Solid	300.0	50169
880-26347-2	SB-9-S-2'-20230323	Soluble	Solid	300.0	50169
880-26347-3	SB-9-S-4'-20230323	Soluble	Solid	300.0	50169
880-26347-4	SB-8-S-.5'-20230323	Soluble	Solid	300.0	50169
MB 880-50169/1-A	Method Blank	Soluble	Solid	300.0	50169
LCS 880-50169/2-A	Lab Control Sample	Soluble	Solid	300.0	50169
LCSD 880-50169/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50169

Analysis Batch: 50390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26347-5	SB-8-S-2'-20230323	Soluble	Solid	300.0	50170
880-26347-6	SB-8-S-4'-20230323	Soluble	Solid	300.0	50170
880-26347-7	SB-7-S-.5'-20230323	Soluble	Solid	300.0	50170
880-26347-8	SB-7-S-2'-20230323	Soluble	Solid	300.0	50170
880-26347-9	SB-8-S-.5'-20230323	Soluble	Solid	300.0	50170
880-26347-10	SB-8-S-2'-20230323	Soluble	Solid	300.0	50170
880-26347-11	SB-8-S-4'-20230323	Soluble	Solid	300.0	50170
MB 880-50170/1-A	Method Blank	Soluble	Solid	300.0	50170
LCS 880-50170/2-A	Lab Control Sample	Soluble	Solid	300.0	50170
LCSD 880-50170/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50170
880-26347-5 MS	SB-8-S-2'-20230323	Soluble	Solid	300.0	50170
880-26347-5 MSD	SB-8-S-2'-20230323	Soluble	Solid	300.0	50170

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-9-S-0-.5'-20230323

Lab Sample ID: 880-26347-1
Matrix: Solid
Date Collected: 03/23/23 14:55
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/05/23 21:20	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	03/31/23 11:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49838	03/29/23 12:35	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49908	03/30/23 21:11	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50389	04/04/23 20:56	SMC	EET MID

Client Sample ID: SB-9-S-2'-20230323

Lab Sample ID: 880-26347-2
Matrix: Solid
Date Collected: 03/23/23 15:00
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 01:49	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	03/31/23 11:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49838	03/29/23 12:35	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49908	03/30/23 21:33	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50389	04/04/23 21:01	SMC	EET MID

Client Sample ID: SB-9-S-4'-20230323

Lab Sample ID: 880-26347-3
Matrix: Solid
Date Collected: 03/23/23 15:10
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 02:10	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	03/31/23 11:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49838	03/29/23 12:35	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49908	03/30/23 21:55	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50389	04/04/23 21:05	SMC	EET MID

Client Sample ID: SB-8-S-.5'-20230323

Lab Sample ID: 880-26347-4
Matrix: Solid
Date Collected: 03/23/23 15:15
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 02:30	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 12:01	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-.5'-20230323

Lab Sample ID: 880-26347-4

Date Collected: 03/23/23 15:15
Matrix: Solid
Date Received: 03/24/23 15:09

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	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50389	04/04/23 21:10	SMC	EET MID

Client Sample ID: SB-8-S-2'-20230323

Lab Sample ID: 880-26347-5

Date Collected: 03/23/23 15:20
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 02:51	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 13:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 21:46	SMC	EET MID

Client Sample ID: SB-8-S-4'-20230323

Lab Sample ID: 880-26347-6

Date Collected: 03/23/23 15:25
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 03:11	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 13:30	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 22:00	SMC	EET MID

Client Sample ID: SB-7-S-.5'-20230323

Lab Sample ID: 880-26347-7

Date Collected: 03/23/23 15:30
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 03:32	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 13:51	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 22:05	SMC	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-7-S-2'-20230323

Lab Sample ID: 880-26347-8

Date Collected: 03/23/23 15:35
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 03:53	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 14:13	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 22:09	SMC	EET MID

Client Sample ID: SB-8-S-.5'-20230323

Lab Sample ID: 880-26347-9

Date Collected: 03/23/23 15:40
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 04:13	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 14:35	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 22:14	SMC	EET MID

Client Sample ID: SB-8-S-2'-20230323

Lab Sample ID: 880-26347-10

Date Collected: 03/23/23 15:45
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 04:34	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 14:56	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50390	04/04/23 22:27	SMC	EET MID

Client Sample ID: SB-8-S-4'-20230323

Lab Sample ID: 880-26347-11

Date Collected: 03/23/23 15:50
Matrix: Solid
Date Received: 03/24/23 15:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	50229	04/03/23 15:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50423	04/06/23 04:54	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50032	04/03/23 14:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49932	03/30/23 12:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49995	03/31/23 15:18	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Client Sample ID: SB-8-S-4'-20230323

Date Collected: 03/23/23 15:50
Date Received: 03/24/23 15:09

Lab Sample ID: 880-26347-11

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	50170	04/03/23 11:16	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	50390	04/04/23 22:32	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 23

Job ID: 880-26347-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-26347-1	SB-9-S-0-.5'-20230323	Solid	03/23/23 14:55	03/24/23 15:09
880-26347-2	SB-9-S-2'-20230323	Solid	03/23/23 15:00	03/24/23 15:09
880-26347-3	SB-9-S-4'-20230323	Solid	03/23/23 15:10	03/24/23 15:09
880-26347-4	SB-8-S-.5'-20230323	Solid	03/23/23 15:15	03/24/23 15:09
880-26347-5	SB-8-S-2'-20230323	Solid	03/23/23 15:20	03/24/23 15:09
880-26347-6	SB-8-S-4'-20230323	Solid	03/23/23 15:25	03/24/23 15:09
880-26347-7	SB-7-S-.5'-20230323	Solid	03/23/23 15:30	03/24/23 15:09
880-26347-8	SB-7-S-2'-20230323	Solid	03/23/23 15:35	03/24/23 15:09
880-26347-9	SB-8-S-.5'-20230323	Solid	03/23/23 15:40	03/24/23 15:09
880-26347-10	SB-8-S-2'-20230323	Solid	03/23/23 15:45	03/24/23 15:09
880-26347-11	SB-8-S-4'-20230323	Solid	03/23/23 15:50	03/24/23 15:09

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

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26347

Client Information	Sampler: Daniel McGee	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-5478-717 1
Client Contact: Douglas Jordan	Phone: 432-999-2980	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page ~~1 of 2~~ 1 of 1
Company: ARCADIS U S Inc	PWSID:			Job #:
Address: 10205 Westheimer Rd Suite 800	Due Date Requested:			
City: Houston	TAT Requested (days): Standard			
State Zip: TX, 77042	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: PN 30172230			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: ~~Lovington~~ WLU 23	Project #: 88001697			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F - MeOH, G Amchlor, H Ascorbic Acid, I - Ice, J - DI Water, K EDTA, L EDA, M Hexane, N - None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T - TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note
		Preservation Code:					N		
SB-9-S-0-.5'-20230323	3-23-23	1455	G	Solid			X	1	402
SB-9-S-2'-20230323		1500		Solid			X	1	
SB-9-S-4'-20230323		1510		Solid			X	1	
SB-8-S-0-.5'-20230323		1515		Solid			X	1	
SB-8-S-2'-20230323		1520		Solid			X	1	
SB-8-S-4'-20230323		1525		Solid			X	1	
SB-7-S-0-.5'-20230323		1530		Solid			X		
SB-7-S-2'-20230323		1535		Solid			X		
SB-8-S-0-.5'-20230323		1540		Solid			X		
SB-8-S-2'-20230323		1545		Solid			X		
SB-8-S-4'-20230323	3-23-23	1550	G	Solid			X	1	

880-26347 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		3-24-23 / 1500	Arcadis		3/24/23	
2					1509	
3						

Custody Seals Intact. Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 1.3 | 1.0

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc Job Number: 880-26347-1

Login Number: 26347 **List Source: Eurofins Midland**
List Number: 1
Creator: Rodriguez, Leticia

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis U.S., Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 4/18/2024 10:53:38 PM

JOB DESCRIPTION

WLU 23
Lovington, NM

JOB NUMBER

880-42180-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
4/18/2024 10:53:38 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Laboratory Job ID: 880-42180-1
SDG: Lovington, NM

Table of Contents

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Definitions/Glossary

Client: Arcadis U.S., Inc. Job ID: 880-42180-1
Project/Site: WLU 23 SDG: Lovington, NM

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: Arcadis U.S., Inc.
Project: WLU 23

Job ID: 880-42180-1

Job ID: 880-42180-1 Eurofins Midland

Job Narrative
880-42180-1

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 4/12/2024 11:08 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 3.7°C.

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: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Client Sample ID: SB-23-0-1'
Lab Sample ID: 880-42180-1
Date Collected: 04/10/24 13:50
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	385		4.99	0.394	mg/Kg			04/17/24 06:33	1

Client Sample ID: SB-23-2'-3'
Lab Sample ID: 880-42180-2
Date Collected: 04/10/24 13:55
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41.9		5.04	0.398	mg/Kg			04/17/24 06:40	1

Client Sample ID: SB-24-0-1'
Lab Sample ID: 880-42180-3
Date Collected: 04/10/24 14:10
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.78	J	4.96	0.392	mg/Kg			04/17/24 06:46	1

Client Sample ID: SB-24-2'-3'
Lab Sample ID: 880-42180-4
Date Collected: 04/10/24 14:15
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.4		5.04	0.398	mg/Kg			04/17/24 06:52	1

Client Sample ID: SB-25-0-1'
Lab Sample ID: 880-42180-5
Date Collected: 04/10/24 14:30
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.70	J	5.03	0.397	mg/Kg			04/17/24 06:59	1

Client Sample ID: SB-25-2'-3'
Lab Sample ID: 880-42180-6
Date Collected: 04/10/24 14:35
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.44	J	4.99	0.394	mg/Kg			04/17/24 07:18	1

Client Sample ID: SB-26-0-1'
Lab Sample ID: 880-42180-7
Date Collected: 04/10/24 14:50
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.24		5.00	0.395	mg/Kg			04/17/24 07:24	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Client Sample ID: SB-26-2'-3'
Date Collected: 04/10/24 14:55
Date Received: 04/12/24 11:08

Lab Sample ID: 880-42180-8
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	153		5.04	0.398	mg/Kg			04/17/24 07:43	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78295/1-A
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/17/24 05:11	1

Lab Sample ID: LCS 880-78295/2-A
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-78295/3-A
Matrix: Solid
Analysis Batch: 78405

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	248.8		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 880-42180-5 MS
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: SB-25-0-1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3.70	J	252	266.3		mg/Kg		104	90 - 110		

Lab Sample ID: 880-42180-5 MSD
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: SB-25-0-1'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3.70	J	252	263.9		mg/Kg		103	90 - 110	1	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

HPLC/IC

Leach Batch: 78295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42180-1	SB-23-0-1'	Soluble	Solid	DI Leach	
880-42180-2	SB-23-2'-3'	Soluble	Solid	DI Leach	
880-42180-3	SB-24-0-1'	Soluble	Solid	DI Leach	
880-42180-4	SB-24-2'-3'	Soluble	Solid	DI Leach	
880-42180-5	SB-25-0-1'	Soluble	Solid	DI Leach	
880-42180-6	SB-25-2'-3'	Soluble	Solid	DI Leach	
880-42180-7	SB-26-0-1'	Soluble	Solid	DI Leach	
880-42180-8	SB-26-2'-3'	Soluble	Solid	DI Leach	
MB 880-78295/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78295/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78295/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-42180-5 MS	SB-25-0-1'	Soluble	Solid	DI Leach	
880-42180-5 MSD	SB-25-0-1'	Soluble	Solid	DI Leach	

Analysis Batch: 78405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42180-1	SB-23-0-1'	Soluble	Solid	300.0	78295
880-42180-2	SB-23-2'-3'	Soluble	Solid	300.0	78295
880-42180-3	SB-24-0-1'	Soluble	Solid	300.0	78295
880-42180-4	SB-24-2'-3'	Soluble	Solid	300.0	78295
880-42180-5	SB-25-0-1'	Soluble	Solid	300.0	78295
880-42180-6	SB-25-2'-3'	Soluble	Solid	300.0	78295
880-42180-7	SB-26-0-1'	Soluble	Solid	300.0	78295
880-42180-8	SB-26-2'-3'	Soluble	Solid	300.0	78295
MB 880-78295/1-A	Method Blank	Soluble	Solid	300.0	78295
LCS 880-78295/2-A	Lab Control Sample	Soluble	Solid	300.0	78295
LCSD 880-78295/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78295
880-42180-5 MS	SB-25-0-1'	Soluble	Solid	300.0	78295
880-42180-5 MSD	SB-25-0-1'	Soluble	Solid	300.0	78295

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Client Sample ID: SB-23-0-1'
Lab Sample ID: 880-42180-1
Date Collected: 04/10/24 13:50
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 06:33	SMC	EET MID

Client Sample ID: SB-23-2'-3'
Lab Sample ID: 880-42180-2
Date Collected: 04/10/24 13:55
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 06:40	SMC	EET MID

Client Sample ID: SB-24-0-1'
Lab Sample ID: 880-42180-3
Date Collected: 04/10/24 14:10
Matrix: Solid
Date Received: 04/12/24 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 06:46	SMC	EET MID

Client Sample ID: SB-24-2'-3'
Lab Sample ID: 880-42180-4
Date Collected: 04/10/24 14:15
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 06:52	SMC	EET MID

Client Sample ID: SB-25-0-1'
Lab Sample ID: 880-42180-5
Date Collected: 04/10/24 14:30
Matrix: Solid
Date Received: 04/12/24 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 06:59	SMC	EET MID

Client Sample ID: SB-25-2'-3'
Lab Sample ID: 880-42180-6
Date Collected: 04/10/24 14:35
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 07:18	SMC	EET MID

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Client Sample ID: SB-26-0-1'

Lab Sample ID: 880-42180-7
Matrix: Solid
Date Collected: 04/10/24 14:50
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 07:24	SMC	EET MID

Client Sample ID: SB-26-2'-3'

Lab Sample ID: 880-42180-8
Matrix: Solid
Date Collected: 04/10/24 14:55
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 07:43	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

Method Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42180-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-42180-1	SB-23-0-1'	Solid	04/10/24 13:50	04/12/24 11:08
880-42180-2	SB-23-2'-3'	Solid	04/10/24 13:55	04/12/24 11:08
880-42180-3	SB-24-0-1'	Solid	04/10/24 14:10	04/12/24 11:08
880-42180-4	SB-24-2'-3'	Solid	04/10/24 14:15	04/12/24 11:08
880-42180-5	SB-25-0-1'	Solid	04/10/24 14:30	04/12/24 11:08
880-42180-6	SB-25-2'-3'	Solid	04/10/24 14:35	04/12/24 11:08
880-42180-7	SB-26-0-1'	Solid	04/10/24 14:50	04/12/24 11:08
880-42180-8	SB-26-2'-3'	Solid	04/10/24 14:55	04/12/24 11:08

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

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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

880-42180 Chain of Custody

Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:	1004 N Big Springs Suite 300	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	281-644-9437 Email	Douglas Jordan@Arcadis.com	

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:	WLU 23	Turn Around	
Project Number:	30209681	☑ Routine ☐ Rush	
Project Location:	Lovington, NM	Due Date:	
Sampler's Name:	Heath Boyd	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:	-.10
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.8
Total Containers:		Corrected Temperature:	3.7

ANALYSIS REQUEST

Pres. Code

Parameters: 300.0/9056M_280

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	
SB-23-0-1'	S	4/10/24	1350		G	1	X
SB-23-2'-3'			1355			1	X
SB-24-0-1'			1410			1	X
SB-24-2'-3'			1415			1	X
SB-25-0-1'			1430			1	X
SB-25-2'-3'			1435			1	X
SB-26-0-1'			1450			1	X
SB-26-2'-3'	"	"	1455		"	1	X

Preservative Codes

None NO — DI Water H_2O
Cool Cool — MeOH Me
HCL HC — HNO_3 HN
H_2SO_4 H_2 — NaOH Na
H_3PO_4 HP
NaHSO$_4$ NABIS
$Na_2S_2O_3$ NaSO$_3$
Zn Acetate+NaOH Zn
NaOH+Ascorbic Acid SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

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 BCox	4/11/24 1430	2 BCox		4/12/24 1108
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-42180-1
SDG Number: Lovington, NM

Login Number: 42180
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: Mr. Morgan Jordan
Arcadis U.S., Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 4/18/2024 10:53:38 PM

JOB DESCRIPTION

WLU 23
Lovington, NM

JOB NUMBER

880-42181-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
4/18/2024 10:53:38 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Laboratory Job ID: 880-42181-1
SDG: Lovington, NM

Table of Contents

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Definitions/Glossary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: Arcadis U.S., Inc.
Project: WLU 23

Job ID: 880-42181-1

Job ID: 880-42181-1 Eurofins Midland

Job Narrative
880-42181-1

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 4/12/2024 11:08 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 3.7°C.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-78085 and analytical batch 880-78101 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.

SB-29-2'-3' (880-42181-7), SB-29-4'-5' (880-42181-8), SB-29-6'-7' (880-42181-9), (880-42179-A-1-B), (880-42179-A-1-C MS) and (880-42179-A-1-D MSD)

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

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Client Sample ID: SB-27-2'-3'
Lab Sample ID: 880-42181-1
Date Collected: 04/11/24 08:40
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.70	J	5.05	0.399	mg/Kg			04/17/24 07:49	1

Client Sample ID: SB-27-4'-5'
Lab Sample ID: 880-42181-2
Date Collected: 04/11/24 08:55
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.35		4.98	0.393	mg/Kg			04/17/24 07:55	1

Client Sample ID: SB-27-6'-7'
Lab Sample ID: 880-42181-3
Date Collected: 04/11/24 09:10
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.4		4.99	0.394	mg/Kg			04/17/24 08:02	1

Client Sample ID: SB-28-2'-3'
Lab Sample ID: 880-42181-4
Date Collected: 04/11/24 09:55
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		5.02	0.397	mg/Kg			04/17/24 08:08	1

Client Sample ID: SB-28-4'-5'
Lab Sample ID: 880-42181-5
Date Collected: 04/11/24 10:20
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	490		4.98	0.393	mg/Kg			04/17/24 08:14	1

Client Sample ID: SB-28-6'-7'
Lab Sample ID: 880-42181-6
Date Collected: 04/11/24 10:55
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	300		5.02	0.397	mg/Kg			04/17/24 08:21	1

Client Sample ID: SB-29-2'-3'
Lab Sample ID: 880-42181-7
Date Collected: 04/11/24 11:20
Matrix: Solid
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1540		24.9	1.96	mg/Kg			04/12/24 21:49	5

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Client Sample ID: SB-29-4'-5'

Lab Sample ID: 880-42181-8
Matrix: Solid
Date Collected: 04/11/24 11:40
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1010		4.98	0.393	mg/Kg			04/12/24 21:55	1

Client Sample ID: SB-29-6'-7'

Lab Sample ID: 880-42181-9
Matrix: Solid
Date Collected: 04/11/24 12:00
Date Received: 04/12/24 11:08

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	859		5.02	0.397	mg/Kg			04/12/24 22:01	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78085/1-A
Matrix: Solid
Analysis Batch: 78101

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/12/24 21:12	1

Lab Sample ID: LCS 880-78085/2-A
Matrix: Solid
Analysis Batch: 78101

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	249.7		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-78085/3-A
Matrix: Solid
Analysis Batch: 78101

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	242.1		mg/Kg		97	90 - 110	3	20

Lab Sample ID: MB 880-78295/1-A
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			04/17/24 05:11	1

Lab Sample ID: LCS 880-78295/2-A
Matrix: Solid
Analysis Batch: 78405

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-78295/3-A
Matrix: Solid
Analysis Batch: 78405

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	248.8		mg/Kg		100	90 - 110	1	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

HPLC/IC

Leach Batch: 78085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42181-7	SB-29-2'-3'	Soluble	Solid	DI Leach	
880-42181-8	SB-29-4'-5'	Soluble	Solid	DI Leach	
880-42181-9	SB-29-6'-7'	Soluble	Solid	DI Leach	
MB 880-78085/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78085/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78085/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 78101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42181-7	SB-29-2'-3'	Soluble	Solid	300.0	78085
880-42181-8	SB-29-4'-5'	Soluble	Solid	300.0	78085
880-42181-9	SB-29-6'-7'	Soluble	Solid	300.0	78085
MB 880-78085/1-A	Method Blank	Soluble	Solid	300.0	78085
LCS 880-78085/2-A	Lab Control Sample	Soluble	Solid	300.0	78085
LCSD 880-78085/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78085

Leach Batch: 78295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42181-1	SB-27-2'-3'	Soluble	Solid	DI Leach	
880-42181-2	SB-27-4'-5'	Soluble	Solid	DI Leach	
880-42181-3	SB-27-6'-7'	Soluble	Solid	DI Leach	
880-42181-4	SB-28-2'-3'	Soluble	Solid	DI Leach	
880-42181-5	SB-28-4'-5'	Soluble	Solid	DI Leach	
880-42181-6	SB-28-6'-7'	Soluble	Solid	DI Leach	
MB 880-78295/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78295/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78295/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 78405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-42181-1	SB-27-2'-3'	Soluble	Solid	300.0	78295
880-42181-2	SB-27-4'-5'	Soluble	Solid	300.0	78295
880-42181-3	SB-27-6'-7'	Soluble	Solid	300.0	78295
880-42181-4	SB-28-2'-3'	Soluble	Solid	300.0	78295
880-42181-5	SB-28-4'-5'	Soluble	Solid	300.0	78295
880-42181-6	SB-28-6'-7'	Soluble	Solid	300.0	78295
MB 880-78295/1-A	Method Blank	Soluble	Solid	300.0	78295
LCS 880-78295/2-A	Lab Control Sample	Soluble	Solid	300.0	78295
LCSD 880-78295/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78295

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Client Sample ID: SB-27-2'-3'
Lab Sample ID: 880-42181-1
Date Collected: 04/11/24 08:40
Matrix: Solid
Date Received: 04/12/24 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 07:49	SMC	EET MID

Client Sample ID: SB-27-4'-5'
Lab Sample ID: 880-42181-2
Date Collected: 04/11/24 08:55
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 07:55	SMC	EET MID

Client Sample ID: SB-27-6'-7'
Lab Sample ID: 880-42181-3
Date Collected: 04/11/24 09:10
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 08:02	SMC	EET MID

Client Sample ID: SB-28-2'-3'
Lab Sample ID: 880-42181-4
Date Collected: 04/11/24 09:55
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 08:08	SMC	EET MID

Client Sample ID: SB-28-4'-5'
Lab Sample ID: 880-42181-5
Date Collected: 04/11/24 10:20
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 08:14	SMC	EET MID

Client Sample ID: SB-28-6'-7'
Lab Sample ID: 880-42181-6
Date Collected: 04/11/24 10:55
Matrix: Solid
Date Received: 04/12/24 11:08

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	78295	04/15/24 17:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78405	04/17/24 08:21	SMC	EET MID

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Client Sample ID: SB-29-2'-3'

Lab Sample ID: 880-42181-7
Matrix: Solid
Date Collected: 04/11/24 11:20
Date Received: 04/12/24 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	78085	04/12/24 15:41	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	78101	04/12/24 21:49	SMC	EET MID

Client Sample ID: SB-29-4'-5'

Lab Sample ID: 880-42181-8
Matrix: Solid
Date Collected: 04/11/24 11:40
Date Received: 04/12/24 11:08

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	78085	04/12/24 15:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78101	04/12/24 21:55	SMC	EET MID

Client Sample ID: SB-29-6'-7'

Lab Sample ID: 880-42181-9
Matrix: Solid
Date Collected: 04/11/24 12:00
Date Received: 04/12/24 11:08

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	78085	04/12/24 15:41	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	78101	04/12/24 22:01	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

Method Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 23

Job ID: 880-42181-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-42181-1	SB-27-2'-3'	Solid	04/11/24 08:40	04/12/24 11:08
880-42181-2	SB-27-4'-5'	Solid	04/11/24 08:55	04/12/24 11:08
880-42181-3	SB-27-6'-7'	Solid	04/11/24 09:10	04/12/24 11:08
880-42181-4	SB-28-2'-3'	Solid	04/11/24 09:55	04/12/24 11:08
880-42181-5	SB-28-4'-5'	Solid	04/11/24 10:20	04/12/24 11:08
880-42181-6	SB-28-6'-7'	Solid	04/11/24 10:55	04/12/24 11:08
880-42181-7	SB-29-2'-3'	Solid	04/11/24 11:20	04/12/24 11:08
880-42181-8	SB-29-4'-5'	Solid	04/11/24 11:40	04/12/24 11:08
880-42181-9	SB-29-6'-7'	Solid	04/11/24 12:00	04/12/24 11:08

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Received by OCD: 1/9/2025 1:18:24 PM

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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

880-42181 Chain of Custody

Work Order Comments

Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:	1004 N Big Springs Suite 300	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	281-644-9437	Email	Douglas.Jordan@Arcadis.Com

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:	WLU 23	Turn Around	
Project Number:	30209681	☑ Routine ☐ Rush	
Project Location:	Lovington, NM	Due Date:	
Sampler's Name:	Heath Boyd	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:	-.10	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	39	
Total Containers:		Corrected Temperature:	37	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: 300_ORO_FM_28D														Sample Comments
SB-27-2'-3'	S	4/11/24	840		G	1		X														
SB-27-4'-5'			855			1		X														
SB-27-6'-7'			910			1		X														
SB-28-2'-3'			955			1		X														
SB-28-4'-5'			1020			1		X														
SB-28-6'-7'			1055			1		X														
SB-29-2'-3'			1120			1		X														
SB-29-4'-5'			1140			1		X														
SB-29-6'-7'	X	X	1200		X	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	

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 / 2451 / 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	BCO	4/11/24 1430	2 BCO		4/12/24 1108
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-42181-1
SDG Number: Lovington, NM

Login Number: 42181
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: Mr. Morgan Jordan
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 2/26/2024 5:43:17 PM

JOB DESCRIPTION

WLU 23
Couington,NM

JOB NUMBER

880-39505-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
2/26/2024 5:43:17 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS US Inc
Project/Site: WLU 23

Laboratory Job ID: 880-39505-1
SDG: Couington,NM

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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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)

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS US Inc
Project: WLU 23

Job ID: 880-39505-1

Job ID: 880-39505-1 Eurofins Midland

Job Narrative
880-39505-1

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 2/16/2024 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-10-S-1'-240213 (880-39505-1), SB-10-S-2'-240213 (880-39505-2), SB-11-S-1'-240213 (880-39505-3), SB-11-S-2'-240213 (880-39505-4), SB-12-S-1'-240213 (880-39505-5), SB-12-S-2'-240213 (880-39505-6), SB-13-S-1'-240213 (880-39505-7), SB-13-S-2'-240213 (880-39505-8), SB-14-S-1'-240213 (880-39505-9), SB-14-S-2'-240213 (880-39505-10), SB-15-S-1'-240213 (880-39505-11), SB-15-S-2'-240213 (880-39505-12), SB-16-S-1'-240213 (880-39505-13), SB-16-S-2'-240213 (880-39505-14), SB-17-S-1'-240213 (880-39505-15), SB-17-S-2'-240213 (880-39505-16), SB-18-S-1'-240213 (880-39505-17) and SB-18-S-3'-240213 (880-39505-18).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SB-10-S-2'-240213 (880-39505-2), SB-11-S-2'-240213 (880-39505-4), SB-12-S-2'-240213 (880-39505-6), SB-17-S-2'-240213 (880-39505-16), (880-39505-A-2-E MS) and (880-39505-A-2-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-73803 and analytical batch 880-73992 was outside the upper control limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-16-S-2'-240213 (880-39505-14) and SB-17-S-2'-240213 (880-39505-16). 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 880-73439 and analytical batch 880-73600 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (880-39505-A-2-B MS). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-73439 and analytical batch 880-73600 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73439 and analytical batch 880-73600 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Midland

Case Narrative

Client: ARCADIS US Inc
Project: WLU 23

Job ID: 880-39505-1

Job ID: 880-39505-1 (Continued) Eurofins Midland

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: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-10-S-1'-240213

Lab Sample ID: 880-39505-1
Matrix: Solid
Date Collected: 02/13/24 10:00
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84.1**		5.01	0.396	mg/Kg			02/20/24 14:19	1

Client Sample ID: SB-10-S-2'-240213

Lab Sample ID: 880-39505-2
Matrix: Solid
Date Collected: 02/13/24 10:05
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U F2 F1	0.00199	0.000383	mg/Kg		02/21/24 15:31	02/26/24 12:26	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		02/21/24 15:31	02/26/24 12:26	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		02/21/24 15:31	02/26/24 12:26	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		02/21/24 15:31	02/26/24 12:26	1
o-Xylene	**0.000962**	**J**	0.00199	0.000343	mg/Kg		02/21/24 15:31	02/26/24 12:26	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		02/21/24 15:31	02/26/24 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*38*	*S1-*	*70 - 130*	*02/21/24 15:31*	*02/26/24 12:26*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/21/24 15:31*	*02/26/24 12:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00398	0.00101	mg/Kg			02/26/24 12:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**72.2**		49.5	14.9	mg/Kg			02/20/24 21:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**43.5**	**J B F1**	49.5	14.9	mg/Kg		02/19/24 09:07	02/20/24 21:37	1
Diesel Range Organics (Over C10-C28)	**28.7**	**J F1**	49.5	14.9	mg/Kg		02/19/24 09:07	02/20/24 21:37	1
OII Range Organics (Over C28-C36)	<14.9	U	49.5	14.9	mg/Kg		02/19/24 09:07	02/20/24 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*02/19/24 09:07*	*02/20/24 21:37*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/19/24 09:07*	*02/20/24 21:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**88.4**		5.03	0.397	mg/Kg			02/20/24 14:26	1

Client Sample ID: SB-11-S-1'-240213

Lab Sample ID: 880-39505-3
Matrix: Solid
Date Collected: 02/13/24 10:15
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.2**		4.98	0.393	mg/Kg			02/20/24 14:46	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-11-S-2'-240213

Lab Sample ID: 880-39505-4
Matrix: Solid
Date Collected: 02/13/24 10:20
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		02/21/24 15:31	02/26/24 12:54	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		02/21/24 15:31	02/26/24 12:54	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		02/21/24 15:31	02/26/24 12:54	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		02/21/24 15:31	02/26/24 12:54	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		02/21/24 15:31	02/26/24 12:54	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		02/21/24 15:31	02/26/24 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*02/21/24 15:31*	*02/26/24 12:54*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*02/21/24 15:31*	*02/26/24 12:54*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			02/26/24 12:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**66.8**		50.5	15.2	mg/Kg			02/20/24 22:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**38.8**	**J B**	50.5	15.2	mg/Kg		02/19/24 09:07	02/20/24 22:47	1
Diesel Range Organics (Over C10-C28)	**28.0**	**J**	50.5	15.2	mg/Kg		02/19/24 09:07	02/20/24 22:47	1
OII Range Organics (Over C28-C36)	<15.2	U	50.5	15.2	mg/Kg		02/19/24 09:07	02/20/24 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/19/24 09:07*	*02/20/24 22:47*	*1*
o-Terphenyl	*102*		*70 - 130*	*02/19/24 09:07*	*02/20/24 22:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**56.4**		4.96	0.392	mg/Kg			02/20/24 14:53	1

Client Sample ID: SB-12-S-1'-240213

Lab Sample ID: 880-39505-5
Matrix: Solid
Date Collected: 02/13/24 10:30
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**146**		4.96	0.392	mg/Kg			02/20/24 14:59	1

Client Sample ID: SB-12-S-2'-240213

Lab Sample ID: 880-39505-6
Matrix: Solid
Date Collected: 02/13/24 10:35
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		02/21/24 15:31	02/26/24 13:23	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		02/21/24 15:31	02/26/24 13:23	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		02/21/24 15:31	02/26/24 13:23	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-12-S-2'-240213

Lab Sample ID: 880-39505-6
Matrix: Solid
Date Collected: 02/13/24 10:35
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		02/21/24 15:31	02/26/24 13:23	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		02/21/24 15:31	02/26/24 13:23	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		02/21/24 15:31	02/26/24 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*02/21/24 15:31*	*02/26/24 13:23*	*1*
1,4-Difluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*02/21/24 15:31*	*02/26/24 13:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg			02/26/24 13:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**74.9**		49.7	14.9	mg/Kg			02/20/24 23:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**45.9**	**J B**	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:10	1
Diesel Range Organics (Over C10-C28)	**29.0**	**J**	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:10	1
OII Range Organics (Over C28-C36)	<14.9	U	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:10*	*1*
o-Terphenyl	*99*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**830**		4.95	0.391	mg/Kg			02/20/24 15:06	1

Client Sample ID: SB-13-S-1'-240213

Lab Sample ID: 880-39505-7
Matrix: Solid
Date Collected: 02/13/24 10:45
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.4**		5.04	0.398	mg/Kg			02/20/24 15:13	1

Client Sample ID: SB-13-S-2'-240213

Lab Sample ID: 880-39505-8
Matrix: Solid
Date Collected: 02/13/24 10:55
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		02/21/24 15:31	02/26/24 13:51	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		02/21/24 15:31	02/26/24 13:51	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		02/21/24 15:31	02/26/24 13:51	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		02/21/24 15:31	02/26/24 13:51	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		02/21/24 15:31	02/26/24 13:51	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		02/21/24 15:31	02/26/24 13:51	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-13-S-2'-240213

Lab Sample ID: 880-39505-8
Matrix: Solid
Date Collected: 02/13/24 10:55
Date Received: 02/16/24 15:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*02/21/24 15:31*	*02/26/24 13:51*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/21/24 15:31*	*02/26/24 13:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00398	0.00100	mg/Kg			02/26/24 13:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**70.9**		49.9	15.0	mg/Kg			02/20/24 23:33	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	**41.2**	**J B**	49.9	15.0	mg/Kg		02/19/24 09:07	02/20/24 23:33	1
Diesel Range Organics (Over C10-C28)	**29.7**	**J**	49.9	15.0	mg/Kg		02/19/24 09:07	02/20/24 23:33	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		02/19/24 09:07	02/20/24 23:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*86*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:33*	*1*
o-Terphenyl	*90*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1980**		25.1	1.98	mg/Kg			02/20/24 15:20	5

Client Sample ID: SB-14-S-1'-240213

Lab Sample ID: 880-39505-9
Matrix: Solid
Date Collected: 02/13/24 11:00
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**175**		4.98	0.393	mg/Kg			02/20/24 15:26	1

Client Sample ID: SB-14-S-2'-240213

Lab Sample ID: 880-39505-10
Matrix: Solid
Date Collected: 02/13/24 11:15
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		02/21/24 15:31	02/26/24 14:20	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		02/21/24 15:31	02/26/24 14:20	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		02/21/24 15:31	02/26/24 14:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		02/21/24 15:31	02/26/24 14:20	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		02/21/24 15:31	02/26/24 14:20	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		02/21/24 15:31	02/26/24 14:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/21/24 15:31*	*02/26/24 14:20*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/21/24 15:31*	*02/26/24 14:20*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-14-S-2'-240213

Lab Sample ID: 880-39505-10
Matrix: Solid
Date Collected: 02/13/24 11:15
Date Received: 02/16/24 15:30

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			02/26/24 14:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**67.4**		49.7	14.9	mg/Kg			02/20/24 23:56	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	**37.3**	**J B**	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:56	1
Diesel Range Organics (Over C10-C28)	**30.1**	**J**	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:56	1
OII Range Organics (Over C28-C36)	<14.9	U	49.7	14.9	mg/Kg		02/19/24 09:07	02/20/24 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:56*	*1*
o-Terphenyl	*85*		*70 - 130*	*02/19/24 09:07*	*02/20/24 23:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2260**		25.2	1.99	mg/Kg			02/20/24 12:42	5

Client Sample ID: SB-15-S-1'-240213

Lab Sample ID: 880-39505-11
Matrix: Solid
Date Collected: 02/13/24 11:20
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**125**		5.00	0.395	mg/Kg			02/20/24 12:56	1

Client Sample ID: SB-15-S-2'-240213

Lab Sample ID: 880-39505-12
Matrix: Solid
Date Collected: 02/13/24 11:25
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.00198	0.000381	mg/Kg		02/21/24 15:31	02/26/24 14:49	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		02/21/24 15:31	02/26/24 14:49	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		02/21/24 15:31	02/26/24 14:49	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		02/21/24 15:31	02/26/24 14:49	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		02/21/24 15:31	02/26/24 14:49	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		02/21/24 15:31	02/26/24 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*02/21/24 15:31*	*02/26/24 14:49*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/21/24 15:31*	*02/26/24 14:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00100	U	0.00396	0.00100	mg/Kg			02/26/24 14:49	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-15-S-2'-240213

Lab Sample ID: 880-39505-12
Matrix: Solid
Date Collected: 02/13/24 11:25
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**69.6**		49.9	15.0	mg/Kg			02/21/24 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	**39.7**	**J B**	49.9	15.0	mg/Kg		02/19/24 09:07	02/21/24 00:19	1
Diesel Range Organics (Over C10-C28)	**29.9**	**J**	49.9	15.0	mg/Kg		02/19/24 09:07	02/21/24 00:19	1
Oll Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		02/19/24 09:07	02/21/24 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/19/24 09:07*	*02/21/24 00:19*	*1*
o-Terphenyl	*97*		*70 - 130*	*02/19/24 09:07*	*02/21/24 00:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**151**		4.96	0.392	mg/Kg			02/20/24 13:01	1

Client Sample ID: SB-16-S-1'-240213

Lab Sample ID: 880-39505-13
Matrix: Solid
Date Collected: 02/13/24 11:35
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**103**		4.98	0.393	mg/Kg			02/20/24 13:06	1

Client Sample ID: SB-16-S-2'-240213

Lab Sample ID: 880-39505-14
Matrix: Solid
Date Collected: 02/13/24 11:40
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		02/21/24 15:31	02/26/24 15:17	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		02/21/24 15:31	02/26/24 15:17	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		02/21/24 15:31	02/26/24 15:17	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		02/21/24 15:31	02/26/24 15:17	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		02/21/24 15:31	02/26/24 15:17	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		02/21/24 15:31	02/26/24 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*02/21/24 15:31*	*02/26/24 15:17*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/21/24 15:31*	*02/26/24 15:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			02/26/24 15:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**45.3**	**J**	50.2	15.1	mg/Kg			02/19/24 03:46	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-16-S-2'-240213

Lab Sample ID: 880-39505-14
Matrix: Solid
Date Collected: 02/13/24 11:40
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	24.1	J	50.2	15.1	mg/Kg		02/16/24 16:51	02/19/24 03:46	1
Diesel Range Organics (Over C10-C28)	21.2	J	50.2	15.1	mg/Kg		02/16/24 16:51	02/19/24 03:46	1
OII Range Organics (Over C28-C36)	<15.1	U	50.2	15.1	mg/Kg		02/16/24 16:51	02/19/24 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*139*	*S1+*	*70 - 130*	*02/16/24 16:51*	*02/19/24 03:46*	*1*
o-Terphenyl	*114*		*70 - 130*	*02/16/24 16:51*	*02/19/24 03:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3260		25.3	1.99	mg/Kg			02/20/24 13:10	5

Client Sample ID: SB-17-S-1'-240213

Lab Sample ID: 880-39505-15
Matrix: Solid
Date Collected: 02/13/24 11:45
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		5.01	0.396	mg/Kg			02/20/24 13:24	1

Client Sample ID: SB-17-S-2'-240213

Lab Sample ID: 880-39505-16
Matrix: Solid
Date Collected: 02/13/24 11:50
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000389	U	0.00202	0.000389	mg/Kg		02/21/24 15:31	02/26/24 15:46	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		02/21/24 15:31	02/26/24 15:46	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		02/21/24 15:31	02/26/24 15:46	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		02/21/24 15:31	02/26/24 15:46	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		02/21/24 15:31	02/26/24 15:46	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		02/21/24 15:31	02/26/24 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*02/21/24 15:31*	*02/26/24 15:46*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*02/21/24 15:31*	*02/26/24 15:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00404	0.00102	mg/Kg			02/26/24 15:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	48.5	J	50.4	15.1	mg/Kg			02/19/24 04:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.7	J	50.4	15.1	mg/Kg		02/16/24 16:51	02/19/24 04:08	1
Diesel Range Organics (Over C10-C28)	21.8	J	50.4	15.1	mg/Kg		02/16/24 16:51	02/19/24 04:08	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-17-S-2'-240213

Lab Sample ID: 880-39505-16
Matrix: Solid
Date Collected: 02/13/24 11:50
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<15.1	U	50.4	15.1	mg/Kg		02/16/24 16:51	02/19/24 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*02/16/24 16:51*	*02/19/24 04:08*	*1*
o-Terphenyl	*123*		*70 - 130*	*02/16/24 16:51*	*02/19/24 04:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**75.4**		5.00	0.395	mg/Kg			02/20/24 13:29	1

Client Sample ID: SB-18-S-1'-240213

Lab Sample ID: 880-39505-17
Matrix: Solid
Date Collected: 02/13/24 12:00
Date Received: 02/16/24 15:30

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.1**		4.98	0.393	mg/Kg			02/20/24 13:33	1

Client Sample ID: SB-18-S-3'-240213

Lab Sample ID: 880-39505-18
Matrix: Solid
Date Collected: 02/13/24 12:05
Date Received: 02/16/24 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00200	0.000384	mg/Kg		02/21/24 15:31	02/26/24 16:15	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		02/21/24 15:31	02/26/24 16:15	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		02/21/24 15:31	02/26/24 16:15	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		02/21/24 15:31	02/26/24 16:15	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		02/21/24 15:31	02/26/24 16:15	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		02/21/24 15:31	02/26/24 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/21/24 15:31*	*02/26/24 16:15*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/21/24 15:31*	*02/26/24 16:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			02/26/24 16:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**61.6**		50.5	15.2	mg/Kg			02/19/24 04:31	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	**41.6**	**J**	50.5	15.2	mg/Kg		02/16/24 16:51	02/19/24 04:31	1
Diesel Range Organics (Over C10-C28)	**20.0**	**J**	50.5	15.2	mg/Kg		02/16/24 16:51	02/19/24 04:31	1
OII Range Organics (Over C28-C36)	<15.2	U	50.5	15.2	mg/Kg		02/16/24 16:51	02/19/24 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*02/16/24 16:51*	*02/19/24 04:31*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-18-S-3'-240213
Date Collected: 02/13/24 12:05
Date Received: 02/16/24 15:30

Lab Sample ID: 880-39505-18
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*70 - 130*	*02/16/24 16:51*	*02/19/24 04:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2010		25.1	1.98	mg/Kg			02/20/24 13:38	5

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (70-130)	DFBZ1 (70-130)
880-39505-2	SB-10-S-2'-240213	38 S1-	94
880-39505-2 MS	SB-10-S-2'-240213	153 S1+	107
880-39505-2 MSD	SB-10-S-2'-240213	136 S1+	72
880-39505-4	SB-11-S-2'-240213	147 S1+	119
880-39505-6	SB-12-S-2'-240213	114	138 S1+
880-39505-8	SB-13-S-2'-240213	110	105
880-39505-10	SB-14-S-2'-240213	105	109
880-39505-12	SB-15-S-2'-240213	100	97
880-39505-14	SB-16-S-2'-240213	120	107
880-39505-16	SB-17-S-2'-240213	137 S1+	100
880-39505-18	SB-18-S-3'-240213	107	107
LCS 880-73803/1-A	Lab Control Sample	120	111
LCSD 880-73803/2-A	Lab Control Sample Dup	90	108
MB 880-73803/5-A	Method Blank	81	131 S1+

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 1CO1 (70-130)	OTPH1 (70-130)
880-39505-2	SB-10-S-2'-240213	95	104
880-39505-2 MS	SB-10-S-2'-240213	67 S1-	66 S1-
880-39505-2 MSD	SB-10-S-2'-240213	79	75
880-39505-4	SB-11-S-2'-240213	93	102
880-39505-6	SB-12-S-2'-240213	90	99
880-39505-8	SB-13-S-2'-240213	86	90
880-39505-10	SB-14-S-2'-240213	83	85
880-39505-12	SB-15-S-2'-240213	88	97
880-39505-14	SB-16-S-2'-240213	139 S1+	114
880-39505-16	SB-17-S-2'-240213	145 S1+	123
880-39505-18	SB-18-S-3'-240213	108	92
LCS 880-73393/2-A	Lab Control Sample	103	105
LCS 880-73439/2-A	Lab Control Sample	97	99
LCSD 880-73393/3-A	Lab Control Sample Dup	102	96
LCSD 880-73439/3-A	Lab Control Sample Dup	86	86
MB 880-73393/1-A	Method Blank	127	108
MB 880-73439/1-A	Method Blank	133 S1+	152 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73803/5-A
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73803

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/21/24 15:31	02/26/24 11:59	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/21/24 15:31	02/26/24 11:59	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/21/24 15:31	02/26/24 11:59	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/21/24 15:31	02/26/24 11:59	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/21/24 15:31	02/26/24 11:59	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/21/24 15:31	02/26/24 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/21/24 15:31*	*02/26/24 11:59*	*1*
1,4-Difluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*02/21/24 15:31*	*02/26/24 11:59*	*1*

Lab Sample ID: LCS 880-73803/1-A
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73803

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1222		mg/Kg		122	70 - 130		
Toluene			0.100	0.1118		mg/Kg		112	70 - 130		
Ethylbenzene			0.100	0.1157		mg/Kg		116	70 - 130		
m-Xylene & p-Xylene			0.200	0.2434		mg/Kg		122	70 - 130		
o-Xylene			0.100	0.1101		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-73803/2-A
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73803

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09063		mg/Kg		91	70 - 130	30	35
Toluene			0.100	0.08619		mg/Kg		86	70 - 130	26	35
Ethylbenzene			0.100	0.08392		mg/Kg		84	70 - 130	32	35
m-Xylene & p-Xylene			0.200	0.1973		mg/Kg		99	70 - 130	21	35
o-Xylene			0.100	0.09452		mg/Kg		95	70 - 130	15	35

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

Lab Sample ID: 880-39505-2 MS
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: SB-10-S-2'-240213
Prep Type: Total/NA
Prep Batch: 73803

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.000383	U F2 F1	0.101	0.1084		mg/Kg		108	70 - 130		
Toluene	<0.000454	U	0.101	0.09961		mg/Kg		99	70 - 130		

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

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

Lab Sample ID: 880-39505-2 MS
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: SB-10-S-2'-240213
Prep Type: Total/NA
Prep Batch: 73803

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000563	U	0.101	0.09768		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.202	0.2232		mg/Kg		111	70 - 130
o-Xylene	0.000962	J	0.101	0.1028		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 880-39505-2 MSD
Matrix: Solid
Analysis Batch: 73992

Client Sample ID: SB-10-S-2'-240213
Prep Type: Total/NA
Prep Batch: 73803

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000383	U F2 F1	0.100	0.1277		mg/Kg		128	70 - 130	16	35
Toluene	<0.000454	U	0.100	0.09377		mg/Kg		94	70 - 130	6	35
Ethylbenzene	<0.000563	U	0.100	0.09850		mg/Kg		98	70 - 130	1	35
m-Xylene & p-Xylene	<0.00101	U	0.200	0.2128		mg/Kg		106	70 - 130	5	35
o-Xylene	0.000962	J	0.100	0.1029		mg/Kg		102	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*

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

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	<15.0	U	50.0	15.0	mg/Kg		02/16/24 14:56	02/18/24 19:15	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		02/16/24 14:56	02/18/24 19:15	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	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

Eurofins Midland

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

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

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

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: MB 880-73439/1-A
Matrix: Solid
Analysis Batch: 73600

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73439

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.06	J	50.0	15.0	mg/Kg		02/19/24 09:06	02/20/24 20:27	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		02/19/24 09:06	02/20/24 20:27	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		02/19/24 09:06	02/20/24 20:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	02/19/24 09:06	02/20/24 20:27	1
o-Terphenyl	152	S1+	70 - 130	02/19/24 09:06	02/20/24 20:27	1

Lab Sample ID: LCS 880-73439/2-A
Matrix: Solid
Analysis Batch: 73600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73439

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	819.0		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)			1000	897.7		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	99		70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

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

Lab Sample ID: LCSD 880-73439/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73600 — **Prep Batch: 73439**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	802.7		mg/Kg		80	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	866.2		mg/Kg		87	70 - 130	4	20

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

Lab Sample ID: 880-39505-2 MS — **Client Sample ID: SB-10-S-2'-240213**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73600 — **Prep Batch: 73439**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	43.5	J B F1	1010	624.1	F1	mg/Kg		58	70 - 130
Diesel Range Organics (Over C10-C28)	28.7	J F1	1010	507.1	F1	mg/Kg		48	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*67*	*S1-*	*70 - 130*
o-Terphenyl	*66*	*S1-*	*70 - 130*

Lab Sample ID: 880-39505-2 MSD — **Client Sample ID: SB-10-S-2'-240213**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 73600 — **Prep Batch: 73439**

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	43.5	J B F1	1010	700.5	F1	mg/Kg		65	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	28.7	J F1	1010	583.6	F1	mg/Kg		55	70 - 130	14	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*79*		*70 - 130*
o-Terphenyl	*75*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73472/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73634

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			02/20/24 12:29	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-73472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73634

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	241.8		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-73472/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73634

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	242.9		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-39505-10 MS — **Client Sample ID: SB-14-S-2'-240213**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2260		1260	3471		mg/Kg		97	90 - 110		

Lab Sample ID: 880-39505-10 MSD — **Client Sample ID: SB-14-S-2'-240213**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2260		1260	3480		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-73457/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			02/20/24 12:04	1

Lab Sample ID: LCS 880-73457/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73640

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	252.8		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-73457/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 73640

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.9		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

GC VOA

Prep Batch: 73803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	5030B	
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	5030B	
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	5030B	
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	5030B	
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	5030B	
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	5030B	
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	5030B	
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	5030B	
880-39505-18	SB-18-S-3'-240213	Total/NA	Solid	5030B	
MB 880-73803/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-73803/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-73803/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-39505-2 MS	SB-10-S-2'-240213	Total/NA	Solid	5030B	
880-39505-2 MSD	SB-10-S-2'-240213	Total/NA	Solid	5030B	

Analysis Batch: 73992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-18	SB-18-S-3'-240213	Total/NA	Solid	8021B	73803
MB 880-73803/5-A	Method Blank	Total/NA	Solid	8021B	73803
LCS 880-73803/1-A	Lab Control Sample	Total/NA	Solid	8021B	73803
LCSD 880-73803/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73803
880-39505-2 MS	SB-10-S-2'-240213	Total/NA	Solid	8021B	73803
880-39505-2 MSD	SB-10-S-2'-240213	Total/NA	Solid	8021B	73803

Analysis Batch: 74101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	Total BTEX	
880-39505-18	SB-18-S-3'-240213	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-18	SB-18-S-3'-240213	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

GC Semi VOA (Continued)

Prep Batch: 73393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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	

Analysis Batch: 73414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	8015B NM	73393
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	8015B NM	73393
880-39505-18	SB-18-S-3'-240213	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

Prep Batch: 73439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	8015NM Prep	
MB 880-73439/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73439/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39505-2 MS	SB-10-S-2'-240213	Total/NA	Solid	8015NM Prep	
880-39505-2 MSD	SB-10-S-2'-240213	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-14	SB-16-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-16	SB-17-S-2'-240213	Total/NA	Solid	8015 NM	
880-39505-18	SB-18-S-3'-240213	Total/NA	Solid	8015 NM	

Analysis Batch: 73600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2	SB-10-S-2'-240213	Total/NA	Solid	8015B NM	73439
880-39505-4	SB-11-S-2'-240213	Total/NA	Solid	8015B NM	73439
880-39505-6	SB-12-S-2'-240213	Total/NA	Solid	8015B NM	73439
880-39505-8	SB-13-S-2'-240213	Total/NA	Solid	8015B NM	73439
880-39505-10	SB-14-S-2'-240213	Total/NA	Solid	8015B NM	73439
880-39505-12	SB-15-S-2'-240213	Total/NA	Solid	8015B NM	73439
MB 880-73439/1-A	Method Blank	Total/NA	Solid	8015B NM	73439
LCS 880-73439/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73439
LCSD 880-73439/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73439
880-39505-2 MS	SB-10-S-2'-240213	Total/NA	Solid	8015B NM	73439

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

GC Semi VOA (Continued)

Analysis Batch: 73600 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-2 MSD	SB-10-S-2'-240213	Total/NA	Solid	8015B NM	73439

HPLC/IC

Leach Batch: 73457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-1	SB-10-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-2	SB-10-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-3	SB-11-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-4	SB-11-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-5	SB-12-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-6	SB-12-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-7	SB-13-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-8	SB-13-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-9	SB-14-S-1'-240213	Soluble	Solid	DI Leach	
MB 880-73457/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73457/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73457/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 73472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-10	SB-14-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-11	SB-15-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-12	SB-15-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-13	SB-16-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-14	SB-16-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-15	SB-17-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-16	SB-17-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-17	SB-18-S-1'-240213	Soluble	Solid	DI Leach	
880-39505-18	SB-18-S-3'-240213	Soluble	Solid	DI Leach	
MB 880-73472/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73472/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73472/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-39505-10 MS	SB-14-S-2'-240213	Soluble	Solid	DI Leach	
880-39505-10 MSD	SB-14-S-2'-240213	Soluble	Solid	DI Leach	

Analysis Batch: 73634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-10	SB-14-S-2'-240213	Soluble	Solid	300.0	73472
880-39505-11	SB-15-S-1'-240213	Soluble	Solid	300.0	73472
880-39505-12	SB-15-S-2'-240213	Soluble	Solid	300.0	73472
880-39505-13	SB-16-S-1'-240213	Soluble	Solid	300.0	73472
880-39505-14	SB-16-S-2'-240213	Soluble	Solid	300.0	73472
880-39505-15	SB-17-S-1'-240213	Soluble	Solid	300.0	73472
880-39505-16	SB-17-S-2'-240213	Soluble	Solid	300.0	73472
880-39505-17	SB-18-S-1'-240213	Soluble	Solid	300.0	73472
880-39505-18	SB-18-S-3'-240213	Soluble	Solid	300.0	73472
MB 880-73472/1-A	Method Blank	Soluble	Solid	300.0	73472
LCS 880-73472/2-A	Lab Control Sample	Soluble	Solid	300.0	73472
LCSD 880-73472/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73472
880-39505-10 MS	SB-14-S-2'-240213	Soluble	Solid	300.0	73472

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

HPLC/IC (Continued)

Analysis Batch: 73634 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-10 MSD	SB-14-S-2'-240213	Soluble	Solid	300.0	73472

Analysis Batch: 73640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39505-1	SB-10-S-1'-240213	Soluble	Solid	300.0	73457
880-39505-2	SB-10-S-2'-240213	Soluble	Solid	300.0	73457
880-39505-3	SB-11-S-1'-240213	Soluble	Solid	300.0	73457
880-39505-4	SB-11-S-2'-240213	Soluble	Solid	300.0	73457
880-39505-5	SB-12-S-1'-240213	Soluble	Solid	300.0	73457
880-39505-6	SB-12-S-2'-240213	Soluble	Solid	300.0	73457
880-39505-7	SB-13-S-1'-240213	Soluble	Solid	300.0	73457
880-39505-8	SB-13-S-2'-240213	Soluble	Solid	300.0	73457
880-39505-9	SB-14-S-1'-240213	Soluble	Solid	300.0	73457
MB 880-73457/1-A	Method Blank	Soluble	Solid	300.0	73457
LCS 880-73457/2-A	Lab Control Sample	Soluble	Solid	300.0	73457
LCSD 880-73457/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73457

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-10-S-1'-240213

Lab Sample ID: 880-39505-1
Matrix: Solid
Date Collected: 02/13/24 10:00
Date Received: 02/16/24 15:30

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	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 14:19	CH	EET MID

Client Sample ID: SB-10-S-2'-240213

Lab Sample ID: 880-39505-2
Matrix: Solid
Date Collected: 02/13/24 10:05
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 12:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 12:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/20/24 21:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/20/24 21:37	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 14:26	CH	EET MID

Client Sample ID: SB-11-S-1'-240213

Lab Sample ID: 880-39505-3
Matrix: Solid
Date Collected: 02/13/24 10:15
Date Received: 02/16/24 15:30

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	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 14:46	CH	EET MID

Client Sample ID: SB-11-S-2'-240213

Lab Sample ID: 880-39505-4
Matrix: Solid
Date Collected: 02/13/24 10:20
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 12:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 12:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/20/24 22:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/20/24 22:47	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 14:53	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-12-S-1'-240213

Lab Sample ID: 880-39505-5
Matrix: Solid
Date Collected: 02/13/24 10:30
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 14:59	CH	EET MID

Client Sample ID: SB-12-S-2'-240213

Lab Sample ID: 880-39505-6
Matrix: Solid
Date Collected: 02/13/24 10:35
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 13:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 13:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/20/24 23:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/20/24 23:10	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 15:06	CH	EET MID

Client Sample ID: SB-13-S-1'-240213

Lab Sample ID: 880-39505-7
Matrix: Solid
Date Collected: 02/13/24 10:45
Date Received: 02/16/24 15:30

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	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 15:13	CH	EET MID

Client Sample ID: SB-13-S-2'-240213

Lab Sample ID: 880-39505-8
Matrix: Solid
Date Collected: 02/13/24 10:55
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 13:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 13:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/20/24 23:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/20/24 23:33	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		5			73640	02/20/24 15:20	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-14-S-1'-240213

Lab Sample ID: 880-39505-9
Matrix: Solid
Date Collected: 02/13/24 11:00
Date Received: 02/16/24 15:30

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	73457	02/19/24 11:43	SA	EET MID
Soluble	Analysis	300.0		1			73640	02/20/24 15:26	CH	EET MID

Client Sample ID: SB-14-S-2'-240213

Lab Sample ID: 880-39505-10
Matrix: Solid
Date Collected: 02/13/24 11:15
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 14:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 14:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/20/24 23:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/20/24 23:56	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		5			73634	02/20/24 12:42	CH	EET MID

Client Sample ID: SB-15-S-1'-240213

Lab Sample ID: 880-39505-11
Matrix: Solid
Date Collected: 02/13/24 11:20
Date Received: 02/16/24 15:30

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	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 12:56	CH	EET MID

Client Sample ID: SB-15-S-2'-240213

Lab Sample ID: 880-39505-12
Matrix: Solid
Date Collected: 02/13/24 11:25
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 14:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 14:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/21/24 00:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	73439	02/19/24 09:07	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73600	02/21/24 00:19	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 13:01	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-16-S-1'-240213
Date Collected: 02/13/24 11:35
Date Received: 02/16/24 15:30

Lab Sample ID: 880-39505-13
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	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 13:06	CH	EET MID

Client Sample ID: SB-16-S-2'-240213
Date Collected: 02/13/24 11:40
Date Received: 02/16/24 15:30

Lab Sample ID: 880-39505-14
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	5030B			4.98 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/19/24 03:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 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 03:46	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		5			73634	02/20/24 13:10	CH	EET MID

Client Sample ID: SB-17-S-1'-240213
Date Collected: 02/13/24 11:45
Date Received: 02/16/24 15:30

Lab Sample ID: 880-39505-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 13:24	CH	EET MID

Client Sample ID: SB-17-S-2'-240213
Date Collected: 02/13/24 11:50
Date Received: 02/16/24 15:30

Lab Sample ID: 880-39505-16
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	5030B			4.95 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 15:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 15:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/19/24 04:08	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 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 04:08	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 13:29	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Client Sample ID: SB-18-S-1'-240213

Lab Sample ID: 880-39505-17
Matrix: Solid
Date Collected: 02/13/24 12:00
Date Received: 02/16/24 15:30

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	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		1			73634	02/20/24 13:33	CH	EET MID

Client Sample ID: SB-18-S-3'-240213

Lab Sample ID: 880-39505-18
Matrix: Solid
Date Collected: 02/13/24 12:05
Date Received: 02/16/24 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	73803	02/21/24 15:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73992	02/26/24 16:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74101	02/26/24 16:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			73543	02/19/24 04:31	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 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 04:31	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	73472	02/19/24 11:49	SA	EET MID
Soluble	Analysis	300.0		5			73634	02/20/24 13:38	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	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: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39505-1
SDG: Couington,NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-39505-1	SB-10-S-1'-240213	Solid	02/13/24 10:00	02/16/24 15:30
880-39505-2	SB-10-S-2'-240213	Solid	02/13/24 10:05	02/16/24 15:30
880-39505-3	SB-11-S-1'-240213	Solid	02/13/24 10:15	02/16/24 15:30
880-39505-4	SB-11-S-2'-240213	Solid	02/13/24 10:20	02/16/24 15:30
880-39505-5	SB-12-S-1'-240213	Solid	02/13/24 10:30	02/16/24 15:30
880-39505-6	SB-12-S-2'-240213	Solid	02/13/24 10:35	02/16/24 15:30
880-39505-7	SB-13-S-1'-240213	Solid	02/13/24 10:45	02/16/24 15:30
880-39505-8	SB-13-S-2'-240213	Solid	02/13/24 10:55	02/16/24 15:30
880-39505-9	SB-14-S-1'-240213	Solid	02/13/24 11:00	02/16/24 15:30
880-39505-10	SB-14-S-2'-240213	Solid	02/13/24 11:15	02/16/24 15:30
880-39505-11	SB-15-S-1'-240213	Solid	02/13/24 11:20	02/16/24 15:30
880-39505-12	SB-15-S-2'-240213	Solid	02/13/24 11:25	02/16/24 15:30
880-39505-13	SB-16-S-1'-240213	Solid	02/13/24 11:35	02/16/24 15:30
880-39505-14	SB-16-S-2'-240213	Solid	02/13/24 11:40	02/16/24 15:30
880-39505-15	SB-17-S-1'-240213	Solid	02/13/24 11:45	02/16/24 15:30
880-39505-16	SB-17-S-2'-240213	Solid	02/13/24 11:50	02/16/24 15:30
880-39505-17	SB-18-S-1'-240213	Solid	02/13/24 12:00	02/16/24 15:30
880-39505-18	SB-18-S-3'-240213	Solid	02/13/24 12:05	02/16/24 15:30

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

39505

eurofins | Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-8032-1136 13
Client Contact: Mr Morgan Jordan	Phone: 575-942-0292	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page ~~13 of 14~~ 1 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): Standard			
State, Zip: TX 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #: Purchase Order Requested			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: WCU 23	Project #: ~~88002020~~ 30209652			
Site: Lovington, NM	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	~~300_ORGFM_28D~~, 8015MOD_NM, 8021B	300_ORGFM_28D	Total Number of containers	Special Instructions/Note.
			Preservation Code:				N			
SB-10-S-1'-240213	2/13/24	1000	G	Solid				X		
SB-10-S-2'-240213		1005		Solid			Y	X		
SB-11-S-1'-240213		1015		Solid				X		
SB-11-S-2'-240213		1020		Solid			Y	X		
SB-12-S-1'-240213		1030		Solid				X		
SB-12-S-2'-240213		1035		Solid			Y	X		
SB-13-S-1'-240213		1045		Solid				X		
SB-13-S-4'-240213		1055		Solid			Y	X		
SB-14-S-1-240213		1100		Solid				X		
SB-14-S-3.5'-240213		1115		Solid			Y	X		
SB-15-S-1'-240213	X	1120	X	Solid				X		

880-39505 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		2/15/24 1530	Arcadis	Dailely Gonzales		
2				Dailely Gonzales		
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3.2/3.1

Ver: 01/16/2019

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Released to Imaging: 1/10/2025 9:43:03 AM

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

39505

eurofins | Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-8032-1136 13
Client Contact: Mr Morgan Jordan	Phone: 575-942-0292	E-Mail: John Builes@et.eurofinsus com	State of Origin: NM	Page: Page ~~13 of 14~~ 2 of 2
Company: ARCADIS US Inc	PWSID:			Job #
Address: 1004 North Big Spring Suite 300	Due Date Requested			
City: Midland	TAT Requested (days): Standard			
State Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #: Purchase Order Requested			
Email: douglas jordan@arcadis com	WO #:			
Project Name: WLN 23	Project #: ~~88002020~~ 30209652			
Site: Lovington, NM	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M - Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	300_ORGFM_28D	Total Number of containers	Special Instructions/Note.
			Preservation Code:			N				
SB-15-S-2'-240213	2/13/24	1125	G	Solid			X	X		
SB-16-S-1'-240213		1135		Solid				X		
SB-16-S-2'-240213		1140		Solid			X	X		
SB-17-S-1'-240213		1145		Solid				X		
SB-17-S-2'-240213		1150		Solid			X	X		
SB-18-S-1-240213		1200		Solid				X		
SB-18-S-3'-240213	"	1205	"	Solid			X	X		
				Solid						
				Solid						
				Solid						
				Solid						

Loc: 880
39505

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time: 2/15/24 1530	Company: Arcadis	Received by: Dalleny Gonzales	Date/Time	Company
Relinquished by:	Date/Time:	Company	Received by: Dalleny Gonzales	Date/Time	Company
Relinquished by	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 3.2 | 3.1

Ver: 01/16/2019

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2/26/2024
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Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-39505-1
SDG Number: Couington,NM

Login Number: 39505
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: Mr. Morgan Jordan
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 2/27/2024 12:21:01 PM

JOB DESCRIPTION

WLU 23
Lovington NM

JOB NUMBER

880-39545-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
2/27/2024 12:21:01 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: ARCADIS US Inc
Project/Site: WLU 23

Laboratory Job ID: 880-39545-1
SDG: Lovington NM

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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.

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: ARCADIS US Inc
Project: WLU 23

Job ID: 880-39545-1

Job ID: 880-39545-1 Eurofins Midland

Job Narrative
880-39545-1

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 2/19/2024 9:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-19-S-1'-240215 (880-39545-1), SB-19-S-2'-240215 (880-39545-2), SB-20-S-1'-240215 (880-39545-3), SB-20-S-2'-240215 (880-39545-4), SB-21-S-1'-240215 (880-39545-5), SB-21-S-2'-240215 (880-39545-6), SB-22-S-1'-240215 (880-39545-7) and SB-22-S-2'-240215 (880-39545-8).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SB-20-S-2'-240215 (880-39545-4), SB-21-S-2'-240215 (880-39545-6) and (CCV 880-73994/33). 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: (LCSD 880-73997/2-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-73653 and analytical batch 880-73706 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-19-S-2'-240215 (880-39545-2), SB-21-S-2'-240215 (880-39545-6), SB-22-S-2'-240215 (880-39545-8), (880-39545-A-2-C MS) and (880-39545-A-2-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-73653 and analytical batch 880-73706 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The method blank for preparation batch 880-73653 and analytical batch 880-73706 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-73613 and analytical batch 880-73695 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The method blank for preparation batch 880-73613 and 880-73613 and analytical batch

Case Narrative

Client: ARCADIS US Inc
Project: WLU 23

Job ID: 880-39545-1

Job ID: 880-39545-1 (Continued) Eurofins Midland

880-73695 contained Chloride above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-19-S-1'-240215

Lab Sample ID: 880-39545-1
Matrix: Solid
Date Collected: 02/15/24 13:00
Date Received: 02/19/24 09:05

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.6	B F1	4.97	0.393	mg/Kg			02/21/24 08:45	1

Client Sample ID: SB-19-S-2'-240215

Lab Sample ID: 880-39545-2
Matrix: Solid
Date Collected: 02/15/24 13:10
Date Received: 02/19/24 09:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/26/24 08:31	02/26/24 19:57	1
Toluene	0.00103	J	0.00200	0.000456	mg/Kg		02/26/24 08:31	02/26/24 19:57	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/26/24 08:31	02/26/24 19:57	1
m-Xylene & p-Xylene	0.00133	J	0.00400	0.00101	mg/Kg		02/26/24 08:31	02/26/24 19:57	1
o-Xylene	0.000530	J	0.00200	0.000344	mg/Kg		02/26/24 08:31	02/26/24 19:57	1
Xylenes, Total	0.00186	J	0.00400	0.00101	mg/Kg		02/26/24 08:31	02/26/24 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*02/26/24 08:31*	*02/26/24 19:57*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/26/24 08:31*	*02/26/24 19:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00289	J	0.00400	0.00101	mg/Kg			02/26/24 19:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	78.2		49.9	15.0	mg/Kg			02/21/24 21:26	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	46.3	J B	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 21:26	1
Diesel Range Organics (Over C10-C28)	31.9	J F1	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 21:26	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*02/20/24 11:29*	*02/21/24 21:26*	*1*
o-Terphenyl	*152*	*S1+*	*70 - 130*	*02/20/24 11:29*	*02/21/24 21:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.0	B	5.01	0.396	mg/Kg			02/21/24 09:05	1

Client Sample ID: SB-20-S-1'-240215

Lab Sample ID: 880-39545-3
Matrix: Solid
Date Collected: 02/15/24 13:40
Date Received: 02/19/24 09:05

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114	B	4.96	0.392	mg/Kg			02/21/24 09:12	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-20-S-2'-240215

Lab Sample ID: 880-39545-4
Matrix: Solid
Date Collected: 02/15/24 13:50
Date Received: 02/19/24 09:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00199	0.000383	mg/Kg		02/26/24 08:31	02/26/24 20:17	1
Toluene	**0.00107**	**J**	0.00199	0.000454	mg/Kg		02/26/24 08:31	02/26/24 20:17	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		02/26/24 08:31	02/26/24 20:17	1
m-Xylene & p-Xylene	**0.00159**	**J**	0.00398	0.00101	mg/Kg		02/26/24 08:31	02/26/24 20:17	1
o-Xylene	**0.000507**	**J**	0.00199	0.000343	mg/Kg		02/26/24 08:31	02/26/24 20:17	1
Xylenes, Total	**0.00210**	**J**	0.00398	0.00101	mg/Kg		02/26/24 08:31	02/26/24 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*02/26/24 08:31*	*02/26/24 20:17*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*02/26/24 08:31*	*02/26/24 20:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00317**	**J**	0.00398	0.00101	mg/Kg			02/26/24 20:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**71.0**		50.2	15.0	mg/Kg			02/21/24 22:38	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	**40.8**	**J B**	50.2	15.0	mg/Kg		02/20/24 11:29	02/21/24 22:38	1
Diesel Range Organics (Over C10-C28)	**30.2**	**J**	50.2	15.0	mg/Kg		02/20/24 11:29	02/21/24 22:38	1
OII Range Organics (Over C28-C36)	<15.0	U	50.2	15.0	mg/Kg		02/20/24 11:29	02/21/24 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*02/20/24 11:29*	*02/21/24 22:38*	*1*
o-Terphenyl	*120*		*70 - 130*	*02/20/24 11:29*	*02/21/24 22:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1920**	**B**	25.0	1.98	mg/Kg			02/21/24 09:19	5

Client Sample ID: SB-21-S-1'-240215

Lab Sample ID: 880-39545-5
Matrix: Solid
Date Collected: 02/15/24 14:40
Date Received: 02/19/24 09:05

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**358**	**B**	5.05	0.399	mg/Kg			02/21/24 09:26	1

Client Sample ID: SB-21-S-2'-240215

Lab Sample ID: 880-39545-6
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/19/24 09:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000387	U	0.00201	0.000387	mg/Kg		02/26/24 08:31	02/26/24 20:38	1
Toluene	**0.00141**	**J**	0.00201	0.000458	mg/Kg		02/26/24 08:31	02/26/24 20:38	1
Ethylbenzene	**0.000867**	**J**	0.00201	0.000567	mg/Kg		02/26/24 08:31	02/26/24 20:38	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-21-S-2'-240215

Lab Sample ID: 880-39545-6
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/19/24 09:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	0.00218	J	0.00402	0.00101	mg/Kg		02/26/24 08:31	02/26/24 20:38	1
o-Xylene	0.000791	J	0.00201	0.000345	mg/Kg		02/26/24 08:31	02/26/24 20:38	1
Xylenes, Total	0.00297	J	0.00402	0.00101	mg/Kg		02/26/24 08:31	02/26/24 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*02/26/24 08:31*	*02/26/24 20:38*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/26/24 08:31*	*02/26/24 20:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00525		0.00402	0.00101	mg/Kg			02/26/24 20:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	73.6		49.9	15.0	mg/Kg			02/21/24 23:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	45.6	J B	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 23:02	1
Diesel Range Organics (Over C10-C28)	28.0	J	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 23:02	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		02/20/24 11:29	02/21/24 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*28*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/21/24 23:02*	*1*
o-Terphenyl	*21*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/21/24 23:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2630	B	24.9	1.97	mg/Kg			02/21/24 09:46	5

Client Sample ID: SB-22-S-1'-240215

Lab Sample ID: 880-39545-7
Matrix: Solid
Date Collected: 02/15/24 15:20
Date Received: 02/19/24 09:05

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109	B	4.97	0.393	mg/Kg			02/21/24 09:53	1

Client Sample ID: SB-22-S-2'-240215

Lab Sample ID: 880-39545-8
Matrix: Solid
Date Collected: 02/15/24 15:30
Date Received: 02/19/24 09:05

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000388	U	0.00202	0.000388	mg/Kg		02/26/24 08:31	02/26/24 20:59	1
Toluene	0.000599	J	0.00202	0.000460	mg/Kg		02/26/24 08:31	02/26/24 20:59	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		02/26/24 08:31	02/26/24 20:59	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		02/26/24 08:31	02/26/24 20:59	1
o-Xylene	0.000393	J	0.00202	0.000347	mg/Kg		02/26/24 08:31	02/26/24 20:59	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		02/26/24 08:31	02/26/24 20:59	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-22-S-2'-240215
Date Collected: 02/15/24 15:30
Date Received: 02/19/24 09:05

Lab Sample ID: 880-39545-8
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/26/24 08:31*	*02/26/24 20:59*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/26/24 08:31*	*02/26/24 20:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00403	0.00102	mg/Kg			02/26/24 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**72.1**		49.7	14.9	mg/Kg			02/21/24 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**46.9**	**J B**	49.7	14.9	mg/Kg		02/20/24 11:29	02/21/24 23:25	1
Diesel Range Organics (Over C10-C28)	**25.2**	**J**	49.7	14.9	mg/Kg		02/20/24 11:29	02/21/24 23:25	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.7	14.9	mg/Kg		02/20/24 11:29	02/21/24 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/21/24 23:25*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*02/20/24 11:29*	*02/21/24 23:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1680**	**B**	24.8	1.96	mg/Kg			02/21/24 09:59	5

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-39545-2	SB-19-S-2'-240215	107	96
880-39545-4	SB-20-S-2'-240215	135 S1+	102
880-39545-6	SB-21-S-2'-240215	138 S1+	98
880-39545-8	SB-22-S-2'-240215	119	103
LCS 880-73997/1-A	Lab Control Sample	118	99
LCSD 880-73997/2-A	Lab Control Sample Dup	135 S1+	101
MB 880-73997/5-A	Method Blank	125	110

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)
880-39545-2	SB-19-S-2'-240215	142 S1+	152 S1+
880-39545-2 MS	SB-19-S-2'-240215	74	68 S1-
880-39545-2 MSD	SB-19-S-2'-240215	74	68 S1-
880-39545-4	SB-20-S-2'-240215	113	120
880-39545-6	SB-21-S-2'-240215	28 S1-	21 S1-
880-39545-8	SB-22-S-2'-240215	63 S1-	60 S1-
LCS 880-73653/2-A	Lab Control Sample	88	88
LCSD 880-73653/3-A	Lab Control Sample Dup	88	87
MB 880-73653/1-A	Method Blank	148 S1+	159 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73997/5-A
Matrix: Solid
Analysis Batch: 73994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73997

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/26/24 08:31	02/26/24 14:28	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/26/24 08:31	02/26/24 14:28	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/26/24 08:31	02/26/24 14:28	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/26/24 08:31	02/26/24 14:28	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/26/24 08:31	02/26/24 14:28	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/26/24 08:31	02/26/24 14:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*02/26/24 08:31*	*02/26/24 14:28*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/26/24 08:31*	*02/26/24 14:28*	*1*

Lab Sample ID: LCS 880-73997/1-A
Matrix: Solid
Analysis Batch: 73994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73997

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1132		mg/Kg		113	70 - 130		
Toluene			0.100	0.1070		mg/Kg		107	70 - 130		
Ethylbenzene			0.100	0.1069		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.1889		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.1042		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-73997/2-A
Matrix: Solid
Analysis Batch: 73994

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73997

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1119		mg/Kg		112	70 - 130	1	35
Toluene			0.100	0.1024		mg/Kg		102	70 - 130	4	35
Ethylbenzene			0.100	0.1185		mg/Kg		118	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.2601		mg/Kg		130	70 - 130	32	35
o-Xylene			0.100	0.1194		mg/Kg		119	70 - 130	14	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

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

Lab Sample ID: MB 880-73653/1-A
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73653

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.68	J	50.0	15.0	mg/Kg		02/20/24 11:29	02/21/24 20:15	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		02/20/24 11:29	02/21/24 20:15	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		02/20/24 11:29	02/21/24 20:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*02/20/24 11:29*	*02/21/24 20:15*	*1*
o-Terphenyl	*159*	*S1+*	*70 - 130*	*02/20/24 11:29*	*02/21/24 20:15*	*1*

Lab Sample ID: LCS 880-73653/2-A
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73653

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	944.0		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	1000	979.2		mg/Kg		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Lab Sample ID: LCSD 880-73653/3-A
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73653

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	964.6		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	984.1		mg/Kg		98	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*88*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: 880-39545-2 MS
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: SB-19-S-2'-240215
Prep Type: Total/NA
Prep Batch: 73653

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	46.3	J B	1010	1101		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	31.9	J F1	1010	665.3	F1	mg/Kg		63	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

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

Lab Sample ID: 880-39545-2 MS
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: SB-19-S-2'-240215
Prep Type: Total/NA
Prep Batch: 73653

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Lab Sample ID: 880-39545-2 MSD
Matrix: Solid
Analysis Batch: 73706

Client Sample ID: SB-19-S-2'-240215
Prep Type: Total/NA
Prep Batch: 73653

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	46.3	J B	1010	1113		mg/Kg		106	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	31.9	J F1	1010	661.7	F1	mg/Kg		63	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*74*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-73613/1-A
Matrix: Solid
Analysis Batch: 73695

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.232		5.00	0.395	mg/Kg			02/21/24 08:25	1

Lab Sample ID: LCS 880-73613/2-A
Matrix: Solid
Analysis Batch: 73695

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	237.8		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-73613/3-A
Matrix: Solid
Analysis Batch: 73695

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	237.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-39545-1 MS
Matrix: Solid
Analysis Batch: 73695

Client Sample ID: SB-19-S-1'-240215
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	79.6	B F1	249	290.9	F1	mg/Kg		85	90 - 110		

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-39545-1 MSD
Matrix: Solid
Analysis Batch: 73695

Client Sample ID: SB-19-S-1'-240215
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	79.6	B F1	249	293.8	F1	mg/Kg		86	90 - 110	1	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

GC VOA

Analysis Batch: 73994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	8021B	73997
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	8021B	73997
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	8021B	73997
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	8021B	73997
MB 880-73997/5-A	Method Blank	Total/NA	Solid	8021B	73997
LCS 880-73997/1-A	Lab Control Sample	Total/NA	Solid	8021B	73997
LCSD 880-73997/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73997

Prep Batch: 73997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	5030B	
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	5030B	
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	5030B	
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	5030B	
MB 880-73997/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-73997/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-73997/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 74157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	Total BTEX	
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	Total BTEX	
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	Total BTEX	
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 73653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	8015NM Prep	
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	8015NM Prep	
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	8015NM Prep	
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	8015NM Prep	
MB 880-73653/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-73653/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-73653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-39545-2 MS	SB-19-S-2'-240215	Total/NA	Solid	8015NM Prep	
880-39545-2 MSD	SB-19-S-2'-240215	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	8015B NM	73653
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	8015B NM	73653
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	8015B NM	73653
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	8015B NM	73653
MB 880-73653/1-A	Method Blank	Total/NA	Solid	8015B NM	73653
LCS 880-73653/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	73653
LCSD 880-73653/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	73653
880-39545-2 MS	SB-19-S-2'-240215	Total/NA	Solid	8015B NM	73653
880-39545-2 MSD	SB-19-S-2'-240215	Total/NA	Solid	8015B NM	73653

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

GC Semi VOA

Analysis Batch: 73839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-2	SB-19-S-2'-240215	Total/NA	Solid	8015 NM	
880-39545-4	SB-20-S-2'-240215	Total/NA	Solid	8015 NM	
880-39545-6	SB-21-S-2'-240215	Total/NA	Solid	8015 NM	
880-39545-8	SB-22-S-2'-240215	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 73613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-1	SB-19-S-1'-240215	Soluble	Solid	DI Leach	
880-39545-2	SB-19-S-2'-240215	Soluble	Solid	DI Leach	
880-39545-3	SB-20-S-1'-240215	Soluble	Solid	DI Leach	
880-39545-4	SB-20-S-2'-240215	Soluble	Solid	DI Leach	
880-39545-5	SB-21-S-1'-240215	Soluble	Solid	DI Leach	
880-39545-6	SB-21-S-2'-240215	Soluble	Solid	DI Leach	
880-39545-7	SB-22-S-1'-240215	Soluble	Solid	DI Leach	
880-39545-8	SB-22-S-2'-240215	Soluble	Solid	DI Leach	
MB 880-73613/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-73613/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-73613/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-39545-1 MS	SB-19-S-1'-240215	Soluble	Solid	DI Leach	
880-39545-1 MSD	SB-19-S-1'-240215	Soluble	Solid	DI Leach	

Analysis Batch: 73695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39545-1	SB-19-S-1'-240215	Soluble	Solid	300.0	73613
880-39545-2	SB-19-S-2'-240215	Soluble	Solid	300.0	73613
880-39545-3	SB-20-S-1'-240215	Soluble	Solid	300.0	73613
880-39545-4	SB-20-S-2'-240215	Soluble	Solid	300.0	73613
880-39545-5	SB-21-S-1'-240215	Soluble	Solid	300.0	73613
880-39545-6	SB-21-S-2'-240215	Soluble	Solid	300.0	73613
880-39545-7	SB-22-S-1'-240215	Soluble	Solid	300.0	73613
880-39545-8	SB-22-S-2'-240215	Soluble	Solid	300.0	73613
MB 880-73613/1-A	Method Blank	Soluble	Solid	300.0	73613
LCS 880-73613/2-A	Lab Control Sample	Soluble	Solid	300.0	73613
LCSD 880-73613/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	73613
880-39545-1 MS	SB-19-S-1'-240215	Soluble	Solid	300.0	73613
880-39545-1 MSD	SB-19-S-1'-240215	Soluble	Solid	300.0	73613

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-19-S-1'-240215

Lab Sample ID: 880-39545-1
Matrix: Solid
Date Collected: 02/15/24 13:00
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		1			73695	02/21/24 08:45	CH	EET MID

Client Sample ID: SB-19-S-2'-240215

Lab Sample ID: 880-39545-2
Matrix: Solid
Date Collected: 02/15/24 13:10
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	73997	02/26/24 08:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73994	02/26/24 19:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74157	02/26/24 19:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			73839	02/21/24 21:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/21/24 21:26	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		1			73695	02/21/24 09:05	CH	EET MID

Client Sample ID: SB-20-S-1'-240215

Lab Sample ID: 880-39545-3
Matrix: Solid
Date Collected: 02/15/24 13:40
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		1			73695	02/21/24 09:12	CH	EET MID

Client Sample ID: SB-20-S-2'-240215

Lab Sample ID: 880-39545-4
Matrix: Solid
Date Collected: 02/15/24 13:50
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	73997	02/26/24 08:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73994	02/26/24 20:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74157	02/26/24 20:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			73839	02/21/24 22:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/21/24 22:38	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		5			73695	02/21/24 09:19	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Client Sample ID: SB-21-S-1'-240215

Lab Sample ID: 880-39545-5
Matrix: Solid
Date Collected: 02/15/24 14:40
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		1			73695	02/21/24 09:26	CH	EET MID

Client Sample ID: SB-21-S-2'-240215

Lab Sample ID: 880-39545-6
Matrix: Solid
Date Collected: 02/15/24 14:50
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	73997	02/26/24 08:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73994	02/26/24 20:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74157	02/26/24 20:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			73839	02/21/24 23:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/21/24 23:02	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		5			73695	02/21/24 09:46	CH	EET MID

Client Sample ID: SB-22-S-1'-240215

Lab Sample ID: 880-39545-7
Matrix: Solid
Date Collected: 02/15/24 15:20
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		1			73695	02/21/24 09:53	CH	EET MID

Client Sample ID: SB-22-S-2'-240215

Lab Sample ID: 880-39545-8
Matrix: Solid
Date Collected: 02/15/24 15:30
Date Received: 02/19/24 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	73997	02/26/24 08:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73994	02/26/24 20:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			74157	02/26/24 20:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			73839	02/21/24 23:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	73653	02/20/24 11:29	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73706	02/21/24 23:25	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	73613	02/20/24 08:47	SA	EET MID
Soluble	Analysis	300.0		5			73695	02/21/24 09:59	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	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: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: ARCADIS US Inc
Project/Site: WLU 23

Job ID: 880-39545-1
SDG: Lovington NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-39545-1	SB-19-S-1'-240215	Solid	02/15/24 13:00	02/19/24 09:05
880-39545-2	SB-19-S-2'-240215	Solid	02/15/24 13:10	02/19/24 09:05
880-39545-3	SB-20-S-1'-240215	Solid	02/15/24 13:40	02/19/24 09:05
880-39545-4	SB-20-S-2'-240215	Solid	02/15/24 13:50	02/19/24 09:05
880-39545-5	SB-21-S-1'-240215	Solid	02/15/24 14:40	02/19/24 09:05
880-39545-6	SB-21-S-2'-240215	Solid	02/15/24 14:50	02/19/24 09:05
880-39545-7	SB-22-S-1'-240215	Solid	02/15/24 15:20	02/19/24 09:05
880-39545-8	SB-22-S-2'-240215	Solid	02/15/24 15:30	02/19/24 09:05

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Eurofins Midland
1211 W Florida Ave
Midland, TX 79701
Phone (432) 704-5440

Chain of Custody Record

880-39545 Chain of Custody

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No:	Page: Page ~~14 of 14~~ 1 of 1
Client Contact: Mr Morgan Jordan	Phone: 575-942-0292	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): Standard			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #: Purchase Order Requested			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: WLH 23	Project #: ~~88002020~~ 30209652			
Site: Lovington, NM	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	300_ORGFM_28D	Total Number of containers	Special Instructions/Note:
		Preservation Code:					N			
SB-19-S-1'-240215	2/15/24	1300	G	Solid				X		
SB-19-S-2'-240215		1310					X	X		
SB-20-S-1'-240215		1340						X		
SB-20-S-2'-240215		1350					X	X		
SB-21-S-1'-240215		1440						X		
SB-21-S-2'-240215		1450					X	X		
SB-22-S-1'-240215		1520						X		
SB-22-S-2'-240215	X	1530	X	X			X	X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		2/16/24 1545	Arcadis	Dalley Gonzales	2/19/24	
2	Relinquished by: Dalley Gonzales	Date/Time:	Company	Received by	Date/Time: 905	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 3.0 | 2.9

Received by OCD: 1/9/2025 1:18:24 PM
Released to Imaging: 1/10/2025 9:43:03 AM
2/27/2024
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Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-39545-1
SDG Number: Lovington NM

Login Number: 39545
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	

Appendix F

NMOCD Correspondence

From: Jordan, Morgan
Sent: Monday, May 6, 2024 10:52 AM
To: Krueger, Lauren
Subject: FW: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

Thank You,

Morgan Jordan | Project Manager | douglas.jordan@arcadis.com
Arcadis | Arcadis U.S., Inc.
98 San Jacinto Blvd, Suite 414 | Austin, TX | 78701 | USA
M. +1 281 644 9437

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ARCADIS Design & Consultancy for natural and built assets

Be green, leave it on the screen.

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Thursday, May 2, 2024 12:54 PM
To: Foord, Scott <William.Foord@arcadis.com>
Cc: Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

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Good Afternoon Scott,

The incidents below have been granted a **final** 60 day extension of July 24, 2024. Please submit all reports via the OCD permitting portal by July 24, 2024.

1. Inc. No. nLWJ1016954547 – WLU East Test Sat (State Land) - Additional soil assessment activities completed in February and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
2. Inc. No. nPAC0614230052 & nPAC0718639351 – WLU Water Inj Station (State Land) - Additional soil assessment activities completed in January and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
3. Inc. No. nGRL1006731469 – WLU 41 (Private) - Additional soil assessment activities conducted in January and February 2024. Vertical delineation was not completed, additional assessment will be required and will be conducted within 30 days. A Site Characterization and Remediation Work Plan will be prepared and submitted to NMOCD following completion of assessment activities within the next 30 days.
4. Inc. No. nPAC0708526071 – WLU 47 (Private) - Additional soil assessment activities completed in January and February 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.

5. Inc. No. nPAC0617348887 – WLU 56 (Private) - The latest soil assessment was completed in March 2023 and a Site Characterization and Remediation Work Plan was submitted to NMOCD in December 2023. The 2023 Site Characterization and Remediation Work Plan was rejected and is currently being revised to address NMOCD comments for resubmittal to the Portal.
6. Inc. No. nTO1424533890 – Keel Fed Battery (BLM) - Closure request report was submitted in December of 2023 and denied by NMOCD on December 22, 2023. The Closure Request Report is currently being revised to address NMOCD comments and will be resubmitted to the Portal.
7. Inc. No. nKJ1515353221 – Moran 2-6 Tank Battery (State Land) – Closure request report was submitted in December of 2023 and denied by NMOCD on December 22, 2023. The Closure Request Report is currently being revised to address NMOCD comments and will be resubmitted to the Portal.

Ashley Maxwell • Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.635.5000 | Ashley.Maxwell@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Foord, Scott <William.Foord@arcadis.com>
Sent: Thursday, May 2, 2024 11:02 AM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

Ashley,

Just following up. Please let me know if you have any questions or need anything additional information.

Thanks,
Scott
Direct 713-953-4853
Cell 281-725-7477

From: Foord, Scott
Sent: Monday, April 29, 2024 9:13 AM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

Ashley,

Please see responses below and let me know if you need any additional information.

1. Inc. No. nLWJ1016954547 – WLU East Test Sat (State Land) - Additional soil assessment activities completed in February and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
2. Inc. No. nPAC0614230052 & nPAC0718639351 – WLU Water Inj Station (State Land) - Additional soil assessment activities completed in January and April 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
3. Inc. No. nGRL1006731469 – WLU 41 (Private) - Additional soil assessment activities conducted in January and February 2024. Vertical delineation was not completed, additional assessment will be required and will be conducted within 30 days. A Site Characterization and Remediation Work Plan will be prepared and submitted to NMOCD following completion of assessment activities within the next 30 days.
4. Inc. No. nPAC0708526071 – WLU 47 (Private) - Additional soil assessment activities completed in January and February 2024. The Site Characterization and Remediation Work Plan is currently under development and will be submitted to NMOCD.
5. Inc. No. nPAC0617348887 – WLU 56 (Private) - The latest soil assessment was completed in March 2023 and a Site Characterization and Remediation Work Plan was submitted to NMOCD in December 2023. The 2023 Site Characterization and Remediation Work Plan was rejected and is currently being revised to address NMOCD comments for resubmittal to the Portal.
6. Inc. No. nTO1424533890 – Keel Fed Battery (BLM) - Closure request report was submitted in December of 2023 and denied by NMOCD on December 22, 2023. The Closure Request Report is currently being revised to address NMOCD comments and will be resubmitted to the Portal.
7. Inc. No. nKJ1515353221 – Moran 2-6 Tank Battery (State Land) – Closure request report was submitted in December of 2023 and denied by NMOCD on December 22, 2023. The Closure Request Report is currently being revised to address NMOCD comments and will be resubmitted to the Portal.

Thanks,
Scott
Direct 713-953-4853
Cell 281-725-7477

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Wednesday, April 24, 2024 9:27 AM
To: Foord, Scott <William.Foord@arcadis.com>
Cc: Chrisbrand@chevron.com; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: RE: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

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Good Morning,

Please see the notes below for the requested extensions:

1. Inc. No. nLWJ1016954547 – WLU East Test Sat (State Land)-Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.
2. Inc. No. nPAC0614230052 & nPAC0718639351 – WLU Water Inj Station (State Land)- Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.

3. Inc. No. nGRL1006731469 – WLU 41 (Private)- Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.
4. Inc. No. nPAC0712954774 – WLU 47 (Private)-Incident nPAC0712954774 is a duplicate incident. Refer to incident NPAC0708526071 for current status.
5. Inc. No. nPAC0617348887 – WLU 56 (Private)- Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.
6. Inc. No. nTO1424533890 – Keel Fed Battery (BLM)- Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.
7. Inc. No. nKJ1515353221 – Moran 2-6 Tank Battery (State Land)- Before an extension can be granted, describe what work has been completed and specify why work has not been completed within the initial time granted.

Ashley Maxwell • Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.635.5000 | Ashley.Maxwell@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, April 24, 2024 8:04 AM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Subject: Fw: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

FYI. All are under your review except for the second one.

Nelson V

From: Foord, Scott <William.Foord@arcadis.com>
Sent: Wednesday, April 3, 2024 3:43 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Brand, Chris M <Chrisbrand@chevron.com>; Michelson, Jason C <jmichelson@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: [EXTERNAL] NMOCD Deadline Extension Requests - Chevron Sites

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

Nelson,

We would like to please request 90-day extensions on the 4/30/2024 deadlines for the following sites. Additional assessments are currently ongoing and remediation work plans or closure requests will be submitted within that timeline. We are also working with the other agencies if applicable.

1. Inc. No. nLWJ1016954547 – WLU East Test Sat (State Land)
2. Inc. No. nPAC0614230052 & nPAC0718639351 – WLU Water Inj Station (State Land)

3. Inc. No. nGRL1006731469 – WLU 41 (Private)
4. Inc. No. nPAC0712954774 – WLU 47 (Private)
5. Inc. No. nPAC0617348887 – WLU 56 (Private)
6. Inc. No. nTO1424533890 – Keel Fed Battery (BLM)
7. Inc. No. nKJ1515353221 – Moran 2-6 Tank Battery (State Land)

Thanks,
Scott

Scott Foord PG, RSO, CPM
AFS Group Service Leader
Arcadis U.S., Inc.
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Appendix B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis U.S., Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 9/26/2024 9:11:53 AM Revision 1

JOB DESCRIPTION

LPU 89
Lea County, NM

JOB NUMBER

880-47195-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
9/26/2024 9:11:53 AM
Revision 1

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Laboratory Job ID: 880-47195-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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
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: Arcadis U.S., Inc.
Project: LPU 89

Job ID: 880-47195-1

Job ID: 880-47195-1 Eurofins Midland

Job Narrative
880-47195-1

REVISION

The report being provided is a revision of the original report sent on 8/23/2024. The report (revision 1) is being revised due to Revised report to split samples into multiple reports per client request..

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 8/13/2024 10:30 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 3.1°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SW-3-2' (880-47195-1), SW-4-2' (880-47195-2), B-1-4' (880-47195-3), B-2-4' (880-47195-4), B-3-4' (880-47195-5), B-4-4' (880-47195-6), B-5-4' (880-47195-7), B-6-4' (880-47195-8), B-7-4' (880-47195-9), B-8-4' (880-47195-10), B-9-4' (880-47195-11), B-10-4' (880-47195-12), B-11-4' (880-47195-13), B-12-4' (880-47195-14), B-13-4' (880-47195-15), B-14-4' (880-47195-16), B-15-4' (880-47195-17), B-16-4' (880-47195-18), B-17-4' (880-47195-19), B-18-4' (880-47195-20), B-19-4' (880-47195-21), B-20-4' (880-47195-22), B-21-4' (880-47195-23), B-22-4' (880-47195-24), B-23-4' (880-47195-25), B-24-4' (880-47195-26), B-25-4' (880-47195-27), B-26-4' (880-47195-28), B-27-4' (880-47195-29), B-28-4' (880-47195-30), B-29-4' (880-47195-31), B-30-4' (880-47195-32), B-31-4' (880-47195-33), B-32-4' (880-47195-34), B-34-4' (880-47195-35), B-35-4' (880-47195-36), B-36-4' (880-47195-37), B-37-4' (880-47195-38), B-38-4' (880-47195-39), B-39-4' (880-47195-40), B-39-4' (880-47195-41) and Backfill (880-47195-42).

GC VOA
Method 8021B: The laboratory control sample duplicate (LCSD) for preparation batch 880-88376 and analytical batch 880-88350 recovered outside control limits for the following analytes: o-Xylene. 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 surrogate recovery for the blank associated with preparation batch 880-88376 and analytical batch 880-88350 was outside the upper control limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-88366 and analytical batch 880-88351 was outside control limits. Sample non-homogeneity is suspected.

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

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: B-17-4' (880-47195-19). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-88295 recovered above the upper control limit for Diesel Range Organics (Over C10-C28) and 1-Chlorooctane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-22-4' (880-47195-24), B-26-4' (880-47195-28), B-36-4' (880-47195-37), (880-47112-A-1-E MS), (880-47112-A-1-F MSD) and (880-47195-A-21-E MS). Evidence of matrix interferences is not obvious.

Eurofins Midland

Case Narrative

Client: Arcadis U.S., Inc.
Project: LPU 89

Job ID: 880-47195-1

Job ID: 880-47195-1 (Continued) Eurofins Midland

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-88308 and analytical batch 880-88292 was outside the upper control limits.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: B-20-4' (880-47195-22), B-23-4' (880-47195-25), B-24-4' (880-47195-26), B-27-4' (880-47195-29), B-31-4' (880-47195-33), B-34-4' (880-47195-35), B-37-4' (880-47195-38) and B-39-4' (880-47195-40). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-88292 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-88305 and analytical batch 880-88322 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-88305 and analytical batch 880-88322 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Client Sample ID: Backfill

Date Collected: 08/12/24 15:20
Date Received: 08/13/24 10:30

Lab Sample ID: 880-47195-42

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		08/14/24 09:38	08/14/24 16:46	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/14/24 09:38	08/14/24 16:46	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		08/14/24 09:38	08/14/24 16:46	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		08/14/24 09:38	08/14/24 16:46	1
o-Xylene	<0.00159	U *+	0.00201	0.00159	mg/Kg		08/14/24 09:38	08/14/24 16:46	1
Xylenes, Total	<0.00230	U *+	0.00402	0.00230	mg/Kg		08/14/24 09:38	08/14/24 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*08/14/24 09:38*	*08/14/24 16:46*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*08/14/24 09:38*	*08/14/24 16:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00402	0.00230	mg/Kg			08/14/24 16:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			08/13/24 21:36	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	<14.5	U	49.8	14.5	mg/Kg		08/12/24 08:30	08/13/24 21:36	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		08/12/24 08:30	08/13/24 21:36	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		08/12/24 08:30	08/13/24 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*08/12/24 08:30*	*08/13/24 21:36*	*1*
o-Terphenyl	*108*		*70 - 130*	*08/12/24 08:30*	*08/13/24 21:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.7**		5.00	0.395	mg/Kg			08/13/24 20:38	1

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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)								
880-47195-42	Backfill	98	115								

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
880-47195-42	Backfill	106	108								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-88365/5-A
Matrix: Solid
Analysis Batch: 88352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		08/14/24 09:11	08/14/24 12:08	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/14/24 09:11	08/14/24 12:08	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/14/24 09:11	08/14/24 12:08	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/14/24 09:11	08/14/24 12:08	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/14/24 09:11	08/14/24 12:08	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/14/24 09:11	08/14/24 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*08/14/24 09:11*	*08/14/24 12:08*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/14/24 09:11*	*08/14/24 12:08*	*1*

Lab Sample ID: LCS 880-88365/1-A
Matrix: Solid
Analysis Batch: 88352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88365

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1150		mg/Kg		115	70 - 130		
Toluene			0.100	0.1039		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1074		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2287		mg/Kg		114	70 - 130		
o-Xylene			0.100	0.1124		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-88365/2-A
Matrix: Solid
Analysis Batch: 88352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88365

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1220		mg/Kg		122	70 - 130	6	35
Toluene			0.100	0.1099		mg/Kg		110	70 - 130	6	35
Ethylbenzene			0.100	0.1133		mg/Kg		113	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2409		mg/Kg		120	70 - 130	5	35
o-Xylene			0.100	0.1183		mg/Kg		118	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 880-88366/5-A
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		08/14/24 09:22	08/14/24 13:04	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/14/24 09:22	08/14/24 13:04	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-88366/5-A
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/14/24 09:22	08/14/24 13:04	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/14/24 09:22	08/14/24 13:04	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/14/24 09:22	08/14/24 13:04	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/14/24 09:22	08/14/24 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*08/14/24 09:22*	*08/14/24 13:04*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*08/14/24 09:22*	*08/14/24 13:04*	*1*

Lab Sample ID: LCS 880-88366/1-A
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88366

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1012		mg/Kg		101	70 - 130
Toluene	0.100	0.09407		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.1021		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1016		mg/Kg		102	70 - 130

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

Lab Sample ID: LCSD 880-88366/2-A
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88366

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1052		mg/Kg		105	70 - 130	4	35
Toluene	0.100	0.09693		mg/Kg		97	70 - 130	3	35
Ethylbenzene	0.100	0.1030		mg/Kg		103	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2037		mg/Kg		102	70 - 130	1	35
o-Xylene	0.100	0.1008		mg/Kg		101	70 - 130	1	35

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

Lab Sample ID: 880-47195-14 MS
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: B-12-4'
Prep Type: Total/NA
Prep Batch: 88366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00140	U	0.100	0.08366		mg/Kg		84	70 - 130
Toluene	<0.00201	U	0.100	0.09580		mg/Kg		96	70 - 130
Ethylbenzene	<0.00109	U	0.100	0.08670		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00229	U F2	0.200	0.1479		mg/Kg		74	70 - 130

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: 880-47195-14 MS
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: B-12-4'
Prep Type: Total/NA
Prep Batch: 88366

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00159	U F2	0.100	0.07387		mg/Kg		74	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 880-47195-14 MSD
Matrix: Solid
Analysis Batch: 88351

Client Sample ID: B-12-4'
Prep Type: Total/NA
Prep Batch: 88366

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00140	U	0.100	0.1093		mg/Kg		109	70 - 130	27	35
Toluene	<0.00201	U	0.100	0.09343		mg/Kg		93	70 - 130	3	35
Ethylbenzene	<0.00109	U	0.100	0.1113		mg/Kg		111	70 - 130	25	35
m-Xylene & p-Xylene	<0.00229	U F2	0.200	0.2192	F2	mg/Kg		110	70 - 130	39	35
o-Xylene	<0.00159	U F2	0.100	0.1072	F2	mg/Kg		107	70 - 130	37	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: MB 880-88376/5-A
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00141	U	0.00202	0.00141	mg/Kg		08/14/24 09:38	08/14/24 13:33	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		08/14/24 09:38	08/14/24 13:33	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		08/14/24 09:38	08/14/24 13:33	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		08/14/24 09:38	08/14/24 13:33	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		08/14/24 09:38	08/14/24 13:33	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		08/14/24 09:38	08/14/24 13:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*162*	*S1+*	*70 - 130*	*08/14/24 09:38*	*08/14/24 13:33*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*08/14/24 09:38*	*08/14/24 13:33*	*1*

Lab Sample ID: LCS 880-88376/1-A
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1203		mg/Kg		120	70 - 130
Toluene	0.100	0.1200		mg/Kg		120	70 - 130
Ethylbenzene	0.100	0.1103		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2257		mg/Kg		113	70 - 130
o-Xylene	0.100	0.1257		mg/Kg		126	70 - 130

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-88376/1-A
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88376

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

Lab Sample ID: LCSD 880-88376/2-A
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88376

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1214		mg/Kg		121	70 - 130	1	35
Toluene			0.100	0.1148		mg/Kg		115	70 - 130	4	35
Ethylbenzene			0.100	0.1135		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2517		mg/Kg		126	70 - 130	11	35
o-Xylene			0.100	0.1404	*+	mg/Kg		140	70 - 130	11	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-47195-34 MS
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: B-32-4'
Prep Type: Total/NA
Prep Batch: 88376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00140	U	0.100	0.1140		mg/Kg		114	70 - 130
Toluene	<0.00201	U	0.100	0.1060		mg/Kg		106	70 - 130
Ethylbenzene	<0.00109	U	0.100	0.08744		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00229	U	0.200	0.1909		mg/Kg		95	70 - 130
o-Xylene	<0.00159	U *+	0.100	0.1184		mg/Kg		118	70 - 130

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

Lab Sample ID: 880-47195-34 MSD
Matrix: Solid
Analysis Batch: 88350

Client Sample ID: B-32-4'
Prep Type: Total/NA
Prep Batch: 88376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00140	U	0.100	0.1148		mg/Kg		115	70 - 130	1	35
Toluene	<0.00201	U	0.100	0.1136		mg/Kg		114	70 - 130	7	35
Ethylbenzene	<0.00109	U	0.100	0.1049		mg/Kg		105	70 - 130	18	35
m-Xylene & p-Xylene	<0.00229	U	0.200	0.2229		mg/Kg		111	70 - 130	15	35
o-Xylene	<0.00159	U *+	0.100	0.1243		mg/Kg		124	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-88142/1-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		08/12/24 08:30	08/13/24 09:44	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		08/12/24 08:30	08/13/24 09:44	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		08/12/24 08:30	08/13/24 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*08/12/24 08:30*	*08/13/24 09:44*	*1*
o-Terphenyl	*110*		*70 - 130*	*08/12/24 08:30*	*08/13/24 09:44*	*1*

Lab Sample ID: LCS 880-88142/2-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1138		mg/Kg		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*111*		*70 - 130*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: LCSD 880-88142/3-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88142

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1072		mg/Kg		107	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1097		mg/Kg		110	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: MB 880-88307/1-A
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88307

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		08/13/24 11:53	08/14/24 00:33	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		08/13/24 11:53	08/14/24 00:33	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		08/13/24 11:53	08/14/24 00:33	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-88307/1-A
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88307

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	08/13/24 11:53	08/14/24 00:33	1
o-Terphenyl	101		70 - 130	08/13/24 11:53	08/14/24 00:33	1

Lab Sample ID: LCS 880-88307/2-A
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88307

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	923.1		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	749.8		mg/Kg		75	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: LCSD 880-88307/3-A
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88307

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	926.9		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	789.6		mg/Kg		79	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-47195-1 MS
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: SW-3-2'
Prep Type: Total/NA
Prep Batch: 88307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	998	857.4		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)	<15.1	U	998	741.2		mg/Kg		74	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	96		70 - 130

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: 880-47195-1 MSD
Matrix: Solid
Analysis Batch: 88295

Client Sample ID: SW-3-2'
Prep Type: Total/NA
Prep Batch: 88307

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	<14.5	U	998	814.1		mg/Kg		82	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<15.1	U	998	714.2		mg/Kg		72	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: MB 880-88308/1-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 88308

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		08/13/24 11:57	08/14/24 00:17	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		08/13/24 11:57	08/14/24 00:17	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		08/13/24 11:57	08/14/24 00:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*154*	*S1+*	*70 - 130*	*08/13/24 11:57*	*08/14/24 00:17*	*1*
o-Terphenyl	*160*	*S1+*	*70 - 130*	*08/13/24 11:57*	*08/14/24 00:17*	*1*

Lab Sample ID: LCS 880-88308/2-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 88308

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	981.1		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	973.9		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*97*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: LCSD 880-88308/3-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88308

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	971.7		mg/Kg		97	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	957.0		mg/Kg		96	70 - 130	2	20

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-88308/3-A
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 88308

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 880-47195-21 MS
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: B-19-4'
Prep Type: Total/NA
Prep Batch: 88308

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<14.4	U	999	870.7		mg/Kg		87	70 - 130		
Diesel Range Organics (Over C10-C28)	<15.0	U	999	918.7		mg/Kg		92	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	131	S1+	70 - 130

Lab Sample ID: 880-47195-21 MSD
Matrix: Solid
Analysis Batch: 88292

Client Sample ID: B-19-4'
Prep Type: Total/NA
Prep Batch: 88308

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	<14.4	U	999	880.9		mg/Kg		88	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.0	U	999	941.7		mg/Kg		94	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	130		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-88107/1-A
Matrix: Solid
Analysis Batch: 88304

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			08/13/24 17:54	1

Lab Sample ID: LCS 880-88107/2-A
Matrix: Solid
Analysis Batch: 88304

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.2		mg/Kg		101	90 - 110		

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-88107/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88304

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-88303/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			08/13/24 21:08	1

Lab Sample ID: LCS 880-88303/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-88303/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.2		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-47195-1 MS — **Client Sample ID: SW-3-2'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	80.5		250	340.0		mg/Kg		104	90 - 110		

Lab Sample ID: 880-47195-1 MSD — **Client Sample ID: SW-3-2'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	80.5		250	340.8		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-47195-11 MS — **Client Sample ID: B-9-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	29.0		252	280.1		mg/Kg		100	90 - 110		

Lab Sample ID: 880-47195-11 MSD — **Client Sample ID: B-9-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 88314

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	29.0		252	280.1		mg/Kg		100	90 - 110	0	20

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-88305/1-A
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			08/14/24 02:42	1

Lab Sample ID: LCS 880-88305/2-A
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	231.4		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-88305/3-A
Matrix: Solid
Analysis Batch: 88322

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	231.8		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 880-47195-21 MS
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: B-19-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	712	F1	252	933.0	F1	mg/Kg		88	90 - 110		

Lab Sample ID: 880-47195-21 MSD
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: B-19-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	712	F1	252	934.2	F1	mg/Kg		88	90 - 110	0	20

Lab Sample ID: 880-47195-31 MS
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: B-29-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1200		249	1375	4	mg/Kg		71	90 - 110		

Lab Sample ID: 880-47195-31 MSD
Matrix: Solid
Analysis Batch: 88322

Client Sample ID: B-29-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1200		249	1372	4	mg/Kg		70	90 - 110	0	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 88350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	8021B	88376

Prep Batch: 88376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	5030B	

Analysis Batch: 88491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 88142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	8015NM Prep	

Analysis Batch: 88292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	8015B NM	88142

Analysis Batch: 88405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 88107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Soluble	Solid	DI Leach	

Analysis Batch: 88304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47195-42	Backfill	Soluble	Solid	300.0	88107

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Client Sample ID: Backfill
Date Collected: 08/12/24 15:20
Date Received: 08/13/24 10:30

Lab Sample ID: 880-47195-42
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	88376	08/14/24 09:38	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88350	08/14/24 16:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88491	08/14/24 16:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			88405	08/13/24 21:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	88142	08/12/24 08:30	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88292	08/13/24 21:36	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	88107	08/13/24 11:33	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88304	08/13/24 20:38	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: Arcadis U.S., Inc.
Project/Site: LPU 89

Job ID: 880-47195-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-47195-42	Backfill	Solid	08/12/24 15:20	08/13/24 10:30

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 880-47195 Chain of Custody

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Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	281-644-9437	Email:	Douglas.Jordan@Arcadis.com

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:	LPU 89	Turn Around	
Project Number:	30209864	☒ Routine BTEX TPH ☒ Rush C1'	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Heath Boyd	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:	3.2
Total Containers:		Corrected Temperature:	3.1

Pres. Code

Parameters

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	300_ORGFM_28D	8015 Mod_NM	8021B
SW-3-2'	S	8/12/24	815		C	1	X	X	X
SW-4-2'			820			1	X	X	X
B-1-4'			825			1	X	X	X
B-2-4'			830			1	X	X	X
B-3-4'			840			1	X	X	X
B-4-4'			850			1	X	X	X
B-5-4'			900			1	X	X	X
B-6-4'			910			1	X	X	X
B-7-4'			920			1	X	X	X
B-8-4'	X	X	930		X	1	X	X	X

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed — TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U — Hg: 1631 / 245.1 / 7470 / 7471

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1	EC	8/12/24 1555	2 EC 8/12/24		8/13/24 1030
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 47195

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Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	Douglas.Jordan@Arcadis.com
Phone:	281-644-9437	Email:	

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:	LPU 89	Turn Around	
Project Number:	30209864	☒Routine ☐BTEX ☐TPH ☒Rush C1'	Pres. Code
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Heath Boyd	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_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	8021 B	300_ORGFM_28D	8015 Mod_NM	Sample Comments
B-9-4'	S	8/12/24	940		C	1	X	X	X	
B-10-4'			950			1	X	X	X	
B-11-4'			1000			1	X	X	X	
B-12-4'			1010			1	X	X	X	
B-13-4'			1020			1	X	X	X	
B-14-4'			1100			1	X	X	X	
B-15-4'			1110			1	X	X	X	
B-16-4'			1120			1	X	X	X	
B-17-4'			1130			1	X	X	X	
B-18-4'	″	″	1140		″	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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5			6		

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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: 47195

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Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	281-644-9437	Email:	Douglas.Jordan@Arcadis.com

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:	LPH 89	Turn Around	
Project Number:	30209864	☒Routine ~~☐Rush~~ TAT	C1'
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Heath Boyd	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: 300_ORG_FM-28D	8021B	8015 Mod_NM	Sample Comments
B-19-4'	S	8/12/24	1150		C	1		X	X	X	
B-20-4'			1200			1		X	X	X	
B-21-4'			1210			1		X	X	X	
B-22-4'			1220			1		X	X	X	
B-23-4'			1230			1		X	X	X	
B-24-4'			1240			1		X	X	X	
B-25-4'			1250			1		X	X	X	
B-26-4'			1300			1		X	X	X	
B-27-4'			1310			1		X	X	X	
B-28-4'	X	X	1320		X	1		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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3			4		
5			6		

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Work Order No: 47195

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Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	281-644-9437	Email:	Douglas.Jordan@Arcadis.com

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:	LPU 89	Turn Around	
Project Number:	30209864	☒Routine ☐Rush	C1
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Heath Boyd	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_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: 300.0_DEC FM_28D	8021B	8015 MOD_NM	Sample Comments
B-29-4'	S	8/14/24	1330		C	1	X	X	X	
B-30-4'			1340			1	X	X	X	
B-31-4'			1350			1	X	X	X	
B-32-4'			1400			1	X	X	X	
B-33-4'			1410			1	X	X	X	
B-34-4'			1420			1	X	X	X	
B-35-4'			1430			1	X	X	X	
B-36-4'			1440			1	X	X	X	
B-37-4'			1450			1	X	X	X	
B-38-4'	↓	↓	1500		↓	1	X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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Revised Date: 08/25/2020 Rev. 2020.2

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Work Order No: 47193

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Project Manager:	Morgan Jordan	Bill to: (if different)	
Company Name:	Arcadis	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	281-644-9437	Email:	Douglas.Jordan@Arcadis.com

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:	LPU 89	Turn Around	
Project Number:	30209864	☒Routine ☒Rush CI'	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Heath Boyd	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	300_ORGFM_28D (Parameters)	8021B	8015 MOD_NM	Sample Comments
B-39-4'	S	8/12/24	1510		C	1		X	X	X	
Backfill	S	8/12/24	1520		C	1		X	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_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	EC	8/12/24 1555	2 EC		8/13/24 1030
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-47195-1
SDG Number: Lea County, NM

Login Number: 47195
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Justin Nixon
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 12/11/2024 11:49:56 AM

JOB DESCRIPTION

east test sat

JOB NUMBER

890-7448-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
12/11/2024 11:49:56 AM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis US Inc.
Project/Site: east test sat

Laboratory Job ID: 890-7448-1

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Qualifiers

GC 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.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

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: Arcadis US Inc.
Project: east test sat

Job ID: 890-7448-1

Job ID: 890-7448-1 Eurofins Carlsbad

Job Narrative
890-7448-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 12/9/2024 3:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B-17 (890-7448-1), B-18 (890-7448-2), B-19 (890-7448-3), B-20 (890-7448-4), B-21 (890-7448-5), B-22 (890-7448-6), B-23 (890-7448-7), B-24 (890-7448-8), B-25 (890-7448-9), B-26 (890-7448-10), B-27 (890-7448-11), B-28 (890-7448-12), B-29 (890-7448-13), B-30 (890-7448-14), B-31 (890-7448-15), B-32 (890-7448-16), B-33 (890-7448-17), B-34 (890-7448-18), B-35 (890-7448-19), B-36 (890-7448-20), B-37 (890-7448-21), B-38 (890-7448-22), B-39 (890-7448-23), B-40 (890-7448-24), B-41 (890-7448-25), B-42 (890-7448-26), B-43 (890-7448-27), B-44 (890-7448-28), B-45 (890-7448-29), B-46 (890-7448-30), B-47 (890-7448-31), B-48 (890-7448-32), B-49 (890-7448-33), B-50 (890-7448-34), B-51 (890-7448-35), B-52 (890-7448-36), B-53 (890-7448-37), B-54 (890-7448-38) and B-55 (890-7448-39).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: B-37 (890-7448-21), B-38 (890-7448-22), B-39 (890-7448-23), B-40 (890-7448-24), B-41 (890-7448-25), B-42 (890-7448-26), B-43 (890-7448-27), B-44 (890-7448-28), B-45 (890-7448-29), B-46 (890-7448-30), B-47 (890-7448-31), B-48 (890-7448-32), B-49 (890-7448-33), B-50 (890-7448-34), B-51 (890-7448-35), B-52 (890-7448-36), B-53 (890-7448-37), B-54 (890-7448-38), B-55 (890-7448-39), (CCV 880-97488/2), (CCV 880-97488/33), (LCS 880-97505/1-A) and (LCSD 880-97505/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97505 and analytical batch 880-97488 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.

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-19 (890-7448-3), B-23 (890-7448-7), B-24 (890-7448-8), B-28 (890-7448-12), B-30 (890-7448-14), B-31 (890-7448-15), B-32 (890-7448-16), B-33 (890-7448-17) and B-35 (890-7448-19). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-97468 and analytical batch 880-97475 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-97468 and analytical batch 880-97475 contained 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.

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 880-97478 and analytical batch 880-97496 were outside control limits for one or more analytes. See QC Sample Results for detail.

Case Narrative

Client: Arcadis US Inc.
Project: east test sat

Job ID: 890-7448-1

Job ID: 890-7448-1 (Continued) Eurofins Carlsbad

Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

The associated samples are: B-37 (890-7448-21), B-38 (890-7448-22), B-39 (890-7448-23), B-40 (890-7448-24), B-41 (890-7448-25), B-42 (890-7448-26), B-43 (890-7448-27), B-44 (890-7448-28), B-45 (890-7448-29), B-46 (890-7448-30), (890-7448-A-21-E MS) and (890-7448-A-21-F MSD).

Method 300_ORGFM_28D - Soluble: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 880-97467 and analytical batch 880-97485 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The associated samples are: (890-7448-A-1-E MS) and (890-7448-A-1-F MSD).

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-17

Date Collected: 12/07/24 09:00
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-1
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		12/10/24 10:47	12/10/24 12:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:57	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 12:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:57	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/10/24 10:47*	*12/10/24 12:57*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 12:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/10/24 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 18:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 18:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*12/10/24 08:23*	*12/10/24 18:14*	*1*
o-Terphenyl	*84*		*70 - 130*	*12/10/24 08:23*	*12/10/24 18:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1250**		10.0		mg/Kg			12/10/24 12:25	1

Client Sample ID: B-18

Date Collected: 12/07/24 09:10
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:18	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 13:18	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:18	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:18*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:18*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-18

Date Collected: 12/07/24 09:10
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/10/24 13:18	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			12/10/24 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 19:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 19:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:02*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1560**		50.5		mg/Kg			12/10/24 12:43	5

Client Sample ID: B-19

Date Collected: 12/07/24 09:20
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-3
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		12/10/24 10:47	12/10/24 13:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 13:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 13:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 13:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 13:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:38*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/10/24 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 19:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 19:17	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-19

Date Collected: 12/07/24 09:20
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-3
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		12/10/24 08:23	12/10/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:17*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 19:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1390**		49.6		mg/Kg			12/10/24 12:49	5

Client Sample ID: B-20

Date Collected: 12/07/24 09:30
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:59	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:59	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:59	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 13:59	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 13:59	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:59*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 13:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/10/24 13:59	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			12/10/24 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 19:33	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 19:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:33*	*1*
o-Terphenyl	*70*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1220**		49.7		mg/Kg			12/10/24 12:55	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-21

Lab Sample ID: 890-7448-5

Date Collected: 12/07/24 09:40
Matrix: Solid
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 14:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 14:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 14:19	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 14:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 14:19	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/10/24 10:47*	*12/10/24 14:19*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*12/10/24 10:47*	*12/10/24 14:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/10/24 14:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 19:49	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 19:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:49*	*1*
o-Terphenyl	*78*		*70 - 130*	*12/10/24 08:23*	*12/10/24 19:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		49.9		mg/Kg			12/10/24 13:01	5

Client Sample ID: B-22

Lab Sample ID: 890-7448-6

Date Collected: 12/07/24 09:50
Matrix: Solid
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 14:40	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 14:40	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 14:40	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		12/10/24 10:47	12/10/24 14:40	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 14:40	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		12/10/24 10:47	12/10/24 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/10/24 10:47*	*12/10/24 14:40*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*12/10/24 10:47*	*12/10/24 14:40*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-22

Date Collected: 12/07/24 09:50
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-6
Matrix: Solid

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			12/10/24 14:40	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			12/10/24 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 20:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 20:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:05*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1530**		50.4		mg/Kg			12/10/24 13:18	5

Client Sample ID: B-23

Date Collected: 12/07/24 10:00
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-7
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		12/10/24 10:47	12/10/24 15:00	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 15:00	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 15:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/10/24 10:47	12/10/24 15:00	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 15:00	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/10/24 10:47	12/10/24 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:00*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:00*	*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			12/10/24 15:00	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			12/10/24 20:20	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		12/10/24 08:23	12/10/24 20:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 20:20	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-23 Lab Sample ID: 890-7448-7

Date Collected: 12/07/24 10:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:20*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 20:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1320**		49.7		mg/Kg			12/10/24 13:24	5

Client Sample ID: B-24 Lab Sample ID: 890-7448-8

Date Collected: 12/07/24 10:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 15:20	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 15:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 15:20	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/10/24 10:47	12/10/24 15:20	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 15:20	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/10/24 10:47	12/10/24 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:20*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:20*	*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			12/10/24 15:20	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			12/10/24 20:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 20:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 20:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:37*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 20:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1740**		49.8		mg/Kg			12/10/24 13:30	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-25

Date Collected: 12/07/24 10:20
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-9
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		12/10/24 10:47	12/10/24 15:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 15:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 15:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/10/24 10:47	12/10/24 15:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 15:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/10/24 10:47	12/10/24 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:41*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 15:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/10/24 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 20:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 20:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 20:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:52*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/10/24 08:23*	*12/10/24 20:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1750**		50.0		mg/Kg			12/10/24 13:36	5

Client Sample ID: B-26

Date Collected: 12/07/24 10:30
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-10
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		12/10/24 10:47	12/10/24 16:01	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 16:01	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 16:01	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/10/24 10:47	12/10/24 16:01	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 16:01	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/10/24 10:47	12/10/24 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/10/24 10:47*	*12/10/24 16:01*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 16:01*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-26

Lab Sample ID: 890-7448-10
Matrix: Solid
Date Collected: 12/07/24 10:30
Date Received: 12/09/24 15:23

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			12/10/24 16:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			12/10/24 21:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		12/10/24 08:23	12/10/24 21:08	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		12/10/24 08:23	12/10/24 21:08	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		12/10/24 08:23	12/10/24 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/10/24 08:23*	*12/10/24 21:08*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/10/24 08:23*	*12/10/24 21:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1820**		50.2		mg/Kg			12/10/24 13:42	5

Client Sample ID: B-27

Lab Sample ID: 890-7448-11
Matrix: Solid
Date Collected: 12/07/24 10:40
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 17:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 17:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:37	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/10/24 10:47*	*12/10/24 17:37*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/10/24 10:47*	*12/10/24 17:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/10/24 17:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 21:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 21:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 21:39	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-27 — Lab Sample ID: 890-7448-11

Date Collected: 12/07/24 10:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 08:23	12/10/24 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/10/24 08:23*	*12/10/24 21:39*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/10/24 08:23*	*12/10/24 21:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1930**		50.5		mg/Kg			12/10/24 13:48	5

Client Sample ID: B-28 — Lab Sample ID: 890-7448-12

Date Collected: 12/07/24 10:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 17:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:57	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/10/24 10:47	12/10/24 17:57	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 17:57	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/10/24 10:47	12/10/24 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/10/24 10:47*	*12/10/24 17:57*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 17:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			12/10/24 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 21:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 21:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/10/24 08:23*	*12/10/24 21:55*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 21:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1000**		9.96		mg/Kg			12/10/24 14:06	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-29

Lab Sample ID: 890-7448-13

Date Collected: 12/07/24 11:00
Matrix: Solid
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 18:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 18:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 18:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 18:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 18:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:18*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:18*	*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			12/10/24 18:18	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			12/10/24 22:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*12/10/24 08:23*	*12/10/24 22:10*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/10/24 08:23*	*12/10/24 22:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1850**		50.4		mg/Kg			12/10/24 14:12	5

Client Sample ID: B-30

Lab Sample ID: 890-7448-14

Date Collected: 12/07/24 11:15
Matrix: Solid
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 18:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 18:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 18:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 18:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 18:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/10/24 10:47	12/10/24 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:39*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:39*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-30 Lab Sample ID: 890-7448-14

Date Collected: 12/07/24 11:15 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			12/10/24 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 22:26	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 22:26	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/10/24 08:23*	*12/10/24 22:26*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 22:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1560**		49.7		mg/Kg			12/10/24 14:29	5

Client Sample ID: B-31 Lab Sample ID: 890-7448-15

Date Collected: 12/07/24 11:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 18:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 18:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 18:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/10/24 10:47	12/10/24 18:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:47	12/10/24 18:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/10/24 10:47	12/10/24 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:59*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 18:59*	*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			12/10/24 18:59	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			12/10/24 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 22:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 22:41	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-31 Lab Sample ID: 890-7448-15

Date Collected: 12/07/24 11:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 08:23	12/10/24 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/10/24 08:23*	*12/10/24 22:41*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 22:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2010**		49.9		mg/Kg			12/10/24 14:35	5

Client Sample ID: B-32 Lab Sample ID: 890-7448-16

Date Collected: 12/07/24 11:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 19:19	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 19:19	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 19:19	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/10/24 10:47	12/10/24 19:19	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:47	12/10/24 19:19	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/10/24 10:47	12/10/24 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/10/24 10:47*	*12/10/24 19:19*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 19:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			12/10/24 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/10/24 22:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:23	12/10/24 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/10/24 08:23*	*12/10/24 22:57*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 22:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1830**		49.9		mg/Kg			12/10/24 14:41	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-33

Date Collected: 12/07/24 11:40
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-17
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		12/10/24 10:47	12/10/24 19:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 19:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 19:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/10/24 10:47	12/10/24 19:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 19:40	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/10/24 10:47	12/10/24 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/10/24 10:47*	*12/10/24 19:40*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/10/24 10:47*	*12/10/24 19:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/10/24 19:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 23:13	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	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 23:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 23:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/10/24 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/10/24 08:23*	*12/10/24 23:13*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 23:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1530**		50.0		mg/Kg			12/10/24 14:47	5

Client Sample ID: B-34

Date Collected: 12/07/24 11:50
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-18
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 20:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 20:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 20:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 20:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:47	12/10/24 20:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/10/24 10:47	12/10/24 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:01*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:01*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-34 Lab Sample ID: 890-7448-18

Date Collected: 12/07/24 11:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			12/10/24 20:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 23:28	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 23:28	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:23	12/10/24 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*12/10/24 08:23*	*12/10/24 23:28*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/10/24 08:23*	*12/10/24 23:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2080**		50.5		mg/Kg			12/10/24 14:53	5

Client Sample ID: B-35 Lab Sample ID: 890-7448-19

Date Collected: 12/07/24 12:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 20:21	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 20:21	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 20:21	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/10/24 10:47	12/10/24 20:21	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:47	12/10/24 20:21	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/10/24 10:47	12/10/24 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:21*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:21*	*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			12/10/24 20:21	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			12/10/24 23:44	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		12/10/24 08:23	12/10/24 23:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 23:44	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-35 — Lab Sample ID: 890-7448-19

Date Collected: 12/07/24 12:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 08:23	12/10/24 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/10/24 08:23*	*12/10/24 23:44*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*12/10/24 08:23*	*12/10/24 23:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1520**		50.1		mg/Kg			12/10/24 14:59	5

Client Sample ID: B-36 — Lab Sample ID: 890-7448-20

Date Collected: 12/07/24 12:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:47	12/10/24 20:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 20:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 20:42	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 20:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 20:42	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:47	12/10/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:42*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/10/24 10:47*	*12/10/24 20:42*	*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			12/10/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/11/24 00:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/11/24 00:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/11/24 00:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:23	12/11/24 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/10/24 08:23*	*12/11/24 00:00*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/10/24 08:23*	*12/11/24 00:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1820**		49.8		mg/Kg			12/10/24 15:05	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-37

Date Collected: 12/07/24 12:20
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-21
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		12/10/24 10:50	12/10/24 18:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 18:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 18:17	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 18:17	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 18:17	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 18:17*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/10/24 10:50*	*12/10/24 18:17*	*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			12/10/24 18:17	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			12/10/24 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 18:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 18:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*12/10/24 08:27*	*12/10/24 18:14*	*1*
o-Terphenyl	*102*		*70 - 130*	*12/10/24 08:27*	*12/10/24 18:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1680**	**F1**	49.6		mg/Kg			12/10/24 11:16	5

Client Sample ID: B-38

Date Collected: 12/07/24 12:25
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-22
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		12/10/24 10:50	12/10/24 18:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 18:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 18:37	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 18:37	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/10/24 10:50	12/10/24 18:37	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*154*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 18:37*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*12/10/24 10:50*	*12/10/24 18:37*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-38

Date Collected: 12/07/24 12:25
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-22
Matrix: Solid

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			12/10/24 18:37	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			12/10/24 19:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:02*	*1*
o-Terphenyl	*94*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1870**		49.5		mg/Kg			12/10/24 11:37	5

Client Sample ID: B-39

Date Collected: 12/07/24 12:30
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-23
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		12/10/24 10:50	12/10/24 18:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/10/24 18:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/10/24 18:57	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/10/24 18:57	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		12/10/24 10:50	12/10/24 18:57	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/10/24 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 18:57*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*12/10/24 10:50*	*12/10/24 18:57*	*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			12/10/24 18:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 19:17	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 19:17	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-39 Lab Sample ID: 890-7448-23

Date Collected: 12/07/24 12:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:17*	*1*
o-Terphenyl	*94*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1880**		49.9		mg/Kg			12/10/24 11:44	5

Client Sample ID: B-40 Lab Sample ID: 890-7448-24

Date Collected: 12/07/24 12:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/10/24 19:18	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 19:18	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 19:18	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 19:18	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/10/24 10:50	12/10/24 19:18	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 19:18*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/10/24 10:50*	*12/10/24 19:18*	*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			12/10/24 19:18	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			12/10/24 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:33*	*1*
o-Terphenyl	*78*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1780**		50.0		mg/Kg			12/10/24 11:51	5

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-41 Lab Sample ID: 890-7448-25

Date Collected: 12/07/24 12:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/10/24 19:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 19:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 19:38	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 19:38	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 19:38	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 19:38*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/10/24 10:50*	*12/10/24 19:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/10/24 19:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 19:49	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 19:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:49*	*1*
o-Terphenyl	*94*		*70 - 130*	*12/10/24 08:27*	*12/10/24 19:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1910**		50.1		mg/Kg			12/10/24 11:58	5

Client Sample ID: B-42 Lab Sample ID: 890-7448-26

Date Collected: 12/07/24 12:45 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/10/24 19:59	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/10/24 19:59	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/10/24 19:59	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		12/10/24 10:50	12/10/24 19:59	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		12/10/24 10:50	12/10/24 19:59	1
Xylenes, Total	<0.00396	U *+	0.00396		mg/Kg		12/10/24 10:50	12/10/24 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 19:59*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/10/24 10:50*	*12/10/24 19:59*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-42

Date Collected: 12/07/24 12:45
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-26
Matrix: Solid

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			12/10/24 19:59	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			12/10/24 20:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 20:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 20:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:05*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1610**		49.8		mg/Kg			12/10/24 12:59	5

Client Sample ID: B-43

Date Collected: 12/07/24 12:50
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-27
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 20:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 20:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 20:19	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		12/10/24 10:50	12/10/24 20:19	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 20:19	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		12/10/24 10:50	12/10/24 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 20:19*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*12/10/24 10:50*	*12/10/24 20:19*	*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			12/10/24 20:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 20:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 20:20	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 20:20	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-43 — Lab Sample ID: 890-7448-27

Date Collected: 12/07/24 12:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:20*	*1*
o-Terphenyl	*92*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3910**		49.6		mg/Kg			12/10/24 13:06	5

Client Sample ID: B-44 — Lab Sample ID: 890-7448-28

Date Collected: 12/07/24 12:55 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/10/24 20:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/10/24 20:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/10/24 20:39	1
m-Xylene & p-Xylene	<0.00397	U *+	0.00397		mg/Kg		12/10/24 10:50	12/10/24 20:39	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		12/10/24 10:50	12/10/24 20:39	1
Xylenes, Total	<0.00397	U *+	0.00397		mg/Kg		12/10/24 10:50	12/10/24 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 20:39*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/10/24 10:50*	*12/10/24 20:39*	*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			12/10/24 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 20:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 20:37	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 20:37	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:37*	*1*
o-Terphenyl	*93*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1360**		50.1		mg/Kg			12/10/24 13:13	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-45

Date Collected: 12/07/24 13:00
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-29
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		12/10/24 10:50	12/10/24 21:00	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:50	12/10/24 21:00	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:50	12/10/24 21:00	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		12/10/24 10:50	12/10/24 21:00	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		12/10/24 10:50	12/10/24 21:00	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		12/10/24 10:50	12/10/24 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*155*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 21:00*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/10/24 10:50*	*12/10/24 21:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/10/24 21:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 20:52	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	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 20:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 20:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 20:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:52*	*1*
o-Terphenyl	*97*		*70 - 130*	*12/10/24 08:27*	*12/10/24 20:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		50.4		mg/Kg			12/10/24 13:20	5

Client Sample ID: B-46

Date Collected: 12/07/24 13:10
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-30
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		12/10/24 10:50	12/10/24 21:20	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 21:20	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 21:20	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		12/10/24 10:50	12/10/24 21:20	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/10/24 10:50	12/10/24 21:20	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		12/10/24 10:50	12/10/24 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*156*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 21:20*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*12/10/24 10:50*	*12/10/24 21:20*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-46

Date Collected: 12/07/24 13:10
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-30
Matrix: Solid

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			12/10/24 21:20	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			12/10/24 21:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:08	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:08*	*1*
o-Terphenyl	*88*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**754**		9.94		mg/Kg			12/10/24 13:27	1

Client Sample ID: B-47

Date Collected: 12/07/24 13:20
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-31
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 22:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 22:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 22:55	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 22:55	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 22:55	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/10/24 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 22:55*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*12/10/24 10:50*	*12/10/24 22:55*	*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			12/10/24 22:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/10/24 21:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 21:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 21:39	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-47 — Lab Sample ID: 890-7448-31

Date Collected: 12/07/24 13:20 **Matrix: Solid**
Date Received: 12/09/24 15:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 21:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:39*	*1*
o-Terphenyl	*90*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		49.8		mg/Kg			12/10/24 13:34	5

Client Sample ID: B-48 — Lab Sample ID: 890-7448-32

Date Collected: 12/07/24 13:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/10/24 23:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 23:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 23:15	1
m-Xylene & p-Xylene	<0.00400	U *+	0.00400		mg/Kg		12/10/24 10:50	12/10/24 23:15	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/10/24 23:15	1
Xylenes, Total	<0.00400	U *+	0.00400		mg/Kg		12/10/24 10:50	12/10/24 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 23:15*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/10/24 10:50*	*12/10/24 23:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			12/10/24 23:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:55*	*1*
o-Terphenyl	*90*		*70 - 130*	*12/10/24 08:27*	*12/10/24 21:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1880**		50.0		mg/Kg			12/10/24 13:55	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-49

Date Collected: 12/07/24 13:30
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-33
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		12/10/24 10:50	12/10/24 23:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/10/24 23:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/10/24 23:35	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/10/24 23:35	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		12/10/24 10:50	12/10/24 23:35	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/10/24 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 23:35*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/10/24 10:50*	*12/10/24 23:35*	*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			12/10/24 23:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/10/24 22:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:10*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**739**		10.0		mg/Kg			12/10/24 14:01	1

Client Sample ID: B-50

Date Collected: 12/07/24 13:35
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-34
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		12/10/24 10:50	12/10/24 23:56	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 23:56	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/10/24 23:56	1
m-Xylene & p-Xylene	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 23:56	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/10/24 10:50	12/10/24 23:56	1
Xylenes, Total	<0.00403	U *+	0.00403		mg/Kg		12/10/24 10:50	12/10/24 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 23:56*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/10/24 10:50*	*12/10/24 23:56*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-50

Date Collected: 12/07/24 13:35
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-34
Matrix: Solid

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			12/10/24 23:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 22:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 22:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:26*	*1*
o-Terphenyl	*98*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**443**		9.90		mg/Kg			12/10/24 14:22	1

Client Sample ID: B-51

Date Collected: 12/07/24 13:40
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-35
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		12/10/24 10:50	12/11/24 00:16	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:50	12/11/24 00:16	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/10/24 10:50	12/11/24 00:16	1
m-Xylene & p-Xylene	<0.00402	U *+	0.00402		mg/Kg		12/10/24 10:50	12/11/24 00:16	1
o-Xylene	<0.00201	U *+	0.00201		mg/Kg		12/10/24 10:50	12/11/24 00:16	1
Xylenes, Total	<0.00402	U *+	0.00402		mg/Kg		12/10/24 10:50	12/11/24 00:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*151*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 00:16*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/10/24 10:50*	*12/11/24 00:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/11/24 00:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 22:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 22:41	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-51 Lab Sample ID: 890-7448-35

Date Collected: 12/07/24 13:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 08:27	12/10/24 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:41*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1040**		9.90		mg/Kg			12/10/24 14:29	1

Client Sample ID: B-52 Lab Sample ID: 890-7448-36

Date Collected: 12/07/24 13:45 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/11/24 00:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/11/24 00:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:50	12/11/24 00:37	1
m-Xylene & p-Xylene	<0.00404	U *+	0.00404		mg/Kg		12/10/24 10:50	12/11/24 00:37	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/10/24 10:50	12/11/24 00:37	1
Xylenes, Total	<0.00404	U *+	0.00404		mg/Kg		12/10/24 10:50	12/11/24 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*152*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 00:37*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/10/24 10:50*	*12/11/24 00:37*	*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			12/11/24 00:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/10/24 22:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/10/24 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:57*	*1*
o-Terphenyl	*91*		*70 - 130*	*12/10/24 08:27*	*12/10/24 22:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1580**		50.4		mg/Kg			12/10/24 14:36	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-53

Date Collected: 12/07/24 13:50
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-37
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		12/10/24 10:50	12/11/24 00:57	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/11/24 00:57	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/11/24 00:57	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399		mg/Kg		12/10/24 10:50	12/11/24 00:57	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/11/24 00:57	1
Xylenes, Total	<0.00399	U *+	0.00399		mg/Kg		12/10/24 10:50	12/11/24 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*159*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 00:57*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*12/10/24 10:50*	*12/11/24 00:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/11/24 00:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/10/24 23:13	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	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 23:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 23:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/10/24 08:27	12/10/24 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:13*	*1*
o-Terphenyl	*96*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1740**		50.3		mg/Kg			12/10/24 14:43	5

Client Sample ID: B-54

Date Collected: 12/07/24 14:00
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-38
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		12/10/24 10:50	12/11/24 01:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/11/24 01:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:50	12/11/24 01:18	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/11/24 01:18	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		12/10/24 10:50	12/11/24 01:18	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		12/10/24 10:50	12/11/24 01:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*155*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 01:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/10/24 10:50*	*12/11/24 01:18*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-54 — Lab Sample ID: 890-7448-38

Date Collected: 12/07/24 14:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			12/11/24 01:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/10/24 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 23:28	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 23:28	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/10/24 08:27	12/10/24 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:28*	*1*
o-Terphenyl	*97*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		50.2		mg/Kg			12/10/24 14:50	5

Client Sample ID: B-55 — Lab Sample ID: 890-7448-39

Date Collected: 12/07/24 14:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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		12/10/24 10:50	12/11/24 01:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/11/24 01:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/10/24 10:50	12/11/24 01:38	1
m-Xylene & p-Xylene	<0.00397	U *+	0.00397		mg/Kg		12/10/24 10:50	12/11/24 01:38	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		12/10/24 10:50	12/11/24 01:38	1
Xylenes, Total	<0.00397	U *+	0.00397		mg/Kg		12/10/24 10:50	12/11/24 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 01:38*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/10/24 10:50*	*12/11/24 01:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			12/11/24 01:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/10/24 23:44	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		12/10/24 08:27	12/10/24 23:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:27	12/10/24 23:44	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Client Sample ID: B-55

Date Collected: 12/07/24 14:10
Date Received: 12/09/24 15:23

Lab Sample ID: 890-7448-39

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		12/10/24 08:27	12/10/24 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:44*	*1*
o-Terphenyl	*86*		*70 - 130*	*12/10/24 08:27*	*12/10/24 23:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**870**		10.0		mg/Kg			12/10/24 14:56	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
890-7448-1	B-17	117	106										
890-7448-1 MS	B-17	109	105										
890-7448-1 MSD	B-17	110	104										
890-7448-2	B-18	113	105										
890-7448-3	B-19	111	107										
890-7448-4	B-20	112	108										
890-7448-5	B-21	109	105										
890-7448-6	B-22	112	109										
890-7448-7	B-23	110	107										
890-7448-8	B-24	114	108										
890-7448-9	B-25	116	106										
890-7448-10	B-26	110	106										
890-7448-11	B-27	110	107										
890-7448-12	B-28	111	108										
890-7448-13	B-29	115	108										
890-7448-14	B-30	112	107										
890-7448-15	B-31	111	106										
890-7448-16	B-32	110	108										
890-7448-17	B-33	113	108										
890-7448-18	B-34	115	107										
890-7448-19	B-35	109	106										
890-7448-20	B-36	110	106										
890-7448-21	B-37	152 S1+	89										
890-7448-21 MS	B-37	131 S1+	92										
890-7448-21 MSD	B-37	135 S1+	90										
890-7448-22	B-38	154 S1+	87										
890-7448-23	B-39	142 S1+	87										
890-7448-24	B-40	143 S1+	90										
890-7448-25	B-41	149 S1+	88										
890-7448-26	B-42	142 S1+	90										
890-7448-27	B-43	144 S1+	87										
890-7448-28	B-44	141 S1+	89										
890-7448-29	B-45	155 S1+	86										
890-7448-30	B-46	156 S1+	84										
890-7448-31	B-47	147 S1+	91										
890-7448-32	B-48	153 S1+	90										
890-7448-33	B-49	147 S1+	89										
890-7448-34	B-50	147 S1+	89										
890-7448-35	B-51	151 S1+	88										
890-7448-36	B-52	152 S1+	86										
890-7448-37	B-53	159 S1+	89										
890-7448-38	B-54	155 S1+	88										
890-7448-39	B-55	153 S1+	88										
LCS 880-97504/1-A	Lab Control Sample	109	104										
LCS 880-97505/1-A	Lab Control Sample	134 S1+	92										
LCSD 880-97504/2-A	Lab Control Sample Dup	105	104										
LCSD 880-97505/2-A	Lab Control Sample Dup	135 S1+	62 S1-										
MB 880-97504/5-A	Method Blank	109	101										
MB 880-97505/5-A	Method Blank	132 S1+	85										

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-7448-1	B-17	109	84
890-7448-1 MS	B-17	87	77
890-7448-1 MSD	B-17	87	76
890-7448-2	B-18	90	71
890-7448-3	B-19	80	67 S1-
890-7448-4	B-20	89	70
890-7448-5	B-21	96	78
890-7448-6	B-22	98	76
890-7448-7	B-23	87	66 S1-
890-7448-8	B-24	89	69 S1-
890-7448-9	B-25	97	73
890-7448-10	B-26	94	72
890-7448-11	B-27	95	72
890-7448-12	B-28	86	68 S1-
890-7448-13	B-29	93	75
890-7448-14	B-30	83	66 S1-
890-7448-15	B-31	88	68 S1-
890-7448-16	B-32	89	68 S1-
890-7448-17	B-33	87	68 S1-
890-7448-18	B-34	99	76
890-7448-19	B-35	89	67 S1-
890-7448-20	B-36	95	73
890-7448-21	B-37	113	102
890-7448-21 MS	B-37	112	109
890-7448-21 MSD	B-37	113	109
890-7448-22	B-38	103	94
890-7448-23	B-39	106	94
890-7448-24	B-40	87	78
890-7448-25	B-41	102	94
890-7448-26	B-42	94	89
890-7448-27	B-43	99	92
890-7448-28	B-44	103	93
890-7448-29	B-45	107	97
890-7448-30	B-46	98	88
890-7448-31	B-47	100	90
890-7448-32	B-48	100	90
890-7448-33	B-49	99	89
890-7448-34	B-50	106	98
890-7448-35	B-51	105	95
890-7448-36	B-52	101	91
890-7448-37	B-53	105	96
890-7448-38	B-54	110	97
890-7448-39	B-55	95	86
LCS 880-97466/2-A	Lab Control Sample	115	106
LCS 880-97468/2-A	Lab Control Sample	95	97
LCSD 880-97466/3-A	Lab Control Sample Dup	109	97

Surrogate Summary

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCSD 880-97468/3-A	Lab Control Sample Dup	108	107								
MB 880-97466/1-A	Method Blank	116	93								
MB 880-97468/1-A	Method Blank	145 S1+	142 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-97504/5-A
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/10/24 10:47	12/10/24 12:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:47	12/10/24 12:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/10/24 10:47	12/10/24 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/10/24 10:47*	*12/10/24 12:36*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/10/24 10:47*	*12/10/24 12:36*	*1*

Lab Sample ID: LCS 880-97504/1-A
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1182		mg/Kg		118	70 - 130
Toluene	0.100	0.1146		mg/Kg		115	70 - 130
Ethylbenzene	0.100	0.1135		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2304		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1185		mg/Kg		119	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-97504/2-A
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97504

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1207		mg/Kg		121	70 - 130	2	35
Toluene	0.100	0.1166		mg/Kg		117	70 - 130	2	35
Ethylbenzene	0.100	0.1156		mg/Kg		116	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2346		mg/Kg		117	70 - 130	2	35
o-Xylene	0.100	0.1203		mg/Kg		120	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-7448-1 MS
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: B-17
Prep Type: Total/NA
Prep Batch: 97504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.101	0.1062		mg/Kg		105	70 - 130
Toluene	<0.00200	U	0.101	0.1019		mg/Kg		101	70 - 130

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QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Lab Sample ID: 890-7448-1 MS
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: B-17
Prep Type: Total/NA
Prep Batch: 97504

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.101	0.09830		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.202	0.1996		mg/Kg		99	70 - 130
o-Xylene	<0.00200	U	0.101	0.1023		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-7448-1 MSD
Matrix: Solid
Analysis Batch: 97481

Client Sample ID: B-17
Prep Type: Total/NA
Prep Batch: 97504

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.1042		mg/Kg		104	70 - 130	2	35
Toluene	<0.00200	U	0.0998	0.09826		mg/Kg		98	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.0998	0.09397		mg/Kg		94	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1908		mg/Kg		96	70 - 130	5	35
o-Xylene	<0.00200	U	0.0998	0.09848		mg/Kg		99	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-97505/5-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97505

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/10/24 10:50	12/10/24 17:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 17:55*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*12/10/24 10:50*	*12/10/24 17:55*	*1*

Lab Sample ID: LCS 880-97505/1-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1319	*+	mg/Kg		132	70 - 130
Toluene	0.100	0.1197		mg/Kg		120	70 - 130
Ethylbenzene	0.100	0.1259		mg/Kg		126	70 - 130
m-Xylene & p-Xylene	0.200	0.2480		mg/Kg		124	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Lab Sample ID: LCS 880-97505/1-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97505

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1249		mg/Kg		125	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-97505/2-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97505

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1170		mg/Kg		117	70 - 130	12	35
Toluene			0.100	0.1166		mg/Kg		117	70 - 130	3	35
Ethylbenzene			0.100	0.1299		mg/Kg		130	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2672	*+	mg/Kg		134	70 - 130	7	35
o-Xylene			0.100	0.1343	*+	mg/Kg		134	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*62*	*S1-*	*70 - 130*

Lab Sample ID: 890-7448-21 MS
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: B-37
Prep Type: Total/NA
Prep Batch: 97505

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U *+	0.101	0.1121		mg/Kg		111	70 - 130		
Toluene	<0.00200	U	0.101	0.1003		mg/Kg		100	70 - 130		
Ethylbenzene	<0.00200	U	0.101	0.1024		mg/Kg		102	70 - 130		
m-Xylene & p-Xylene	<0.00401	U *+	0.202	0.2004		mg/Kg		99	70 - 130		
o-Xylene	<0.00200	U *+	0.101	0.1010		mg/Kg		100	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-7448-21 MSD
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: B-37
Prep Type: Total/NA
Prep Batch: 97505

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U *+	0.0998	0.1029		mg/Kg		103	70 - 130	9	35
Toluene	<0.00200	U	0.0998	0.09261		mg/Kg		93	70 - 130	8	35
Ethylbenzene	<0.00200	U	0.0998	0.09531		mg/Kg		96	70 - 130	7	35
m-Xylene & p-Xylene	<0.00401	U *+	0.200	0.1862		mg/Kg		93	70 - 130	7	35
o-Xylene	<0.00200	U *+	0.0998	0.09401		mg/Kg		94	70 - 130	7	35

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Lab Sample ID: 890-7448-21 MSD
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: B-37
Prep Type: Total/NA
Prep Batch: 97505

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

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

Lab Sample ID: MB 880-97466/1-A
Matrix: Solid
Analysis Batch: 97473

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97466

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		12/10/24 08:23	12/10/24 17:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 17:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:23	12/10/24 17:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	12/10/24 08:23	12/10/24 17:20	1
o-Terphenyl	93		70 - 130	12/10/24 08:23	12/10/24 17:20	1

Lab Sample ID: LCS 880-97466/2-A
Matrix: Solid
Analysis Batch: 97473

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97466

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1190		mg/Kg		119	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1052		mg/Kg		105	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-97466/3-A
Matrix: Solid
Analysis Batch: 97473

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97466

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1166		mg/Kg		117	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	988.7		mg/Kg		99	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	97		70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Lab Sample ID: 890-7448-1 MS
Matrix: Solid
Analysis Batch: 97473

Client Sample ID: B-17
Prep Type: Total/NA
Prep Batch: 97466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	819.9		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	694.3		mg/Kg		70	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*77*		*70 - 130*

Lab Sample ID: 890-7448-1 MSD
Matrix: Solid
Analysis Batch: 97473

Client Sample ID: B-17
Prep Type: Total/NA
Prep Batch: 97466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	835.0		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	702.6		mg/Kg		70	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*76*		*70 - 130*

Lab Sample ID: MB 880-97468/1-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97468

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		12/10/24 08:26	12/10/24 17:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:26	12/10/24 17:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:26	12/10/24 17:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*12/10/24 08:26*	*12/10/24 17:20*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*12/10/24 08:26*	*12/10/24 17:20*	*1*

Lab Sample ID: LCS 880-97468/2-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	922.9		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	911.1		mg/Kg		91	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Lab Sample ID: LCS 880-97468/2-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97468

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: LCSD 880-97468/3-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97468

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1093		mg/Kg		109	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1008		mg/Kg		101	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-7448-21 MS
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: B-37
Prep Type: Total/NA
Prep Batch: 97468

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	994	931.4		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	994	890.8		mg/Kg		90	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: 890-7448-21 MSD
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: B-37
Prep Type: Total/NA
Prep Batch: 97468

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	994	944.7		mg/Kg		95	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	994	920.9		mg/Kg		93	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	109		70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-97467/1-A
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/10/24 12:08	1

Lab Sample ID: LCS 880-97467/2-A
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.7		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-97467/3-A
Matrix: Solid
Analysis Batch: 97485

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	259.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-7448-1 MS
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: B-17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1250		251	1480	4	mg/Kg		90	90 - 110

Lab Sample ID: 890-7448-1 MSD
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: B-17
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1250		251	1470	4	mg/Kg		86	90 - 110	1	20

Lab Sample ID: 890-7448-11 MS
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: B-27
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1930		1260	3178		mg/Kg		99	90 - 110

Lab Sample ID: 890-7448-11 MSD
Matrix: Solid
Analysis Batch: 97485

Client Sample ID: B-27
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1930		1260	3181		mg/Kg		99	90 - 110	0	20

Lab Sample ID: MB 880-97478/1-A
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/10/24 10:56	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-97478/2-A
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.6		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-97478/3-A
Matrix: Solid
Analysis Batch: 97496

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	260.6		mg/Kg		104	90 - 110	1	20

Lab Sample ID: 890-7448-21 MS
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: B-37
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1680	F1	1240	3250	F1	mg/Kg		126	90 - 110		

Lab Sample ID: 890-7448-21 MSD
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: B-37
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1680	F1	1240	3246	F1	mg/Kg		126	90 - 110	0	20

Lab Sample ID: 890-7448-31 MS
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: B-47
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1710		1250	3065		mg/Kg		109	90 - 110		

Lab Sample ID: 890-7448-31 MSD
Matrix: Solid
Analysis Batch: 97496

Client Sample ID: B-47
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1710		1250	2878		mg/Kg		94	90 - 110	6	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC VOA

Analysis Batch: 97481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	8021B	97504
890-7448-2	B-18	Total/NA	Solid	8021B	97504
890-7448-3	B-19	Total/NA	Solid	8021B	97504
890-7448-4	B-20	Total/NA	Solid	8021B	97504
890-7448-5	B-21	Total/NA	Solid	8021B	97504
890-7448-6	B-22	Total/NA	Solid	8021B	97504
890-7448-7	B-23	Total/NA	Solid	8021B	97504
890-7448-8	B-24	Total/NA	Solid	8021B	97504
890-7448-9	B-25	Total/NA	Solid	8021B	97504
890-7448-10	B-26	Total/NA	Solid	8021B	97504
890-7448-11	B-27	Total/NA	Solid	8021B	97504
890-7448-12	B-28	Total/NA	Solid	8021B	97504
890-7448-13	B-29	Total/NA	Solid	8021B	97504
890-7448-14	B-30	Total/NA	Solid	8021B	97504
890-7448-15	B-31	Total/NA	Solid	8021B	97504
890-7448-16	B-32	Total/NA	Solid	8021B	97504
890-7448-17	B-33	Total/NA	Solid	8021B	97504
890-7448-18	B-34	Total/NA	Solid	8021B	97504
890-7448-19	B-35	Total/NA	Solid	8021B	97504
890-7448-20	B-36	Total/NA	Solid	8021B	97504
MB 880-97504/5-A	Method Blank	Total/NA	Solid	8021B	97504
LCS 880-97504/1-A	Lab Control Sample	Total/NA	Solid	8021B	97504
LCSD 880-97504/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97504
890-7448-1 MS	B-17	Total/NA	Solid	8021B	97504
890-7448-1 MSD	B-17	Total/NA	Solid	8021B	97504

Analysis Batch: 97488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Total/NA	Solid	8021B	97505
890-7448-22	B-38	Total/NA	Solid	8021B	97505
890-7448-23	B-39	Total/NA	Solid	8021B	97505
890-7448-24	B-40	Total/NA	Solid	8021B	97505
890-7448-25	B-41	Total/NA	Solid	8021B	97505
890-7448-26	B-42	Total/NA	Solid	8021B	97505
890-7448-27	B-43	Total/NA	Solid	8021B	97505
890-7448-28	B-44	Total/NA	Solid	8021B	97505
890-7448-29	B-45	Total/NA	Solid	8021B	97505
890-7448-30	B-46	Total/NA	Solid	8021B	97505
890-7448-31	B-47	Total/NA	Solid	8021B	97505
890-7448-32	B-48	Total/NA	Solid	8021B	97505
890-7448-33	B-49	Total/NA	Solid	8021B	97505
890-7448-34	B-50	Total/NA	Solid	8021B	97505
890-7448-35	B-51	Total/NA	Solid	8021B	97505
890-7448-36	B-52	Total/NA	Solid	8021B	97505
890-7448-37	B-53	Total/NA	Solid	8021B	97505
890-7448-38	B-54	Total/NA	Solid	8021B	97505
890-7448-39	B-55	Total/NA	Solid	8021B	97505
MB 880-97505/5-A	Method Blank	Total/NA	Solid	8021B	97505
LCS 880-97505/1-A	Lab Control Sample	Total/NA	Solid	8021B	97505
LCSD 880-97505/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97505
890-7448-21 MS	B-37	Total/NA	Solid	8021B	97505

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC VOA (Continued)

Analysis Batch: 97488 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21 MSD	B-37	Total/NA	Solid	8021B	97505

Prep Batch: 97504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	5035	
890-7448-2	B-18	Total/NA	Solid	5035	
890-7448-3	B-19	Total/NA	Solid	5035	
890-7448-4	B-20	Total/NA	Solid	5035	
890-7448-5	B-21	Total/NA	Solid	5035	
890-7448-6	B-22	Total/NA	Solid	5035	
890-7448-7	B-23	Total/NA	Solid	5035	
890-7448-8	B-24	Total/NA	Solid	5035	
890-7448-9	B-25	Total/NA	Solid	5035	
890-7448-10	B-26	Total/NA	Solid	5035	
890-7448-11	B-27	Total/NA	Solid	5035	
890-7448-12	B-28	Total/NA	Solid	5035	
890-7448-13	B-29	Total/NA	Solid	5035	
890-7448-14	B-30	Total/NA	Solid	5035	
890-7448-15	B-31	Total/NA	Solid	5035	
890-7448-16	B-32	Total/NA	Solid	5035	
890-7448-17	B-33	Total/NA	Solid	5035	
890-7448-18	B-34	Total/NA	Solid	5035	
890-7448-19	B-35	Total/NA	Solid	5035	
890-7448-20	B-36	Total/NA	Solid	5035	
MB 880-97504/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97504/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97504/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7448-1 MS	B-17	Total/NA	Solid	5035	
890-7448-1 MSD	B-17	Total/NA	Solid	5035	

Prep Batch: 97505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Total/NA	Solid	5035	
890-7448-22	B-38	Total/NA	Solid	5035	
890-7448-23	B-39	Total/NA	Solid	5035	
890-7448-24	B-40	Total/NA	Solid	5035	
890-7448-25	B-41	Total/NA	Solid	5035	
890-7448-26	B-42	Total/NA	Solid	5035	
890-7448-27	B-43	Total/NA	Solid	5035	
890-7448-28	B-44	Total/NA	Solid	5035	
890-7448-29	B-45	Total/NA	Solid	5035	
890-7448-30	B-46	Total/NA	Solid	5035	
890-7448-31	B-47	Total/NA	Solid	5035	
890-7448-32	B-48	Total/NA	Solid	5035	
890-7448-33	B-49	Total/NA	Solid	5035	
890-7448-34	B-50	Total/NA	Solid	5035	
890-7448-35	B-51	Total/NA	Solid	5035	
890-7448-36	B-52	Total/NA	Solid	5035	
890-7448-37	B-53	Total/NA	Solid	5035	
890-7448-38	B-54	Total/NA	Solid	5035	
890-7448-39	B-55	Total/NA	Solid	5035	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC VOA (Continued)

Prep Batch: 97505 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-97505/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97505/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97505/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7448-21 MS	B-37	Total/NA	Solid	5035	
890-7448-21 MSD	B-37	Total/NA	Solid	5035	

Analysis Batch: 97554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	Total BTEX	
890-7448-2	B-18	Total/NA	Solid	Total BTEX	
890-7448-3	B-19	Total/NA	Solid	Total BTEX	
890-7448-4	B-20	Total/NA	Solid	Total BTEX	
890-7448-5	B-21	Total/NA	Solid	Total BTEX	
890-7448-6	B-22	Total/NA	Solid	Total BTEX	
890-7448-7	B-23	Total/NA	Solid	Total BTEX	
890-7448-8	B-24	Total/NA	Solid	Total BTEX	
890-7448-9	B-25	Total/NA	Solid	Total BTEX	
890-7448-10	B-26	Total/NA	Solid	Total BTEX	
890-7448-11	B-27	Total/NA	Solid	Total BTEX	
890-7448-12	B-28	Total/NA	Solid	Total BTEX	
890-7448-13	B-29	Total/NA	Solid	Total BTEX	
890-7448-14	B-30	Total/NA	Solid	Total BTEX	
890-7448-15	B-31	Total/NA	Solid	Total BTEX	
890-7448-16	B-32	Total/NA	Solid	Total BTEX	
890-7448-17	B-33	Total/NA	Solid	Total BTEX	
890-7448-18	B-34	Total/NA	Solid	Total BTEX	
890-7448-19	B-35	Total/NA	Solid	Total BTEX	
890-7448-20	B-36	Total/NA	Solid	Total BTEX	
890-7448-21	B-37	Total/NA	Solid	Total BTEX	
890-7448-22	B-38	Total/NA	Solid	Total BTEX	
890-7448-23	B-39	Total/NA	Solid	Total BTEX	
890-7448-24	B-40	Total/NA	Solid	Total BTEX	
890-7448-25	B-41	Total/NA	Solid	Total BTEX	
890-7448-26	B-42	Total/NA	Solid	Total BTEX	
890-7448-27	B-43	Total/NA	Solid	Total BTEX	
890-7448-28	B-44	Total/NA	Solid	Total BTEX	
890-7448-29	B-45	Total/NA	Solid	Total BTEX	
890-7448-30	B-46	Total/NA	Solid	Total BTEX	
890-7448-31	B-47	Total/NA	Solid	Total BTEX	
890-7448-32	B-48	Total/NA	Solid	Total BTEX	
890-7448-33	B-49	Total/NA	Solid	Total BTEX	
890-7448-34	B-50	Total/NA	Solid	Total BTEX	
890-7448-35	B-51	Total/NA	Solid	Total BTEX	
890-7448-36	B-52	Total/NA	Solid	Total BTEX	
890-7448-37	B-53	Total/NA	Solid	Total BTEX	
890-7448-38	B-54	Total/NA	Solid	Total BTEX	
890-7448-39	B-55	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC Semi VOA

Prep Batch: 97466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	8015NM Prep	
890-7448-2	B-18	Total/NA	Solid	8015NM Prep	
890-7448-3	B-19	Total/NA	Solid	8015NM Prep	
890-7448-4	B-20	Total/NA	Solid	8015NM Prep	
890-7448-5	B-21	Total/NA	Solid	8015NM Prep	
890-7448-6	B-22	Total/NA	Solid	8015NM Prep	
890-7448-7	B-23	Total/NA	Solid	8015NM Prep	
890-7448-8	B-24	Total/NA	Solid	8015NM Prep	
890-7448-9	B-25	Total/NA	Solid	8015NM Prep	
890-7448-10	B-26	Total/NA	Solid	8015NM Prep	
890-7448-11	B-27	Total/NA	Solid	8015NM Prep	
890-7448-12	B-28	Total/NA	Solid	8015NM Prep	
890-7448-13	B-29	Total/NA	Solid	8015NM Prep	
890-7448-14	B-30	Total/NA	Solid	8015NM Prep	
890-7448-15	B-31	Total/NA	Solid	8015NM Prep	
890-7448-16	B-32	Total/NA	Solid	8015NM Prep	
890-7448-17	B-33	Total/NA	Solid	8015NM Prep	
890-7448-18	B-34	Total/NA	Solid	8015NM Prep	
890-7448-19	B-35	Total/NA	Solid	8015NM Prep	
890-7448-20	B-36	Total/NA	Solid	8015NM Prep	
MB 880-97466/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97466/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97466/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7448-1 MS	B-17	Total/NA	Solid	8015NM Prep	
890-7448-1 MSD	B-17	Total/NA	Solid	8015NM Prep	

Prep Batch: 97468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Total/NA	Solid	8015NM Prep	
890-7448-22	B-38	Total/NA	Solid	8015NM Prep	
890-7448-23	B-39	Total/NA	Solid	8015NM Prep	
890-7448-24	B-40	Total/NA	Solid	8015NM Prep	
890-7448-25	B-41	Total/NA	Solid	8015NM Prep	
890-7448-26	B-42	Total/NA	Solid	8015NM Prep	
890-7448-27	B-43	Total/NA	Solid	8015NM Prep	
890-7448-28	B-44	Total/NA	Solid	8015NM Prep	
890-7448-29	B-45	Total/NA	Solid	8015NM Prep	
890-7448-30	B-46	Total/NA	Solid	8015NM Prep	
890-7448-31	B-47	Total/NA	Solid	8015NM Prep	
890-7448-32	B-48	Total/NA	Solid	8015NM Prep	
890-7448-33	B-49	Total/NA	Solid	8015NM Prep	
890-7448-34	B-50	Total/NA	Solid	8015NM Prep	
890-7448-35	B-51	Total/NA	Solid	8015NM Prep	
890-7448-36	B-52	Total/NA	Solid	8015NM Prep	
890-7448-37	B-53	Total/NA	Solid	8015NM Prep	
890-7448-38	B-54	Total/NA	Solid	8015NM Prep	
890-7448-39	B-55	Total/NA	Solid	8015NM Prep	
MB 880-97468/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97468/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7448-21 MS	B-37	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC Semi VOA (Continued)

Prep Batch: 97468 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21 MSD	B-37	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	8015B NM	97466
890-7448-2	B-18	Total/NA	Solid	8015B NM	97466
890-7448-3	B-19	Total/NA	Solid	8015B NM	97466
890-7448-4	B-20	Total/NA	Solid	8015B NM	97466
890-7448-5	B-21	Total/NA	Solid	8015B NM	97466
890-7448-6	B-22	Total/NA	Solid	8015B NM	97466
890-7448-7	B-23	Total/NA	Solid	8015B NM	97466
890-7448-8	B-24	Total/NA	Solid	8015B NM	97466
890-7448-9	B-25	Total/NA	Solid	8015B NM	97466
890-7448-10	B-26	Total/NA	Solid	8015B NM	97466
890-7448-11	B-27	Total/NA	Solid	8015B NM	97466
890-7448-12	B-28	Total/NA	Solid	8015B NM	97466
890-7448-13	B-29	Total/NA	Solid	8015B NM	97466
890-7448-14	B-30	Total/NA	Solid	8015B NM	97466
890-7448-15	B-31	Total/NA	Solid	8015B NM	97466
890-7448-16	B-32	Total/NA	Solid	8015B NM	97466
890-7448-17	B-33	Total/NA	Solid	8015B NM	97466
890-7448-18	B-34	Total/NA	Solid	8015B NM	97466
890-7448-19	B-35	Total/NA	Solid	8015B NM	97466
890-7448-20	B-36	Total/NA	Solid	8015B NM	97466
MB 880-97466/1-A	Method Blank	Total/NA	Solid	8015B NM	97466
LCS 880-97466/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97466
LCSD 880-97466/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97466
890-7448-1 MS	B-17	Total/NA	Solid	8015B NM	97466
890-7448-1 MSD	B-17	Total/NA	Solid	8015B NM	97466

Analysis Batch: 97475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Total/NA	Solid	8015B NM	97468
890-7448-22	B-38	Total/NA	Solid	8015B NM	97468
890-7448-23	B-39	Total/NA	Solid	8015B NM	97468
890-7448-24	B-40	Total/NA	Solid	8015B NM	97468
890-7448-25	B-41	Total/NA	Solid	8015B NM	97468
890-7448-26	B-42	Total/NA	Solid	8015B NM	97468
890-7448-27	B-43	Total/NA	Solid	8015B NM	97468
890-7448-28	B-44	Total/NA	Solid	8015B NM	97468
890-7448-29	B-45	Total/NA	Solid	8015B NM	97468
890-7448-30	B-46	Total/NA	Solid	8015B NM	97468
890-7448-31	B-47	Total/NA	Solid	8015B NM	97468
890-7448-32	B-48	Total/NA	Solid	8015B NM	97468
890-7448-33	B-49	Total/NA	Solid	8015B NM	97468
890-7448-34	B-50	Total/NA	Solid	8015B NM	97468
890-7448-35	B-51	Total/NA	Solid	8015B NM	97468
890-7448-36	B-52	Total/NA	Solid	8015B NM	97468
890-7448-37	B-53	Total/NA	Solid	8015B NM	97468
890-7448-38	B-54	Total/NA	Solid	8015B NM	97468
890-7448-39	B-55	Total/NA	Solid	8015B NM	97468

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

GC Semi VOA (Continued)

Analysis Batch: 97475 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-97468/1-A	Method Blank	Total/NA	Solid	8015B NM	97468
LCS 880-97468/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97468
LCSD 880-97468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97468
890-7448-21 MS	B-37	Total/NA	Solid	8015B NM	97468
890-7448-21 MSD	B-37	Total/NA	Solid	8015B NM	97468

Analysis Batch: 97629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Total/NA	Solid	8015 NM	
890-7448-2	B-18	Total/NA	Solid	8015 NM	
890-7448-3	B-19	Total/NA	Solid	8015 NM	
890-7448-4	B-20	Total/NA	Solid	8015 NM	
890-7448-5	B-21	Total/NA	Solid	8015 NM	
890-7448-6	B-22	Total/NA	Solid	8015 NM	
890-7448-7	B-23	Total/NA	Solid	8015 NM	
890-7448-8	B-24	Total/NA	Solid	8015 NM	
890-7448-9	B-25	Total/NA	Solid	8015 NM	
890-7448-10	B-26	Total/NA	Solid	8015 NM	
890-7448-11	B-27	Total/NA	Solid	8015 NM	
890-7448-12	B-28	Total/NA	Solid	8015 NM	
890-7448-13	B-29	Total/NA	Solid	8015 NM	
890-7448-14	B-30	Total/NA	Solid	8015 NM	
890-7448-15	B-31	Total/NA	Solid	8015 NM	
890-7448-16	B-32	Total/NA	Solid	8015 NM	
890-7448-17	B-33	Total/NA	Solid	8015 NM	
890-7448-18	B-34	Total/NA	Solid	8015 NM	
890-7448-19	B-35	Total/NA	Solid	8015 NM	
890-7448-20	B-36	Total/NA	Solid	8015 NM	
890-7448-21	B-37	Total/NA	Solid	8015 NM	
890-7448-22	B-38	Total/NA	Solid	8015 NM	
890-7448-23	B-39	Total/NA	Solid	8015 NM	
890-7448-24	B-40	Total/NA	Solid	8015 NM	
890-7448-25	B-41	Total/NA	Solid	8015 NM	
890-7448-26	B-42	Total/NA	Solid	8015 NM	
890-7448-27	B-43	Total/NA	Solid	8015 NM	
890-7448-28	B-44	Total/NA	Solid	8015 NM	
890-7448-29	B-45	Total/NA	Solid	8015 NM	
890-7448-30	B-46	Total/NA	Solid	8015 NM	
890-7448-31	B-47	Total/NA	Solid	8015 NM	
890-7448-32	B-48	Total/NA	Solid	8015 NM	
890-7448-33	B-49	Total/NA	Solid	8015 NM	
890-7448-34	B-50	Total/NA	Solid	8015 NM	
890-7448-35	B-51	Total/NA	Solid	8015 NM	
890-7448-36	B-52	Total/NA	Solid	8015 NM	
890-7448-37	B-53	Total/NA	Solid	8015 NM	
890-7448-38	B-54	Total/NA	Solid	8015 NM	
890-7448-39	B-55	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

HPLC/IC

Leach Batch: 97467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Soluble	Solid	DI Leach	
890-7448-2	B-18	Soluble	Solid	DI Leach	
890-7448-3	B-19	Soluble	Solid	DI Leach	
890-7448-4	B-20	Soluble	Solid	DI Leach	
890-7448-5	B-21	Soluble	Solid	DI Leach	
890-7448-6	B-22	Soluble	Solid	DI Leach	
890-7448-7	B-23	Soluble	Solid	DI Leach	
890-7448-8	B-24	Soluble	Solid	DI Leach	
890-7448-9	B-25	Soluble	Solid	DI Leach	
890-7448-10	B-26	Soluble	Solid	DI Leach	
890-7448-11	B-27	Soluble	Solid	DI Leach	
890-7448-12	B-28	Soluble	Solid	DI Leach	
890-7448-13	B-29	Soluble	Solid	DI Leach	
890-7448-14	B-30	Soluble	Solid	DI Leach	
890-7448-15	B-31	Soluble	Solid	DI Leach	
890-7448-16	B-32	Soluble	Solid	DI Leach	
890-7448-17	B-33	Soluble	Solid	DI Leach	
890-7448-18	B-34	Soluble	Solid	DI Leach	
890-7448-19	B-35	Soluble	Solid	DI Leach	
890-7448-20	B-36	Soluble	Solid	DI Leach	
MB 880-97467/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97467/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97467/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7448-1 MS	B-17	Soluble	Solid	DI Leach	
890-7448-1 MSD	B-17	Soluble	Solid	DI Leach	
890-7448-11 MS	B-27	Soluble	Solid	DI Leach	
890-7448-11 MSD	B-27	Soluble	Solid	DI Leach	

Leach Batch: 97478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Soluble	Solid	DI Leach	
890-7448-22	B-38	Soluble	Solid	DI Leach	
890-7448-23	B-39	Soluble	Solid	DI Leach	
890-7448-24	B-40	Soluble	Solid	DI Leach	
890-7448-25	B-41	Soluble	Solid	DI Leach	
890-7448-26	B-42	Soluble	Solid	DI Leach	
890-7448-27	B-43	Soluble	Solid	DI Leach	
890-7448-28	B-44	Soluble	Solid	DI Leach	
890-7448-29	B-45	Soluble	Solid	DI Leach	
890-7448-30	B-46	Soluble	Solid	DI Leach	
890-7448-31	B-47	Soluble	Solid	DI Leach	
890-7448-32	B-48	Soluble	Solid	DI Leach	
890-7448-33	B-49	Soluble	Solid	DI Leach	
890-7448-34	B-50	Soluble	Solid	DI Leach	
890-7448-35	B-51	Soluble	Solid	DI Leach	
890-7448-36	B-52	Soluble	Solid	DI Leach	
890-7448-37	B-53	Soluble	Solid	DI Leach	
890-7448-38	B-54	Soluble	Solid	DI Leach	
890-7448-39	B-55	Soluble	Solid	DI Leach	
MB 880-97478/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97478/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

HPLC/IC (Continued)

Leach Batch: 97478 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-97478/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7448-21 MS	B-37	Soluble	Solid	DI Leach	
890-7448-21 MSD	B-37	Soluble	Solid	DI Leach	
890-7448-31 MS	B-47	Soluble	Solid	DI Leach	
890-7448-31 MSD	B-47	Soluble	Solid	DI Leach	

Analysis Batch: 97485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-1	B-17	Soluble	Solid	300.0	97467
890-7448-2	B-18	Soluble	Solid	300.0	97467
890-7448-3	B-19	Soluble	Solid	300.0	97467
890-7448-4	B-20	Soluble	Solid	300.0	97467
890-7448-5	B-21	Soluble	Solid	300.0	97467
890-7448-6	B-22	Soluble	Solid	300.0	97467
890-7448-7	B-23	Soluble	Solid	300.0	97467
890-7448-8	B-24	Soluble	Solid	300.0	97467
890-7448-9	B-25	Soluble	Solid	300.0	97467
890-7448-10	B-26	Soluble	Solid	300.0	97467
890-7448-11	B-27	Soluble	Solid	300.0	97467
890-7448-12	B-28	Soluble	Solid	300.0	97467
890-7448-13	B-29	Soluble	Solid	300.0	97467
890-7448-14	B-30	Soluble	Solid	300.0	97467
890-7448-15	B-31	Soluble	Solid	300.0	97467
890-7448-16	B-32	Soluble	Solid	300.0	97467
890-7448-17	B-33	Soluble	Solid	300.0	97467
890-7448-18	B-34	Soluble	Solid	300.0	97467
890-7448-19	B-35	Soluble	Solid	300.0	97467
890-7448-20	B-36	Soluble	Solid	300.0	97467
MB 880-97467/1-A	Method Blank	Soluble	Solid	300.0	97467
LCS 880-97467/2-A	Lab Control Sample	Soluble	Solid	300.0	97467
LCSD 880-97467/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97467
890-7448-1 MS	B-17	Soluble	Solid	300.0	97467
890-7448-1 MSD	B-17	Soluble	Solid	300.0	97467
890-7448-11 MS	B-27	Soluble	Solid	300.0	97467
890-7448-11 MSD	B-27	Soluble	Solid	300.0	97467

Analysis Batch: 97496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-21	B-37	Soluble	Solid	300.0	97478
890-7448-22	B-38	Soluble	Solid	300.0	97478
890-7448-23	B-39	Soluble	Solid	300.0	97478
890-7448-24	B-40	Soluble	Solid	300.0	97478
890-7448-25	B-41	Soluble	Solid	300.0	97478
890-7448-26	B-42	Soluble	Solid	300.0	97478
890-7448-27	B-43	Soluble	Solid	300.0	97478
890-7448-28	B-44	Soluble	Solid	300.0	97478
890-7448-29	B-45	Soluble	Solid	300.0	97478
890-7448-30	B-46	Soluble	Solid	300.0	97478
890-7448-31	B-47	Soluble	Solid	300.0	97478
890-7448-32	B-48	Soluble	Solid	300.0	97478
890-7448-33	B-49	Soluble	Solid	300.0	97478

QC Association Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

HPLC/IC (Continued)

Analysis Batch: 97496 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7448-34	B-50	Soluble	Solid	300.0	97478
890-7448-35	B-51	Soluble	Solid	300.0	97478
890-7448-36	B-52	Soluble	Solid	300.0	97478
890-7448-37	B-53	Soluble	Solid	300.0	97478
890-7448-38	B-54	Soluble	Solid	300.0	97478
890-7448-39	B-55	Soluble	Solid	300.0	97478
MB 880-97478/1-A	Method Blank	Soluble	Solid	300.0	97478
LCS 880-97478/2-A	Lab Control Sample	Soluble	Solid	300.0	97478
LCSD 880-97478/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97478
890-7448-21 MS	B-37	Soluble	Solid	300.0	97478
890-7448-21 MSD	B-37	Soluble	Solid	300.0	97478
890-7448-31 MS	B-47	Soluble	Solid	300.0	97478
890-7448-31 MSD	B-47	Soluble	Solid	300.0	97478

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-17 — Lab Sample ID: 890-7448-1

Date Collected: 12/07/24 09:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 12:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 12:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 18:14	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 18:14	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97485	12/10/24 12:25	SMC	EET MID

Client Sample ID: B-18 — Lab Sample ID: 890-7448-2

Date Collected: 12/07/24 09:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 13:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 13:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 19:02	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 12:43	SMC	EET MID

Client Sample ID: B-19 — Lab Sample ID: 890-7448-3

Date Collected: 12/07/24 09:20 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 13:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 13:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:17	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 19:17	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 12:49	SMC	EET MID

Client Sample ID: B-20 — Lab Sample ID: 890-7448-4

Date Collected: 12/07/24 09:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 13:59	SM	EET MID

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Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-20 Lab Sample ID: 890-7448-4

Date Collected: 12/07/24 09:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			97629	12/10/24 19:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 19:33	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 12:55	SMC	EET MID

Client Sample ID: B-21 Lab Sample ID: 890-7448-5

Date Collected: 12/07/24 09:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 14:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:49	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 19:49	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:01	SMC	EET MID

Client Sample ID: B-22 Lab Sample ID: 890-7448-6

Date Collected: 12/07/24 09:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 14:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 14:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 20:05	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:18	SMC	EET MID

Client Sample ID: B-23 Lab Sample ID: 890-7448-7

Date Collected: 12/07/24 10:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 15:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 15:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 20:20	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-23 Lab Sample ID: 890-7448-7

Date Collected: 12/07/24 10:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:24	SMC	EET MID

Client Sample ID: B-24 Lab Sample ID: 890-7448-8

Date Collected: 12/07/24 10:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 15:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 15:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:37	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 20:37	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:30	SMC	EET MID

Client Sample ID: B-25 Lab Sample ID: 890-7448-9

Date Collected: 12/07/24 10:20 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 15:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 15:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 20:52	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:36	SMC	EET MID

Client Sample ID: B-26 Lab Sample ID: 890-7448-10

Date Collected: 12/07/24 10:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 16:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 16:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 21:08	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:42	SMC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-27 — Lab Sample ID: 890-7448-11

Date Collected: 12/07/24 10:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 17:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 17:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 21:39	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 13:48	SMC	EET MID

Client Sample ID: B-28 — Lab Sample ID: 890-7448-12

Date Collected: 12/07/24 10:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 17:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 17:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:55	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 21:55	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97485	12/10/24 14:06	SMC	EET MID

Client Sample ID: B-29 — Lab Sample ID: 890-7448-13

Date Collected: 12/07/24 11:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 18:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 22:10	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:12	SMC	EET MID

Client Sample ID: B-30 — Lab Sample ID: 890-7448-14

Date Collected: 12/07/24 11:15 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 18:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:39	SM	EET MID

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Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-30 Lab Sample ID: 890-7448-14

Date Collected: 12/07/24 11:15 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			97629	12/10/24 22:26	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 22:26	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:29	SMC	EET MID

Client Sample ID: B-31 Lab Sample ID: 890-7448-15

Date Collected: 12/07/24 11:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 18:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:41	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 22:41	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:35	SMC	EET MID

Client Sample ID: B-32 Lab Sample ID: 890-7448-16

Date Collected: 12/07/24 11:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 19:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 19:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 22:57	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:41	SMC	EET MID

Client Sample ID: B-33 Lab Sample ID: 890-7448-17

Date Collected: 12/07/24 11:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 19:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 19:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:13	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 23:13	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-33 — Lab Sample ID: 890-7448-17

Date Collected: 12/07/24 11:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:47	SMC	EET MID

Client Sample ID: B-34 — Lab Sample ID: 890-7448-18

Date Collected: 12/07/24 11:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 20:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 20:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 23:28	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:53	SMC	EET MID

Client Sample ID: B-35 — Lab Sample ID: 890-7448-19

Date Collected: 12/07/24 12:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 20:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 20:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:44	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/10/24 23:44	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 14:59	SMC	EET MID

Client Sample ID: B-36 — Lab Sample ID: 890-7448-20

Date Collected: 12/07/24 12:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97504	12/10/24 10:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97481	12/10/24 20:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 20:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/11/24 00:00	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97466	12/10/24 08:23	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97473	12/11/24 00:00	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97467	12/10/24 08:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97485	12/10/24 15:05	SMC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-37 — Lab Sample ID: 890-7448-21

Date Collected: 12/07/24 12:20 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 18:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 18:14	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 18:14	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 11:16	SMC	EET MID

Client Sample ID: B-38 — Lab Sample ID: 890-7448-22

Date Collected: 12/07/24 12:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 18:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:02	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 19:02	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 11:37	SMC	EET MID

Client Sample ID: B-39 — Lab Sample ID: 890-7448-23

Date Collected: 12/07/24 12:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 18:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 18:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:17	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 19:17	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 11:44	SMC	EET MID

Client Sample ID: B-40 — Lab Sample ID: 890-7448-24

Date Collected: 12/07/24 12:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 19:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 19:18	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-40 Lab Sample ID: 890-7448-24

Date Collected: 12/07/24 12:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			97629	12/10/24 19:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 19:33	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 11:51	SMC	EET MID

Client Sample ID: B-41 Lab Sample ID: 890-7448-25

Date Collected: 12/07/24 12:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 19:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 19:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 19:49	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 19:49	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 11:58	SMC	EET MID

Client Sample ID: B-42 Lab Sample ID: 890-7448-26

Date Collected: 12/07/24 12:45 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 19:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 19:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 20:05	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 12:59	SMC	EET MID

Client Sample ID: B-43 Lab Sample ID: 890-7448-27

Date Collected: 12/07/24 12:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 20:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 20:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 20:20	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-43 — Lab Sample ID: 890-7448-27

Date Collected: 12/07/24 12:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 13:06	SMC	EET MID

Client Sample ID: B-44 — Lab Sample ID: 890-7448-28

Date Collected: 12/07/24 12:55 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 20:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 20:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:37	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 20:37	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 13:13	SMC	EET MID

Client Sample ID: B-45 — Lab Sample ID: 890-7448-29

Date Collected: 12/07/24 13:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 21:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 21:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 20:52	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 20:52	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 13:20	SMC	EET MID

Client Sample ID: B-46 — Lab Sample ID: 890-7448-30

Date Collected: 12/07/24 13:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 21:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 21:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:08	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 21:08	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97496	12/10/24 13:27	SMC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-47 — Lab Sample ID: 890-7448-31

Date Collected: 12/07/24 13:20 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 22:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 22:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 21:39	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 13:34	SMC	EET MID

Client Sample ID: B-48 — Lab Sample ID: 890-7448-32

Date Collected: 12/07/24 13:25 **Matrix: Solid**
Date Received: 12/09/24 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 23:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 23:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 21:55	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 21:55	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 13:55	SMC	EET MID

Client Sample ID: B-49 — Lab Sample ID: 890-7448-33

Date Collected: 12/07/24 13:30 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 23:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 23:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 22:10	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97496	12/10/24 14:01	SMC	EET MID

Client Sample ID: B-50 — Lab Sample ID: 890-7448-34

Date Collected: 12/07/24 13:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/10/24 23:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/10/24 23:56	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-50 Lab Sample ID: 890-7448-34

Date Collected: 12/07/24 13:35 **Matrix: Solid**
Date Received: 12/09/24 15:23

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			97629	12/10/24 22:26	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 22:26	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97496	12/10/24 14:22	SMC	EET MID

Client Sample ID: B-51 Lab Sample ID: 890-7448-35

Date Collected: 12/07/24 13:40 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 00:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/11/24 00:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:41	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 22:41	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97496	12/10/24 14:29	SMC	EET MID

Client Sample ID: B-52 Lab Sample ID: 890-7448-36

Date Collected: 12/07/24 13:45 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 00:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/11/24 00:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 22:57	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 22:57	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 14:36	SMC	EET MID

Client Sample ID: B-53 Lab Sample ID: 890-7448-37

Date Collected: 12/07/24 13:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 00:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/11/24 00:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:13	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 23:13	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7448-1
Project/Site: east test sat

Client Sample ID: B-53 Lab Sample ID: 890-7448-37

Date Collected: 12/07/24 13:50 **Matrix: Solid**
Date Received: 12/09/24 15:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 14:43	SMC	EET MID

Client Sample ID: B-54 Lab Sample ID: 890-7448-38

Date Collected: 12/07/24 14:00 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 01:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/11/24 01:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 23:28	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97496	12/10/24 14:50	SMC	EET MID

Client Sample ID: B-55 Lab Sample ID: 890-7448-39

Date Collected: 12/07/24 14:10 **Matrix: Solid**
Date Received: 12/09/24 15:23

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 01:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97554	12/11/24 01:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			97629	12/10/24 23:44	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/10/24 23:44	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97478	12/10/24 09:26	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97496	12/10/24 14:56	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Arcadis US Inc.
Project/Site: east test sat

Job ID: 890-7448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7448-1	B-17	Solid	12/07/24 09:00	12/09/24 15:23
890-7448-2	B-18	Solid	12/07/24 09:10	12/09/24 15:23
890-7448-3	B-19	Solid	12/07/24 09:20	12/09/24 15:23
890-7448-4	B-20	Solid	12/07/24 09:30	12/09/24 15:23
890-7448-5	B-21	Solid	12/07/24 09:40	12/09/24 15:23
890-7448-6	B-22	Solid	12/07/24 09:50	12/09/24 15:23
890-7448-7	B-23	Solid	12/07/24 10:00	12/09/24 15:23
890-7448-8	B-24	Solid	12/07/24 10:10	12/09/24 15:23
890-7448-9	B-25	Solid	12/07/24 10:20	12/09/24 15:23
890-7448-10	B-26	Solid	12/07/24 10:30	12/09/24 15:23
890-7448-11	B-27	Solid	12/07/24 10:40	12/09/24 15:23
890-7448-12	B-28	Solid	12/07/24 10:50	12/09/24 15:23
890-7448-13	B-29	Solid	12/07/24 11:00	12/09/24 15:23
890-7448-14	B-30	Solid	12/07/24 11:15	12/09/24 15:23
890-7448-15	B-31	Solid	12/07/24 11:25	12/09/24 15:23
890-7448-16	B-32	Solid	12/07/24 11:35	12/09/24 15:23
890-7448-17	B-33	Solid	12/07/24 11:40	12/09/24 15:23
890-7448-18	B-34	Solid	12/07/24 11:50	12/09/24 15:23
890-7448-19	B-35	Solid	12/07/24 12:00	12/09/24 15:23
890-7448-20	B-36	Solid	12/07/24 12:10	12/09/24 15:23
890-7448-21	B-37	Solid	12/07/24 12:20	12/09/24 15:23
890-7448-22	B-38	Solid	12/07/24 12:25	12/09/24 15:23
890-7448-23	B-39	Solid	12/07/24 12:30	12/09/24 15:23
890-7448-24	B-40	Solid	12/07/24 12:35	12/09/24 15:23
890-7448-25	B-41	Solid	12/07/24 12:40	12/09/24 15:23
890-7448-26	B-42	Solid	12/07/24 12:45	12/09/24 15:23
890-7448-27	B-43	Solid	12/07/24 12:50	12/09/24 15:23
890-7448-28	B-44	Solid	12/07/24 12:55	12/09/24 15:23
890-7448-29	B-45	Solid	12/07/24 13:00	12/09/24 15:23
890-7448-30	B-46	Solid	12/07/24 13:10	12/09/24 15:23
890-7448-31	B-47	Solid	12/07/24 13:20	12/09/24 15:23
890-7448-32	B-48	Solid	12/07/24 13:25	12/09/24 15:23
890-7448-33	B-49	Solid	12/07/24 13:30	12/09/24 15:23
890-7448-34	B-50	Solid	12/07/24 13:35	12/09/24 15:23
890-7448-35	B-51	Solid	12/07/24 13:40	12/09/24 15:23
890-7448-36	B-52	Solid	12/07/24 13:45	12/09/24 15:23
890-7448-37	B-53	Solid	12/07/24 13:50	12/09/24 15:23
890-7448-38	B-54	Solid	12/07/24 14:00	12/09/24 15:23
890-7448-39	B-55	Solid	12/07/24 14:10	12/09/24 15:23

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

Chain of Custody Record



12/11/2024

Client Information	Sampler: Luis Espaza	Lab PM: Builes, John	Carrie
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State o
Company: Arcadis U.S., Inc.	PWSID:		
Address: 1004 North Big Spring Suite 300	Due Date Requested:		
City: Midland	TAT Requested (days): 3-Day TAT		
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No		
Phone: 281-644-9437(Tel)	PO #:		
Email: douglas.jordan@arcadis.com	WO #:		
Project Name: East Test Sat	Project #: 30246645.00004		
Site: ~~East Test Sat~~ Lea County, NM	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N		
B-17	12/07/24	0900	G	Solid			X	X	X	1	
B-18		0910		Solid			X	X	X	1	
B-19		0920		Solid			X	X	X	1	
B-20		0930		Solid			X	X	X	1	
B-21		0940		Solid			X	X	X	1	
B-22		0950		Solid			X	X	X	1	
B-23		1000		Solid			X	X	X	1	
B-24		1010		Solid			X	X	X	1	
B-25		1020		Solid			X	X	X	1	
B-26		1030		Solid			X	X	X	1	
B-27	X	1040	X	Solid			X	X	X	1	

Preservation Codes: N - None

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: TNM007 -0.2 2.6 2.4

Ver: 05/06/2024

Received by OCD: 1/9/2025 1:18:24 PM

Released to Imaging: 1/10/2025 9:43:03 AM

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

Chain of Custody Record

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Client Information	Sampler: Luis Esparza	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-10757-1562.1
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: 2 4 Page 3 of 3
Company: Arcadis U.S., Inc.	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 3-Day TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sat	Project #: 30246645.00004			
Site: Lea County, NM	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-28	12/07/24	1050	G	Solid			X	X	X	1	
B-29		1100		Solid			X	X	X	1	
B-30		1115		Solid			X	X	X	1	
B-31		1125		Solid			X	X	X	1	
B-32		1135		Solid			X	X	X	1	
B-33		1140		Solid			X	X	X	1	
B-34		1150		Solid			X	X	X	1	
B-35		1200		Solid			X	X	X	1	
B-36		1210		Solid			X	X	X	1	
B-37		1220		Solid			X	X	X	1	
B-38	X	1225	X	Solid			X	X	X	1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: Tumoo -0.2 2.6 2.4

Ver: 05/06/2024

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12/11/2024

Received by OCD: 1/9/2025 1:18:24 PM

Released to Imaging: 1/10/2025 9:43:03 AM

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

Chain of Custody Record

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12/11/2024

Client Information	Sampler: Luis Esparza	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-10757-1562.1
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: 3 4 Page 3 of 4
Company: Arcadis U.S., Inc.	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 3-Day TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sat	Project #: 30246645.00004			
Site: Lea County, NM	SSOW#:			

Analysis Requested

Preservation Codes: N - None

Other:

Special Instructions/Note:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers
			Preservation Code:				N	N	N	
B-39	12/07/24	1230	G	Solid			X	X	X	1
B-40		1235		Solid			X	X	X	1
B-41		1240		Solid			X	X	X	1
B-42		1245		Solid			X	X	X	1
B-43		1250		Solid			X	X	X	1
B-44		1255		Solid			X	X	X	1
B-45		1300		Solid			X	X	X	1
B-46		1310		Solid			X	X	X	1
B-47		1320		Solid			X	X	X	1
B-48		1325		Solid			X	X	X	1
B-49	X	1330	X	Solid			X	X	X	1

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: IR#002 -0.2 2.6 2.4

Ver: 05/06/2024

Received by OCD: 1/9/2025 1:18:24 PM
Released to Imaging: 1/10/2025 9:43:03 AM

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

Chain of Custody Record

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Client Information	Sampler: Luis Esparza	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-10757-1562.1
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: 4 Page 4 of 5 4
Company: Arcadis U.S., Inc.	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			Preservation Codes: N - None
City: Midland	TAT Requested (days): 3-Day TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sat	Project #: 30246645.00004			
Site: Lea County, NM	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-50	12/07/24	1335	G	Solid			X	X	X	1	
B-51		1340		Solid			X	X	X	1	
B-52		1345		Solid			X	X	X	1	
B-53		1350		Solid			X	X	X	1	
B-54		1400		Solid			X	X	X	1	
B-55	X	1410	X	Solid			X	X	X	1	
	X			Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
	X			Solid						1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: TM007 -0.2 2.6 2.4

Ver: 05/06/2024

Received by OCD: 1/9/2025 1:18:24 PM
Released to Imaging: 1/10/2025 9:43:03 AM
12/11/2024
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Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 890-7448-1

Login Number: 7448 **List Source: Eurofins Carlsbad**
List Number: 1
Creator: Lopez, Abraham

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

Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 890-7448-1

Login Number: 7448 **List Source: Eurofins Midland**
List Number: 2 **List Creation: 12/10/24 07:42 AM**
Creator: Laing, Edmundo

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: Justin Nixon
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 12/11/2024 2:34:12 PM

JOB DESCRIPTION

EAST TEST SAT
30246645.00004

JOB NUMBER

890-7449-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

my EOL

Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
12/11/2024 2:34:12 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Laboratory Job ID: 890-7449-1
SDG: 30246645.00004

Table of Contents

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QC Sample Results 12
QC Association Summary 18
Lab Chronicle 21
Certification Summary 23
Method Summary 24
Sample Summary 25
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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

Qualifiers

GC 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.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Arcadis US Inc.
Project: EAST TEST SAT

Job ID: 890-7449-1

Job ID: 890-7449-1 Eurofins Carlsbad

Job Narrative
890-7449-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 12/9/2024 3:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SW - 5 - 2' (890-7449-1), SW - 6 - 2' (890-7449-2), SW - 7 - 2' (890-7449-3), SW - 8 - 2' (890-7449-4), SW - 9 - 2' (890-7449-5) and SW - 10 - 2' (890-7449-6).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SW - 5 - 2' (890-7449-1), (CCV 880-97488/2), (CCV 880-97488/33), (LCS 880-97505/1-A), (LCSD 880-97505/2-A) and (890-7448-A-21-I). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97505 and analytical batch 880-97488 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.

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-97468 and analytical batch 880-97475 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-97468 and analytical batch 880-97475 contained 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 surrogate recovery for the blank associated with preparation batch 880-97502 and analytical batch 880-97586 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW - 9 - 2' (890-7449-5) and SW - 10 - 2' (890-7449-6). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Client Sample ID: SW - 5 - 2'

Lab Sample ID: 890-7449-1
Matrix: Solid
Date Collected: 12/07/24 14:20
Date Received: 12/09/24 15:24

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		12/10/24 10:50	12/11/24 01:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/11/24 01:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/11/24 01:59	1
m-Xylene & p-Xylene	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/11/24 01:59	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/10/24 10:50	12/11/24 01:59	1
Xylenes, Total	<0.00401	U *+	0.00401		mg/Kg		12/10/24 10:50	12/11/24 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*151*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/11/24 01:59*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/10/24 10:50*	*12/11/24 01:59*	*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			12/11/24 01:59	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			12/11/24 00:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/11/24 00:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/11/24 00:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 08:27	12/11/24 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*12/10/24 08:27*	*12/11/24 00:00*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/10/24 08:27*	*12/11/24 00:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**314**		9.94		mg/Kg			12/10/24 10:49	1

Client Sample ID: SW - 6 - 2'

Lab Sample ID: 890-7449-2
Matrix: Solid
Date Collected: 12/07/24 14:30
Date Received: 12/09/24 15:24

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		12/10/24 10:44	12/10/24 12:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:53	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:44	12/10/24 12:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:53	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:44	12/10/24 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/10/24 10:44*	*12/10/24 12:53*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/10/24 10:44*	*12/10/24 12:53*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Client Sample ID: SW - 6 - 2'

Date Collected: 12/07/24 14:30
Date Received: 12/09/24 15:24

Lab Sample ID: 890-7449-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			12/10/24 12:53	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			12/11/24 11:44	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		12/10/24 10:33	12/11/24 11:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 11:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 11:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/10/24 10:33*	*12/11/24 11:44*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/10/24 10:33*	*12/11/24 11:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**94.6**		9.98		mg/Kg			12/10/24 11:05	1

Client Sample ID: SW - 7 - 2'

Date Collected: 12/07/24 14:45
Date Received: 12/09/24 15:24

Lab Sample ID: 890-7449-3
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		12/10/24 10:44	12/10/24 13:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:13	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/10/24 10:44	12/10/24 13:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:13	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/10/24 10:44	12/10/24 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:13*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:13*	*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			12/10/24 13:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			12/11/24 12:33	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		12/10/24 10:33	12/11/24 12:33	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		12/10/24 10:33	12/11/24 12:33	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

Client Sample ID: SW - 7 - 2'
Lab Sample ID: 890-7449-3
Date Collected: 12/07/24 14:45 **Matrix: Solid**
Date Received: 12/09/24 15:24

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		12/10/24 10:33	12/11/24 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/10/24 10:33*	*12/11/24 12:33*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/10/24 10:33*	*12/11/24 12:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**83.5**		10.1		mg/Kg			12/10/24 11:10	1

Client Sample ID: SW - 8 - 2'
Lab Sample ID: 890-7449-4
Date Collected: 12/07/24 15:00 **Matrix: Solid**
Date Received: 12/09/24 15:24

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		12/10/24 10:44	12/10/24 13:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:44	12/10/24 13:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:44	12/10/24 13:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/10/24 10:44	12/10/24 13:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/10/24 10:44	12/10/24 13:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/10/24 10:44	12/10/24 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:34*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:34*	*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			12/10/24 13:34	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			12/11/24 12:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/10/24 10:33	12/11/24 12:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/10/24 10:33	12/11/24 12:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/10/24 10:33	12/11/24 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/10/24 10:33*	*12/11/24 12:48*	*1*
o-Terphenyl	*70*		*70 - 130*	*12/10/24 10:33*	*12/11/24 12:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**322**		9.94		mg/Kg			12/10/24 11:16	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Client Sample ID: SW - 9 - 2'

Date Collected: 12/07/24 15:15
Date Received: 12/09/24 15:24

Lab Sample ID: 890-7449-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:54	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/10/24 10:44	12/10/24 13:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/10/24 10:44	12/10/24 13:54	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/10/24 10:44	12/10/24 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:54*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/10/24 10:44*	*12/10/24 13:54*	*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			12/10/24 13:54	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			12/11/24 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*12/10/24 10:33*	*12/11/24 13:05*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*12/10/24 10:33*	*12/11/24 13:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**82.0**		9.94		mg/Kg			12/10/24 11:21	1

Client Sample ID: SW - 10 - 2'

Date Collected: 12/07/24 15:30
Date Received: 12/09/24 15:24

Lab Sample ID: 890-7449-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 14:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 14:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 14:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/10/24 10:44	12/10/24 14:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 14:15	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/10/24 10:44	12/10/24 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*12/10/24 10:44*	*12/10/24 14:15*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/10/24 10:44*	*12/10/24 14:15*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Client Sample ID: SW - 10 - 2'

Date Collected: 12/07/24 15:30
Date Received: 12/09/24 15:24

Lab Sample ID: 890-7449-6

Matrix: Solid

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			12/10/24 14:15	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			12/11/24 13:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/10/24 10:33*	*12/11/24 13:21*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/10/24 10:33*	*12/11/24 13:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**193**		9.98		mg/Kg			12/10/24 11:26	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-7449-1	SW - 5 - 2'	151 S1+	86
890-7449-2	SW - 6 - 2'	117	94
890-7449-2 MS	SW - 6 - 2'	104	99
890-7449-2 MSD	SW - 6 - 2'	110	98
890-7449-3	SW - 7 - 2'	115	94
890-7449-4	SW - 8 - 2'	117	94
890-7449-5	SW - 9 - 2'	116	92
890-7449-6	SW - 10 - 2'	118	94
LCS 880-97503/1-A	Lab Control Sample	98	97
LCS 880-97505/1-A	Lab Control Sample	134 S1+	92
LCSD 880-97503/2-A	Lab Control Sample Dup	101	98
LCSD 880-97505/2-A	Lab Control Sample Dup	135 S1+	62 S1-
MB 880-97503/5-A	Method Blank	111	86
MB 880-97505/5-A	Method Blank	132 S1+	85

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-7449-1	SW - 5 - 2'	101	95
890-7449-2	SW - 6 - 2'	92	72
890-7449-2 MS	SW - 6 - 2'	91	79
890-7449-2 MSD	SW - 6 - 2'	90	78
890-7449-3	SW - 7 - 2'	98	79
890-7449-4	SW - 8 - 2'	90	70
890-7449-5	SW - 9 - 2'	82	65 S1-
890-7449-6	SW - 10 - 2'	88	68 S1-
LCS 880-97468/2-A	Lab Control Sample	95	97
LCS 880-97502/2-A	Lab Control Sample	118	105
LCSD 880-97468/3-A	Lab Control Sample Dup	108	107
LCSD 880-97502/3-A	Lab Control Sample Dup	110	97
MB 880-97468/1-A	Method Blank	145 S1+	142 S1+
MB 880-97502/1-A	Method Blank	137 S1+	109

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-97503/5-A
Matrix: Solid
Analysis Batch: 97484

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97503

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/10/24 10:44	12/10/24 12:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:44	12/10/24 12:31	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/10/24 10:44	12/10/24 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/10/24 10:44*	*12/10/24 12:31*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/10/24 10:44*	*12/10/24 12:31*	*1*

Lab Sample ID: LCS 880-97503/1-A
Matrix: Solid
Analysis Batch: 97484

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97503

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1137		mg/Kg		114	70 - 130
Toluene	0.100	0.1058		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1088		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2180		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1111		mg/Kg		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-97503/2-A
Matrix: Solid
Analysis Batch: 97484

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97503

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1168		mg/Kg		117	70 - 130	3	35
Toluene	0.100	0.1075		mg/Kg		107	70 - 130	2	35
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2248		mg/Kg		112	70 - 130	3	35
o-Xylene	0.100	0.1145		mg/Kg		115	70 - 130	3	35

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

Lab Sample ID: 890-7449-2 MS
Matrix: Solid
Analysis Batch: 97484

Client Sample ID: SW - 6 - 2'
Prep Type: Total/NA
Prep Batch: 97503

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.101	0.1038		mg/Kg		103	70 - 130
Toluene	<0.00200	U	0.101	0.09460		mg/Kg		94	70 - 130

QC Sample Results

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

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

Lab Sample ID: 890-7449-2 MS **Client Sample ID: SW - 6 - 2'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 97484 **Prep Batch: 97503**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.101	0.09625		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.202	0.1917		mg/Kg		95	70 - 130
o-Xylene	<0.00200	U	0.101	0.09691		mg/Kg		96	70 - 130

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

Lab Sample ID: 890-7449-2 MSD **Client Sample ID: SW - 6 - 2'**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 97484 **Prep Batch: 97503**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0998	0.1073		mg/Kg		108	70 - 130	3	35
Toluene	<0.00200	U	0.0998	0.1059		mg/Kg		106	70 - 130	11	35
Ethylbenzene	<0.00200	U	0.0998	0.1109		mg/Kg		111	70 - 130	14	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.2249		mg/Kg		113	70 - 130	16	35
o-Xylene	<0.00200	U	0.0998	0.1125		mg/Kg		113	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-97505/5-A **Client Sample ID: Method Blank**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 97488 **Prep Batch: 97505**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/10/24 10:50	12/10/24 17:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/10/24 10:50	12/10/24 17:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*12/10/24 10:50*	*12/10/24 17:55*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*12/10/24 10:50*	*12/10/24 17:55*	*1*

Lab Sample ID: LCS 880-97505/1-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Total/NA**
Analysis Batch: 97488 **Prep Batch: 97505**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1319	*+	mg/Kg		132	70 - 130
Toluene	0.100	0.1197		mg/Kg		120	70 - 130
Ethylbenzene	0.100	0.1259		mg/Kg		126	70 - 130
m-Xylene & p-Xylene	0.200	0.2480		mg/Kg		124	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

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

Lab Sample ID: LCS 880-97505/1-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97505

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1249		mg/Kg		125	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-97505/2-A
Matrix: Solid
Analysis Batch: 97488

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97505

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1170		mg/Kg		117	70 - 130	12	35
Toluene			0.100	0.1166		mg/Kg		117	70 - 130	3	35
Ethylbenzene			0.100	0.1299		mg/Kg		130	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2672	*+	mg/Kg		134	70 - 130	7	35
o-Xylene			0.100	0.1343	*+	mg/Kg		134	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*62*	*S1-*	*70 - 130*

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

Lab Sample ID: MB 880-97468/1-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97468

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		12/10/24 08:26	12/10/24 17:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 08:26	12/10/24 17:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 08:26	12/10/24 17:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*12/10/24 08:26*	*12/10/24 17:20*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*12/10/24 08:26*	*12/10/24 17:20*	*1*

Lab Sample ID: LCS 880-97468/2-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97468

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	922.9		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	911.1		mg/Kg		91	70 - 130		

QC Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

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

Lab Sample ID: LCS 880-97468/2-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97468

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: LCSD 880-97468/3-A
Matrix: Solid
Analysis Batch: 97475

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97468

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1093		mg/Kg		109	70 - 130	17	20
Diesel Range Organics (Over C10-C28)			1000	1008		mg/Kg		101	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: MB 880-97502/1-A
Matrix: Solid
Analysis Batch: 97586

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97502

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		12/10/24 10:33	12/11/24 08:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 08:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/10/24 10:33	12/11/24 08:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	12/10/24 10:33	12/11/24 08:50	1
o-Terphenyl	109		70 - 130	12/10/24 10:33	12/11/24 08:50	1

Lab Sample ID: LCS 880-97502/2-A
Matrix: Solid
Analysis Batch: 97586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97502

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1221		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1062		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	105		70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

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

Lab Sample ID: LCSD 880-97502/3-A
Matrix: Solid
Analysis Batch: 97586

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97502

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1168		mg/Kg		117	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	998.0		mg/Kg		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 890-7449-2 MS
Matrix: Solid
Analysis Batch: 97586

Client Sample ID: SW - 6 - 2'
Prep Type: Total/NA
Prep Batch: 97502

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	887.0		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	998	740.1		mg/Kg		74	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*79*		*70 - 130*

Lab Sample ID: 890-7449-2 MSD
Matrix: Solid
Analysis Batch: 97586

Client Sample ID: SW - 6 - 2'
Prep Type: Total/NA
Prep Batch: 97502

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	868.8		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	725.1		mg/Kg		73	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*78*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-97465/1-A
Matrix: Solid
Analysis Batch: 97469

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/10/24 09:03	1

QC Sample Results

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-97465/2-A **Client Sample ID: Lab Control Sample**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 97469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	233.6		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-97465/3-A **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid **Prep Type: Soluble**
Analysis Batch: 97469

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	235.2		mg/Kg		94	90 - 110	1	20

QC Association Summary

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

GC VOA

Analysis Batch: 97484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-2	SW - 6 - 2'	Total/NA	Solid	8021B	97503
890-7449-3	SW - 7 - 2'	Total/NA	Solid	8021B	97503
890-7449-4	SW - 8 - 2'	Total/NA	Solid	8021B	97503
890-7449-5	SW - 9 - 2'	Total/NA	Solid	8021B	97503
890-7449-6	SW - 10 - 2'	Total/NA	Solid	8021B	97503
MB 880-97503/5-A	Method Blank	Total/NA	Solid	8021B	97503
LCS 880-97503/1-A	Lab Control Sample	Total/NA	Solid	8021B	97503
LCSD 880-97503/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97503
890-7449-2 MS	SW - 6 - 2'	Total/NA	Solid	8021B	97503
890-7449-2 MSD	SW - 6 - 2'	Total/NA	Solid	8021B	97503

Analysis Batch: 97488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	8021B	97505
MB 880-97505/5-A	Method Blank	Total/NA	Solid	8021B	97505
LCS 880-97505/1-A	Lab Control Sample	Total/NA	Solid	8021B	97505
LCSD 880-97505/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97505

Prep Batch: 97503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-2	SW - 6 - 2'	Total/NA	Solid	5035	
890-7449-3	SW - 7 - 2'	Total/NA	Solid	5035	
890-7449-4	SW - 8 - 2'	Total/NA	Solid	5035	
890-7449-5	SW - 9 - 2'	Total/NA	Solid	5035	
890-7449-6	SW - 10 - 2'	Total/NA	Solid	5035	
MB 880-97503/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97503/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97503/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7449-2 MS	SW - 6 - 2'	Total/NA	Solid	5035	
890-7449-2 MSD	SW - 6 - 2'	Total/NA	Solid	5035	

Prep Batch: 97505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	5035	
MB 880-97505/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97505/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97505/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 97583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	Total BTEX	
890-7449-2	SW - 6 - 2'	Total/NA	Solid	Total BTEX	
890-7449-3	SW - 7 - 2'	Total/NA	Solid	Total BTEX	
890-7449-4	SW - 8 - 2'	Total/NA	Solid	Total BTEX	
890-7449-5	SW - 9 - 2'	Total/NA	Solid	Total BTEX	
890-7449-6	SW - 10 - 2'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

GC Semi VOA

Prep Batch: 97468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	8015NM Prep	
MB 880-97468/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97468/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	8015B NM	97468
MB 880-97468/1-A	Method Blank	Total/NA	Solid	8015B NM	97468
LCS 880-97468/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97468
LCSD 880-97468/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97468

Prep Batch: 97502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-2	SW - 6 - 2'	Total/NA	Solid	8015NM Prep	
890-7449-3	SW - 7 - 2'	Total/NA	Solid	8015NM Prep	
890-7449-4	SW - 8 - 2'	Total/NA	Solid	8015NM Prep	
890-7449-5	SW - 9 - 2'	Total/NA	Solid	8015NM Prep	
890-7449-6	SW - 10 - 2'	Total/NA	Solid	8015NM Prep	
MB 880-97502/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97502/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97502/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7449-2 MS	SW - 6 - 2'	Total/NA	Solid	8015NM Prep	
890-7449-2 MSD	SW - 6 - 2'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-2	SW - 6 - 2'	Total/NA	Solid	8015B NM	97502
890-7449-3	SW - 7 - 2'	Total/NA	Solid	8015B NM	97502
890-7449-4	SW - 8 - 2'	Total/NA	Solid	8015B NM	97502
890-7449-5	SW - 9 - 2'	Total/NA	Solid	8015B NM	97502
890-7449-6	SW - 10 - 2'	Total/NA	Solid	8015B NM	97502
MB 880-97502/1-A	Method Blank	Total/NA	Solid	8015B NM	97502
LCS 880-97502/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97502
LCSD 880-97502/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97502
890-7449-2 MS	SW - 6 - 2'	Total/NA	Solid	8015B NM	97502
890-7449-2 MSD	SW - 6 - 2'	Total/NA	Solid	8015B NM	97502

Analysis Batch: 97630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Total/NA	Solid	8015 NM	
890-7449-2	SW - 6 - 2'	Total/NA	Solid	8015 NM	
890-7449-3	SW - 7 - 2'	Total/NA	Solid	8015 NM	
890-7449-4	SW - 8 - 2'	Total/NA	Solid	8015 NM	
890-7449-5	SW - 9 - 2'	Total/NA	Solid	8015 NM	
890-7449-6	SW - 10 - 2'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

HPLC/IC

Leach Batch: 97465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Soluble	Solid	DI Leach	
890-7449-2	SW - 6 - 2'	Soluble	Solid	DI Leach	
890-7449-3	SW - 7 - 2'	Soluble	Solid	DI Leach	
890-7449-4	SW - 8 - 2'	Soluble	Solid	DI Leach	
890-7449-5	SW - 9 - 2'	Soluble	Solid	DI Leach	
890-7449-6	SW - 10 - 2'	Soluble	Solid	DI Leach	
MB 880-97465/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97465/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97465/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 97469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7449-1	SW - 5 - 2'	Soluble	Solid	300.0	97465
890-7449-2	SW - 6 - 2'	Soluble	Solid	300.0	97465
890-7449-3	SW - 7 - 2'	Soluble	Solid	300.0	97465
890-7449-4	SW - 8 - 2'	Soluble	Solid	300.0	97465
890-7449-5	SW - 9 - 2'	Soluble	Solid	300.0	97465
890-7449-6	SW - 10 - 2'	Soluble	Solid	300.0	97465
MB 880-97465/1-A	Method Blank	Soluble	Solid	300.0	97465
LCS 880-97465/2-A	Lab Control Sample	Soluble	Solid	300.0	97465
LCSD 880-97465/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97465

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

Client Sample ID: SW - 5 - 2' Lab Sample ID: 890-7449-1

Date Collected: 12/07/24 14:20 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97505	12/10/24 10:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97488	12/11/24 01:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/11/24 01:59	AJ	EET MID
Total/NA	Analysis	8015 NM		1			97630	12/11/24 00:00	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97468	12/10/24 08:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97475	12/11/24 00:00	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 10:49	CH	EET MID

Client Sample ID: SW - 6 - 2' Lab Sample ID: 890-7449-2

Date Collected: 12/07/24 14:30 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97503	12/10/24 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97484	12/10/24 12:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/10/24 12:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			97630	12/11/24 11:44	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97502	12/10/24 10:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97586	12/11/24 11:44	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 11:05	CH	EET MID

Client Sample ID: SW - 7 - 2' Lab Sample ID: 890-7449-3

Date Collected: 12/07/24 14:45 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97503	12/10/24 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97484	12/10/24 13:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/10/24 13:13	AJ	EET MID
Total/NA	Analysis	8015 NM		1			97630	12/11/24 12:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	97502	12/10/24 10:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97586	12/11/24 12:33	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 11:10	CH	EET MID

Client Sample ID: SW - 8 - 2' Lab Sample ID: 890-7449-4

Date Collected: 12/07/24 15:00 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97503	12/10/24 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97484	12/10/24 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/10/24 13:34	AJ	EET MID

Lab Chronicle

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

Client Sample ID: SW - 8 - 2' Lab Sample ID: 890-7449-4

Date Collected: 12/07/24 15:00 **Matrix: Solid**
Date Received: 12/09/24 15:24

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			97630	12/11/24 12:48	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97502	12/10/24 10:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97586	12/11/24 12:48	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 11:16	CH	EET MID

Client Sample ID: SW - 9 - 2' Lab Sample ID: 890-7449-5

Date Collected: 12/07/24 15:15 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97503	12/10/24 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97484	12/10/24 13:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/10/24 13:54	AJ	EET MID
Total/NA	Analysis	8015 NM		1			97630	12/11/24 13:05	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97502	12/10/24 10:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97586	12/11/24 13:05	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 11:21	CH	EET MID

Client Sample ID: SW - 10 - 2' Lab Sample ID: 890-7449-6

Date Collected: 12/07/24 15:30 **Matrix: Solid**
Date Received: 12/09/24 15:24

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	97503	12/10/24 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97484	12/10/24 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97583	12/10/24 14:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			97630	12/11/24 13:21	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97502	12/10/24 10:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97586	12/11/24 13:21	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97465	12/10/24 07:55	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97469	12/10/24 11:26	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis US Inc. Job ID: 890-7449-1
Project/Site: EAST TEST SAT SDG: 30246645.00004

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: Arcadis US Inc.
Project/Site: EAST TEST SAT

Job ID: 890-7449-1
SDG: 30246645.00004

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7449-1	SW - 5 - 2'	Solid	12/07/24 14:20	12/09/24 15:24
890-7449-2	SW - 6 - 2'	Solid	12/07/24 14:30	12/09/24 15:24
890-7449-3	SW - 7 - 2'	Solid	12/07/24 14:45	12/09/24 15:24
890-7449-4	SW - 8 - 2'	Solid	12/07/24 15:00	12/09/24 15:24
890-7449-5	SW - 9 - 2'	Solid	12/07/24 15:15	12/09/24 15:24
890-7449-6	SW - 10 - 2'	Solid	12/07/24 15:30	12/09/24 15:24

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

Chain of Custody Record

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Client Information	Sampler: Luis Esparza	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-10757-1562.1
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page 1 of 1
Company: Arcadis U.S., Inc.	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 48-Hr TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sat	Project #: 30246645.00004			
Site: Lea County, NM	SSOW#:			

Analysis Requested

Preservation Codes: N - None

890-7449 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containe	Special Instructions/Note:
			Preservation Code:				N	N	N		
SW-5-2'	12/07/24	1420	G	Solid			X	X	X	1	
SW-6-2'		1430		Solid			X	X	X	1	
SW-7-2'		1445		Solid			X	X	X	1	
SW-8-2'		1500		Solid			X	X	X	1	
SW-9-2'		1515		Solid			X	X	X	1	
SW-10-2'	X	1530	X	Solid			X	X	X	1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: TNM002 -0.2 2.6 2.4

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:18:24 PM
12/11/2024
Page 26 of 28
Released to Imaging: 1/10/2025 9:43:03 AM

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 890-7449-1
SDG Number: 30246645.00004

Login Number: 7449
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 890-7449-1
SDG Number: 30246645.00004

Login Number: 7449
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 12/10/24 07:43 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 11/15/2024 12:58:49 PM

JOB DESCRIPTION

East Test Sat
Lea County, NM

JOB NUMBER

880-51086-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
11/15/2024 12:58:49 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis US Inc.
Project/Site: East Test Sat

Laboratory Job ID: 880-51086-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51086-1
Project/Site: East Test Sat SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low 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: Arcadis US Inc.
Project: East Test Sat

Job ID: 880-51086-1

Job ID: 880-51086-1 Eurofins Midland

Job Narrative
880-51086-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 11/14/2024 8:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B-1-4' (880-51086-1), B-2-4' (880-51086-2), SW-1-2' (880-51086-3), SW-2-2' (880-51086-4) and SW-3-2' (880-51086-5).

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

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-1-4' (880-51086-1), B-2-4' (880-51086-2), SW-1-2' (880-51086-3), SW-2-2' (880-51086-4) and SW-3-2' (880-51086-5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-95719 exhibited % difference of > 20% for the following analyte(s)o-Terphenyl. These results are within the acceptance limits but exceed the performance criteria.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-95740 and analytical batch 880-95742 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Client Sample ID: B-1-4'

Date Collected: 11/13/24 11:00
Date Received: 11/14/24 08:45

Lab Sample ID: 880-51086-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00198	0.00138	mg/Kg		11/14/24 11:43	11/14/24 12:40	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		11/14/24 11:43	11/14/24 12:40	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		11/14/24 11:43	11/14/24 12:40	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		11/14/24 11:43	11/14/24 12:40	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		11/14/24 11:43	11/14/24 12:40	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		11/14/24 11:43	11/14/24 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*11/14/24 11:43*	*11/14/24 12:40*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/14/24 11:43*	*11/14/24 12:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			11/14/24 12:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/14/24 16:11	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	<14.5	U	49.9	14.5	mg/Kg		11/13/24 19:13	11/14/24 16:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*11/13/24 19:13*	*11/14/24 16:11*	*1*
o-Terphenyl	*62*	*S1-*	*70 - 130*	*11/13/24 19:13*	*11/14/24 16:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.8**		10.0	0.396	mg/Kg			11/15/24 00:25	1

Client Sample ID: B-2-4'

Date Collected: 11/13/24 11:10
Date Received: 11/14/24 08:45

Lab Sample ID: 880-51086-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 11:43	11/14/24 13:01	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 11:43	11/14/24 13:01	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 11:43	11/14/24 13:01	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 11:43	11/14/24 13:01	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 11:43	11/14/24 13:01	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 11:43	11/14/24 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:01*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:01*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51086-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-2-4' Lab Sample ID: 880-51086-2

Date Collected: 11/13/24 11:10 **Matrix: Solid**
Date Received: 11/14/24 08:45

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			11/14/24 13:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/14/24 16:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		11/13/24 19:13	11/14/24 16:43	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:43	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*11/13/24 19:13*	*11/14/24 16:43*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*11/13/24 19:13*	*11/14/24 16:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**165**		10.1	0.397	mg/Kg			11/15/24 00:31	1

Client Sample ID: SW-1-2' Lab Sample ID: 880-51086-3

Date Collected: 11/13/24 11:20 **Matrix: Solid**
Date Received: 11/14/24 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		11/14/24 11:43	11/14/24 13:21	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/14/24 11:43	11/14/24 13:21	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		11/14/24 11:43	11/14/24 13:21	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		11/14/24 11:43	11/14/24 13:21	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/14/24 11:43	11/14/24 13:21	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		11/14/24 11:43	11/14/24 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:21*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			11/14/24 13:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/14/24 16:59	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	<14.5	U	49.8	14.5	mg/Kg		11/13/24 19:13	11/14/24 16:59	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:59	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51086-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: SW-1-2' Lab Sample ID: 880-51086-3

Date Collected: 11/13/24 11:20 **Matrix: Solid**
Date Received: 11/14/24 08:45

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)	<15.1	U	49.8	15.1	mg/Kg		11/13/24 19:13	11/14/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*11/13/24 19:13*	*11/14/24 16:59*	*1*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*11/13/24 19:13*	*11/14/24 16:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**86.6**	**F1**	10.1	0.397	mg/Kg			11/15/24 00:38	1

Client Sample ID: SW-2-2' Lab Sample ID: 880-51086-4

Date Collected: 11/13/24 11:30 **Matrix: Solid**
Date Received: 11/14/24 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/14/24 11:43	11/14/24 13:42	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/14/24 11:43	11/14/24 13:42	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/14/24 11:43	11/14/24 13:42	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 11:43	11/14/24 13:42	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/14/24 11:43	11/14/24 13:42	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 11:43	11/14/24 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:42*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/14/24 11:43*	*11/14/24 13:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			11/14/24 13:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/14/24 17:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		11/13/24 19:13	11/14/24 17:15	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/13/24 19:13	11/14/24 17:15	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		11/13/24 19:13	11/14/24 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*11/13/24 19:13*	*11/14/24 17:15*	*1*
o-Terphenyl	*57*	*S1-*	*70 - 130*	*11/13/24 19:13*	*11/14/24 17:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**358**		10.0	0.396	mg/Kg			11/15/24 00:58	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Client Sample ID: SW-3-2'

Date Collected: 11/13/24 11:40
Date Received: 11/14/24 08:45

Lab Sample ID: 880-51086-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/14/24 11:43	11/14/24 14:02	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/14/24 11:43	11/14/24 14:02	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/14/24 11:43	11/14/24 14:02	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 11:43	11/14/24 14:02	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/14/24 11:43	11/14/24 14:02	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 11:43	11/14/24 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*11/14/24 11:43*	*11/14/24 14:02*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/14/24 11:43*	*11/14/24 14:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			11/14/24 14:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			11/14/24 17:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U	49.7	14.4	mg/Kg		11/13/24 19:13	11/14/24 17:33	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		11/13/24 19:13	11/14/24 17:33	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		11/13/24 19:13	11/14/24 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*11/13/24 19:13*	*11/14/24 17:33*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*11/13/24 19:13*	*11/14/24 17:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.8**		9.90	0.391	mg/Kg			11/15/24 01:05	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-51086-1	B-1-4'	108	94
880-51086-2	B-2-4'	111	92
880-51086-3	SW-1-2'	116	96
880-51086-4	SW-2-2'	107	92
880-51086-5	SW-3-2'	115	91
LCS 880-95691/1-A	Lab Control Sample	87	106
LCSD 880-95691/2-A	Lab Control Sample Dup	93	106
MB 880-95691/5-A	Method Blank	110	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)
880-51086-1	B-1-4'	81	62 S1-
880-51086-2	B-2-4'	78	60 S1-
880-51086-3	SW-1-2'	81	61 S1-
880-51086-4	SW-2-2'	75	57 S1-
880-51086-5	SW-3-2'	85	64 S1-
LCS 880-95671/2-A	Lab Control Sample	118	105
LCSD 880-95671/3-A	Lab Control Sample Dup	130	115
MB 880-95671/1-A	Method Blank	91	77

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-95691/5-A
Matrix: Solid
Analysis Batch: 95584

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95691

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 08:49	11/14/24 11:17	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 08:49	11/14/24 11:17	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 08:49	11/14/24 11:17	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/14/24 08:49	11/14/24 11:17	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 08:49	11/14/24 11:17	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/14/24 08:49	11/14/24 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/14/24 08:49*	*11/14/24 11:17*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*11/14/24 08:49*	*11/14/24 11:17*	*1*

Lab Sample ID: LCS 880-95691/1-A
Matrix: Solid
Analysis Batch: 95584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95691

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1141		mg/Kg		114	70 - 130		
Toluene			0.100	0.1027		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.1045		mg/Kg		105	70 - 130		
m-Xylene & p-Xylene			0.200	0.2056		mg/Kg		103	70 - 130		
o-Xylene			0.100	0.1039		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-95691/2-A
Matrix: Solid
Analysis Batch: 95584

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 95691

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1093		mg/Kg		109	70 - 130	4	35
Toluene			0.100	0.09773		mg/Kg		98	70 - 130	5	35
Ethylbenzene			0.100	0.09901		mg/Kg		99	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1961		mg/Kg		98	70 - 130	5	35
o-Xylene			0.100	0.1003		mg/Kg		100	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-95671/1-A
Matrix: Solid
Analysis Batch: 95719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		11/13/24 19:13	11/14/24 09:54	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/13/24 19:13	11/14/24 09:54	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/13/24 19:13	11/14/24 09:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*11/13/24 19:13*	*11/14/24 09:54*	*1*
o-Terphenyl	*77*		*70 - 130*	*11/13/24 19:13*	*11/14/24 09:54*	*1*

Lab Sample ID: LCS 880-95671/2-A
Matrix: Solid
Analysis Batch: 95719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95671

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	957.1		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	836.8		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-95671/3-A
Matrix: Solid
Analysis Batch: 95719

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 95671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1053		mg/Kg		105	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	921.2		mg/Kg		92	70 - 130	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*130*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-95740/1-A
Matrix: Solid
Analysis Batch: 95742

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	10.0	0.395	mg/Kg			11/14/24 22:45	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-95740/2-A
Matrix: Solid
Analysis Batch: 95742

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-95740/3-A
Matrix: Solid
Analysis Batch: 95742

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	247.6		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-51086-3 MS
Matrix: Solid
Analysis Batch: 95742

Client Sample ID: SW-1-2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	86.6	F1	252	371.1	F1	mg/Kg		113	90 - 110		

Lab Sample ID: 880-51086-3 MSD
Matrix: Solid
Analysis Batch: 95742

Client Sample ID: SW-1-2'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	86.6	F1	252	371.6	F1	mg/Kg		113	90 - 110	0	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 95584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	8021B	95691
880-51086-2	B-2-4'	Total/NA	Solid	8021B	95691
880-51086-3	SW-1-2'	Total/NA	Solid	8021B	95691
880-51086-4	SW-2-2'	Total/NA	Solid	8021B	95691
880-51086-5	SW-3-2'	Total/NA	Solid	8021B	95691
MB 880-95691/5-A	Method Blank	Total/NA	Solid	8021B	95691
LCS 880-95691/1-A	Lab Control Sample	Total/NA	Solid	8021B	95691
LCSD 880-95691/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	95691

Prep Batch: 95691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	5030B	
880-51086-2	B-2-4'	Total/NA	Solid	5030B	
880-51086-3	SW-1-2'	Total/NA	Solid	5030B	
880-51086-4	SW-2-2'	Total/NA	Solid	5030B	
880-51086-5	SW-3-2'	Total/NA	Solid	5030B	
MB 880-95691/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-95691/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-95691/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 95739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	Total BTEX	
880-51086-2	B-2-4'	Total/NA	Solid	Total BTEX	
880-51086-3	SW-1-2'	Total/NA	Solid	Total BTEX	
880-51086-4	SW-2-2'	Total/NA	Solid	Total BTEX	
880-51086-5	SW-3-2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 95671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	8015NM Prep	
880-51086-2	B-2-4'	Total/NA	Solid	8015NM Prep	
880-51086-3	SW-1-2'	Total/NA	Solid	8015NM Prep	
880-51086-4	SW-2-2'	Total/NA	Solid	8015NM Prep	
880-51086-5	SW-3-2'	Total/NA	Solid	8015NM Prep	
MB 880-95671/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-95671/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-95671/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 95719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	8015B NM	95671
880-51086-2	B-2-4'	Total/NA	Solid	8015B NM	95671
880-51086-3	SW-1-2'	Total/NA	Solid	8015B NM	95671
880-51086-4	SW-2-2'	Total/NA	Solid	8015B NM	95671
880-51086-5	SW-3-2'	Total/NA	Solid	8015B NM	95671
MB 880-95671/1-A	Method Blank	Total/NA	Solid	8015B NM	95671
LCS 880-95671/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	95671
LCSD 880-95671/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	95671

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 95809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Total/NA	Solid	8015 NM	
880-51086-2	B-2-4'	Total/NA	Solid	8015 NM	
880-51086-3	SW-1-2'	Total/NA	Solid	8015 NM	
880-51086-4	SW-2-2'	Total/NA	Solid	8015 NM	
880-51086-5	SW-3-2'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 95740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Soluble	Solid	DI Leach	
880-51086-2	B-2-4'	Soluble	Solid	DI Leach	
880-51086-3	SW-1-2'	Soluble	Solid	DI Leach	
880-51086-4	SW-2-2'	Soluble	Solid	DI Leach	
880-51086-5	SW-3-2'	Soluble	Solid	DI Leach	
MB 880-95740/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-95740/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-95740/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51086-3 MS	SW-1-2'	Soluble	Solid	DI Leach	
880-51086-3 MSD	SW-1-2'	Soluble	Solid	DI Leach	

Analysis Batch: 95742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51086-1	B-1-4'	Soluble	Solid	300.0	95740
880-51086-2	B-2-4'	Soluble	Solid	300.0	95740
880-51086-3	SW-1-2'	Soluble	Solid	300.0	95740
880-51086-4	SW-2-2'	Soluble	Solid	300.0	95740
880-51086-5	SW-3-2'	Soluble	Solid	300.0	95740
MB 880-95740/1-A	Method Blank	Soluble	Solid	300.0	95740
LCS 880-95740/2-A	Lab Control Sample	Soluble	Solid	300.0	95740
LCSD 880-95740/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	95740
880-51086-3 MS	SW-1-2'	Soluble	Solid	300.0	95740
880-51086-3 MSD	SW-1-2'	Soluble	Solid	300.0	95740

Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-51086-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-1-4' — Lab Sample ID: 880-51086-1

Date Collected: 11/13/24 11:00 **Matrix: Solid**
Date Received: 11/14/24 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	95691	11/14/24 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95584	11/14/24 12:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95739	11/14/24 12:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			95809	11/14/24 16:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	95671	11/13/24 19:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95719	11/14/24 16:11	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	95740	11/14/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95742	11/15/24 00:25	CH	EET MID

Client Sample ID: B-2-4' — Lab Sample ID: 880-51086-2

Date Collected: 11/13/24 11:10 **Matrix: Solid**
Date Received: 11/14/24 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	95691	11/14/24 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95584	11/14/24 13:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95739	11/14/24 13:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			95809	11/14/24 16:43	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	95671	11/13/24 19:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95719	11/14/24 16:43	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	95740	11/14/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95742	11/15/24 00:31	CH	EET MID

Client Sample ID: SW-1-2' — Lab Sample ID: 880-51086-3

Date Collected: 11/13/24 11:20 **Matrix: Solid**
Date Received: 11/14/24 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	95691	11/14/24 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95584	11/14/24 13:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95739	11/14/24 13:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			95809	11/14/24 16:59	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	95671	11/13/24 19:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95719	11/14/24 16:59	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	95740	11/14/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95742	11/15/24 00:38	CH	EET MID

Client Sample ID: SW-2-2' — Lab Sample ID: 880-51086-4

Date Collected: 11/13/24 11:30 **Matrix: Solid**
Date Received: 11/14/24 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	95691	11/14/24 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95584	11/14/24 13:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95739	11/14/24 13:42	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Client Sample ID: SW-2-2'

Date Collected: 11/13/24 11:30
Date Received: 11/14/24 08:45

Lab Sample ID: 880-51086-4
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			95809	11/14/24 17:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	95671	11/13/24 19:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95719	11/14/24 17:15	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	95740	11/14/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95742	11/15/24 00:58	CH	EET MID

Client Sample ID: SW-3-2'

Date Collected: 11/13/24 11:40
Date Received: 11/14/24 08:45

Lab Sample ID: 880-51086-5
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	5030B			5.02 g	5 mL	95691	11/14/24 11:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95584	11/14/24 14:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95739	11/14/24 14:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			95809	11/14/24 17:33	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	95671	11/13/24 19:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95719	11/14/24 17:33	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	95740	11/14/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95742	11/15/24 01:05	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis US Inc. Job ID: 880-51086-1
Project/Site: East Test Sat SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51086-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51086-1	B-1-4'	Solid	11/13/24 11:00	11/14/24 08:45
880-51086-2	B-2-4'	Solid	11/13/24 11:10	11/14/24 08:45
880-51086-3	SW-1-2'	Solid	11/13/24 11:20	11/14/24 08:45
880-51086-4	SW-2-2'	Solid	11/13/24 11:30	11/14/24 08:45
880-51086-5	SW-3-2'	Solid	11/13/24 11:40	11/14/24 08:45

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

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

Chain of Custody Record

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880-51086 Chain of Custody

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No:
Client Contact: Mr. Morgan Jordan	Phone: 575-942-0292	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM
Company: Arcadis U.S., Inc.	PWSID:		
Address: 1004 North Big Spring Suite 300	Due Date Requested:		
City: Midland	TAT Requested (days): 48 hr TAT		
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No		
Phone: 281-644-9437(Tel)	PO #:		
Email: douglas.jordan@arcadis.com	WO #:		
Project Name: East Test Sant	Project #: 30246645 Task 00004		
Site: Lea County, NM	SSOW#:		

Analysis Requested

N - None
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-1-4'	11/13/24	1100	C	Solid			X	X	X	1	
B-2-4'		1110		Solid			X	X	X	1	
SW-1-2'		1120		Solid			X	X	X	1	
SW-2-2'		1130		Solid			X	X	X	1	
SW-3-2'	X	1140	C	Solid			X	X	X	1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Chris Pruett	11-13-24	Arcadis		11/14/24 845	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		4.6/4.5

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51086-1
SDG Number: Lea County, NM

Login Number: 51086
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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 11/18/2024 5:43:54 PM

JOB DESCRIPTION

East Test Sat
Lea County, NM

JOB NUMBER

880-51103-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

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
11/18/2024 5:43:54 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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: Arcadis US Inc.
Project: East Test Sat

Job ID: 880-51103-1

Job ID: 880-51103-1 Eurofins Midland

Job Narrative
880-51103-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The samples were received on 11/14/2024 3:45 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: B-3-4' (880-51103-1). Evidence of matrix interferences is not obvious.

Method 8021B: The laboratory control sample duplicate (LCSD) associated with preparation batch 880-95921 and analytical batch 880-95906 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

Diesel Range Organics
Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (MB 880-95741/1-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The method blank for preparation batch 880-95741 and analytical batch 880-95721 contained 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.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-95782 and analytical batch 880-95797 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-3-4'

Date Collected: 11/14/24 11:15
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/18/24 09:31	11/18/24 14:16	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/18/24 09:31	11/18/24 14:16	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/18/24 09:31	11/18/24 14:16	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/18/24 09:31	11/18/24 14:16	1
o-Xylene	**0.106**		0.00200	0.00158	mg/Kg		11/18/24 09:31	11/18/24 14:16	1
Xylenes, Total	**0.106**		0.00399	0.00228	mg/Kg		11/18/24 09:31	11/18/24 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*11/18/24 09:31*	*11/18/24 14:16*	*1*
1,4-Difluorobenzene (Surr)	*53*	*S1-*	*70 - 130*	*11/18/24 09:31*	*11/18/24 14:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.106**		0.00399	0.00228	mg/Kg			11/18/24 14:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/14/24 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		11/14/24 16:16	11/14/24 22:24	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/14/24 22:24	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/14/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:24*	*1*
o-Terphenyl	*89*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**165**		10.0	0.397	mg/Kg			11/15/24 12:15	1

Client Sample ID: B-4-4'

Date Collected: 11/14/24 11:25
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		11/14/24 16:40	11/15/24 11:48	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/14/24 16:40	11/15/24 11:48	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		11/14/24 16:40	11/15/24 11:48	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 11:48	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/14/24 16:40	11/15/24 11:48	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 11:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/14/24 16:40*	*11/15/24 11:48*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/14/24 16:40*	*11/15/24 11:48*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-4-4' Lab Sample ID: 880-51103-2
Date Collected: 11/14/24 11:25 **Matrix: Solid**
Date Received: 11/14/24 15:45

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00402	0.00230	mg/Kg			11/15/24 11:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			11/14/24 22:40	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	<14.4	U	49.7	14.4	mg/Kg		11/14/24 16:16	11/14/24 22:40	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/14/24 22:40	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/14/24 22:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:40*	*1*
o-Terphenyl	*90*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		10.1	0.398	mg/Kg			11/15/24 12:31	1

Client Sample ID: B-5-4' Lab Sample ID: 880-51103-3
Date Collected: 11/14/24 11:40 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/14/24 16:40	11/15/24 12:09	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/14/24 16:40	11/15/24 12:09	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/14/24 16:40	11/15/24 12:09	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 12:09	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/14/24 16:40	11/15/24 12:09	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:09*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			11/15/24 12:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			11/14/24 22:56	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	<14.4	U	49.7	14.4	mg/Kg		11/14/24 16:16	11/14/24 22:56	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/14/24 22:56	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-5-4' Lab Sample ID: 880-51103-3

Date Collected: 11/14/24 11:40 **Matrix: Solid**
Date Received: 11/14/24 15:45

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)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/14/24 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:56*	*1*
o-Terphenyl	*85*		*70 - 130*	*11/14/24 16:16*	*11/14/24 22:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1360**		49.5	1.96	mg/Kg			11/15/24 12:36	5

Client Sample ID: B-6-4' Lab Sample ID: 880-51103-4

Date Collected: 11/14/24 11:50 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00198	0.00138	mg/Kg		11/14/24 16:40	11/15/24 12:29	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		11/14/24 16:40	11/15/24 12:29	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		11/14/24 16:40	11/15/24 12:29	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		11/14/24 16:40	11/15/24 12:29	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		11/14/24 16:40	11/15/24 12:29	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		11/14/24 16:40	11/15/24 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:29*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			11/15/24 12:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			11/14/24 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		11/14/24 16:16	11/14/24 23:12	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:12	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:12*	*1*
o-Terphenyl	*96*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**278**		9.90	0.391	mg/Kg			11/15/24 12:41	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-7-4'

Lab Sample ID: 880-51103-5
Matrix: Solid
Date Collected: 11/14/24 12:10
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 16:40	11/15/24 12:49	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 16:40	11/15/24 12:49	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 16:40	11/15/24 12:49	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 12:49	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 16:40	11/15/24 12:49	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:49*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*11/14/24 16:40*	*11/15/24 12:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			11/15/24 12:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/14/24 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		11/14/24 16:16	11/14/24 23:28	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:28	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:28*	*1*
o-Terphenyl	*82*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**890**		9.92	0.392	mg/Kg			11/15/24 12:46	1

Client Sample ID: B-8-4'

Lab Sample ID: 880-51103-6
Matrix: Solid
Date Collected: 11/14/24 12:25
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		11/14/24 16:40	11/15/24 13:10	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/14/24 16:40	11/15/24 13:10	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		11/14/24 16:40	11/15/24 13:10	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		11/14/24 16:40	11/15/24 13:10	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/14/24 16:40	11/15/24 13:10	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		11/14/24 16:40	11/15/24 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:10*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:10*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-8-4' Lab Sample ID: 880-51103-6

Date Collected: 11/14/24 12:25 **Matrix: Solid**
Date Received: 11/14/24 15:45

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			11/15/24 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/14/24 23:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		11/14/24 16:16	11/14/24 23:46	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:46	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/14/24 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:46*	*1*
o-Terphenyl	*95*		*70 - 130*	*11/14/24 16:16*	*11/14/24 23:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.7**		10.1	0.398	mg/Kg			11/15/24 13:02	1

Client Sample ID: B-9-4' Lab Sample ID: 880-51103-7

Date Collected: 11/14/24 12:35 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/14/24 16:40	11/15/24 13:30	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/14/24 16:40	11/15/24 13:30	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/14/24 16:40	11/15/24 13:30	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 13:30	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/14/24 16:40	11/15/24 13:30	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:30*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			11/15/24 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/15/24 00:01	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	<14.5	U	49.8	14.5	mg/Kg		11/14/24 16:16	11/15/24 00:01	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:01	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-9-4' Lab Sample ID: 880-51103-7

Date Collected: 11/14/24 12:35 **Matrix: Solid**
Date Received: 11/14/24 15:45

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)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:01*	*1*
o-Terphenyl	*88*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1030**		9.96	0.393	mg/Kg			11/15/24 13:07	1

Client Sample ID: B-10-4' Lab Sample ID: 880-51103-8

Date Collected: 11/14/24 12:50 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/14/24 16:40	11/15/24 13:51	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/14/24 16:40	11/15/24 13:51	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/14/24 16:40	11/15/24 13:51	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 13:51	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/14/24 16:40	11/15/24 13:51	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/14/24 16:40	11/15/24 13:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:51*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/14/24 16:40*	*11/15/24 13:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			11/15/24 13:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/15/24 00:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		11/14/24 16:16	11/15/24 00:18	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:18	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:18*	*1*
o-Terphenyl	*92*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1160**		10.0	0.396	mg/Kg			11/15/24 13:13	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-11-4' Lab Sample ID: 880-51103-9

Date Collected: 11/14/24 13:00 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 16:40	11/15/24 14:11	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 16:40	11/15/24 14:11	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 16:40	11/15/24 14:11	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 14:11	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 16:40	11/15/24 14:11	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*11/14/24 16:40*	*11/15/24 14:11*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/14/24 16:40*	*11/15/24 14:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			11/15/24 14:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			11/15/24 00:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		11/14/24 16:16	11/15/24 00:50	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:50	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/15/24 00:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:50*	*1*
o-Terphenyl	*92*		*70 - 130*	*11/14/24 16:16*	*11/15/24 00:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**338**		9.92	0.392	mg/Kg			11/15/24 13:18	1

Client Sample ID: B-12-4' Lab Sample ID: 880-51103-10

Date Collected: 11/14/24 13:15 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 16:40	11/15/24 14:31	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 16:40	11/15/24 14:31	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 16:40	11/15/24 14:31	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 14:31	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 16:40	11/15/24 14:31	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		11/14/24 16:40	11/15/24 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*11/14/24 16:40*	*11/15/24 14:31*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*11/14/24 16:40*	*11/15/24 14:31*	*1*

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-12-4' Lab Sample ID: 880-51103-10

Date Collected: 11/14/24 13:15 **Matrix: Solid**
Date Received: 11/14/24 15:45

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			11/15/24 14:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/15/24 01:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		11/14/24 16:16	11/15/24 01:06	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:06	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:06*	*1*
o-Terphenyl	*100*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		9.96	0.393	mg/Kg			11/15/24 13:23	1

Client Sample ID: B-13-4' Lab Sample ID: 880-51103-11

Date Collected: 11/14/24 13:25 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		11/14/24 16:40	11/15/24 17:07	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/14/24 16:40	11/15/24 17:07	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		11/14/24 16:40	11/15/24 17:07	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 17:07	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/14/24 16:40	11/15/24 17:07	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:07*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00402	0.00230	mg/Kg			11/15/24 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			11/15/24 01:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		11/14/24 16:16	11/15/24 01:22	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:22	1

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Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-13-4' Lab Sample ID: 880-51103-11

Date Collected: 11/14/24 13:25 **Matrix: Solid**
Date Received: 11/14/24 15:45

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)	<15.1	U	49.8	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:22*	*1*
o-Terphenyl	*100*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1110**	**F1**	49.8	1.97	mg/Kg			11/15/24 13:29	5

Client Sample ID: B-14-4' Lab Sample ID: 880-51103-12

Date Collected: 11/14/24 13:35 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00141	U	0.00202	0.00141	mg/Kg		11/14/24 16:40	11/15/24 17:27	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		11/14/24 16:40	11/15/24 17:27	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		11/14/24 16:40	11/15/24 17:27	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		11/14/24 16:40	11/15/24 17:27	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		11/14/24 16:40	11/15/24 17:27	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		11/14/24 16:40	11/15/24 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:27*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00231	U	0.00404	0.00231	mg/Kg			11/15/24 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			11/15/24 01:38	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	<14.4	U	49.7	14.4	mg/Kg		11/14/24 16:16	11/15/24 01:38	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/15/24 01:38	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		11/14/24 16:16	11/15/24 01:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:38*	*1*
o-Terphenyl	*89*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**733**		10.1	0.398	mg/Kg			11/15/24 13:44	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-15-4' Lab Sample ID: 880-51103-13

Date Collected: 11/14/24 13:45 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		11/14/24 16:40	11/15/24 17:48	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/14/24 16:40	11/15/24 17:48	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		11/14/24 16:40	11/15/24 17:48	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 17:48	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/14/24 16:40	11/15/24 17:48	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		11/14/24 16:40	11/15/24 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:48*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/14/24 16:40*	*11/15/24 17:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00402	0.00230	mg/Kg			11/15/24 17:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			11/15/24 01:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		11/14/24 16:16	11/15/24 01:54	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:54	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/14/24 16:16	11/15/24 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:54*	*1*
o-Terphenyl	*85*		*70 - 130*	*11/14/24 16:16*	*11/15/24 01:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.0**		9.92	0.392	mg/Kg			11/15/24 13:50	1

Client Sample ID: B-16-4' Lab Sample ID: 880-51103-14

Date Collected: 11/14/24 14:00 **Matrix: Solid**
Date Received: 11/14/24 15:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 16:40	11/15/24 18:08	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 16:40	11/15/24 18:08	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 16:40	11/15/24 18:08	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		11/14/24 16:40	11/15/24 18:08	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		11/14/24 16:40	11/15/24 18:08	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		11/14/24 16:40	11/15/24 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*11/14/24 16:40*	*11/15/24 18:08*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*11/14/24 16:40*	*11/15/24 18:08*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-16-4'
Date Collected: 11/14/24 14:00
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			11/15/24 18:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			11/15/24 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	<14.5	U	50.0	14.5	mg/Kg		11/14/24 16:16	11/15/24 02:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/15/24 02:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/15/24 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*11/14/24 16:16*	*11/15/24 02:11*	*1*
o-Terphenyl	*88*		*70 - 130*	*11/14/24 16:16*	*11/15/24 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	487		10.1	0.397	mg/Kg			11/15/24 14:06	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

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)
880-50704-A-27-A MB	Method Blank	85	100
880-51103-1	B-3-4'	75	53 S1-
880-51103-1 MS	B-3-4'	101	101
880-51103-1 MSD	B-3-4'	104	100
880-51103-2	B-4-4'	94	104
880-51103-3	B-5-4'	90	101
880-51103-4	B-6-4'	89	103
880-51103-5	B-7-4'	90	100
880-51103-6	B-8-4'	89	104
880-51103-7	B-9-4'	89	102
880-51103-8	B-10-4'	89	104
880-51103-9	B-11-4'	87	103
880-51103-10	B-12-4'	94	100
880-51103-11	B-13-4'	90	101
880-51103-12	B-14-4'	91	104
880-51103-13	B-15-4'	91	101
880-51103-14	B-16-4'	89	103
LCS 880-95743/1-A	Lab Control Sample	104	98
LCS 880-95921/1-A	Lab Control Sample	96	100
LCSD 880-95743/2-A	Lab Control Sample Dup	99	100
LCSD 880-95921/2-A	Lab Control Sample Dup	106	104
MB 880-95743/5-A	Method Blank	95	94
MB 880-95921/5-A	Method Blank	111	89

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-51103-1	B-3-4'	100	89
880-51103-2	B-4-4'	101	90
880-51103-3	B-5-4'	95	85
880-51103-4	B-6-4'	108	96
880-51103-5	B-7-4'	92	82
880-51103-6	B-8-4'	105	95
880-51103-7	B-9-4'	98	88
880-51103-8	B-10-4'	102	92
880-51103-9	B-11-4'	102	92
880-51103-10	B-12-4'	112	100
880-51103-11	B-13-4'	112	100
880-51103-12	B-14-4'	100	89
880-51103-13	B-15-4'	95	85
880-51103-14	B-16-4'	97	88
LCS 880-95741/2-A	Lab Control Sample	124	125
LCSD 880-95741/3-A	Lab Control Sample Dup	124	124

Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
MB 880-95741/1-A	Method Blank	166 S1+	155 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 880-50704-A-27-A MB
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95743

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/15/24 16:00	11/15/24 16:06	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/15/24 16:00	11/15/24 16:06	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/15/24 16:00	11/15/24 16:06	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/15/24 16:00	11/15/24 16:06	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/15/24 16:00	11/15/24 16:06	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/15/24 16:00	11/15/24 16:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*11/15/24 16:00*	*11/15/24 16:06*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*11/15/24 16:00*	*11/15/24 16:06*	*1*

Lab Sample ID: MB 880-95743/5-A
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95743

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/14/24 16:40	11/15/24 11:06	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/14/24 16:40	11/15/24 11:06	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/14/24 16:40	11/15/24 11:06	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/14/24 16:40	11/15/24 11:06	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/14/24 16:40	11/15/24 11:06	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/14/24 16:40	11/15/24 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*11/14/24 16:40*	*11/15/24 11:06*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/14/24 16:40*	*11/15/24 11:06*	*1*

Lab Sample ID: LCS 880-95743/1-A
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95743

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1015		mg/Kg		101	70 - 130
Toluene	0.100	0.1001		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.1060		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2063		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1150		mg/Kg		115	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-95743/2-A
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 95743

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09367		mg/Kg		94	70 - 130	8	35

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-95743/2-A
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 95743

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09234		mg/Kg		92	70 - 130	8	35
Ethylbenzene			0.100	0.09784		mg/Kg		98	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.1880		mg/Kg		94	70 - 130	9	35
o-Xylene			0.100	0.1063		mg/Kg		106	70 - 130	8	35

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

Lab Sample ID: 880-51103-1 MS
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: B-3-4'
Prep Type: Total/NA
Prep Batch: 95743

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0110	F1	0.100	0.09603		mg/Kg		85	70 - 130
Toluene	0.0107	F1	0.100	0.09271		mg/Kg		82	70 - 130
Ethylbenzene	0.0199	F1	0.100	0.09587		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00229	U F1	0.200	0.1845		mg/Kg		92	70 - 130
o-Xylene	0.00904	F1	0.100	0.1028		mg/Kg		94	70 - 130

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

Lab Sample ID: 880-51103-1 MSD
Matrix: Solid
Analysis Batch: 95764

Client Sample ID: B-3-4'
Prep Type: Total/NA
Prep Batch: 95743

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0110	F1	0.100	0.09414		mg/Kg		83	70 - 130	2	35
Toluene	0.0107	F1	0.100	0.09103		mg/Kg		80	70 - 130	2	35
Ethylbenzene	0.0199	F1	0.100	0.09446		mg/Kg		75	70 - 130	1	35
m-Xylene & p-Xylene	<0.00229	U F1	0.200	0.1815		mg/Kg		91	70 - 130	2	35
o-Xylene	0.00904	F1	0.100	0.1020		mg/Kg		93	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: MB 880-95921/5-A
Matrix: Solid
Analysis Batch: 95906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/18/24 09:31	11/18/24 12:32	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/18/24 09:31	11/18/24 12:32	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/18/24 09:31	11/18/24 12:32	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/18/24 09:31	11/18/24 12:32	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-95921/5-A
Matrix: Solid
Analysis Batch: 95906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/18/24 09:31	11/18/24 12:32	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/18/24 09:31	11/18/24 12:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*11/18/24 09:31*	*11/18/24 12:32*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*11/18/24 09:31*	*11/18/24 12:32*	*1*

Lab Sample ID: LCS 880-95921/1-A
Matrix: Solid
Analysis Batch: 95906

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 95921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1255		mg/Kg		125	70 - 130
Toluene	0.100	0.1184		mg/Kg		118	70 - 130
Ethylbenzene	0.100	0.1208		mg/Kg		121	70 - 130
m-Xylene & p-Xylene	0.200	0.2416		mg/Kg		121	70 - 130
o-Xylene	0.100	0.1224		mg/Kg		122	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-95921/2-A
Matrix: Solid
Analysis Batch: 95906

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 95921

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1328	*+	mg/Kg		133	70 - 130	6	35
Toluene	0.100	0.1264		mg/Kg		126	70 - 130	7	35
Ethylbenzene	0.100	0.1280		mg/Kg		128	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2558		mg/Kg		128	70 - 130	6	35
o-Xylene	0.100	0.1293		mg/Kg		129	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-95741/1-A
Matrix: Solid
Analysis Batch: 95721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 95741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		11/14/24 16:16	11/14/24 20:31	1
Diesel Range Organics (Over C10-C28)	19.17	J	50.0	15.1	mg/Kg		11/14/24 16:16	11/14/24 20:31	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/14/24 16:16	11/14/24 20:31	1

Eurofins Midland

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	166	S1+	70 - 130	11/14/24 16:16	11/14/24 20:31	1
o-Terphenyl	155	S1+	70 - 130	11/14/24 16:16	11/14/24 20:31	1

Lab Sample ID: LCS 880-95741/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 95721 — **Prep Batch: 95741**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1094		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	125		70 - 130

Lab Sample ID: LCSD 880-95741/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 95721 — **Prep Batch: 95741**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1079		mg/Kg		108	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1038		mg/Kg		104	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	124		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-95782/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 95797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	10.0	0.395	mg/Kg			11/15/24 11:59	1

Lab Sample ID: LCS 880-95782/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 95797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-95782/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 95797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	257.3		mg/Kg		103	90 - 110	0	20

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-51103-1 MS
Matrix: Solid
Analysis Batch: 95797

Client Sample ID: B-3-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	165		251	394.1		mg/Kg		91	90 - 110

Lab Sample ID: 880-51103-1 MSD
Matrix: Solid
Analysis Batch: 95797

Client Sample ID: B-3-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	165		251	392.2		mg/Kg		90	90 - 110	0	20

Lab Sample ID: 880-51103-11 MS
Matrix: Solid
Analysis Batch: 95797

Client Sample ID: B-13-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1110	F1	1250	2706	F1	mg/Kg		128	90 - 110

Lab Sample ID: 880-51103-11 MSD
Matrix: Solid
Analysis Batch: 95797

Client Sample ID: B-13-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1110	F1	1250	2685	F1	mg/Kg		127	90 - 110	1	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

GC VOA

Prep Batch: 95743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-2	B-4-4'	Total/NA	Solid	5030B	
880-51103-3	B-5-4'	Total/NA	Solid	5030B	
880-51103-4	B-6-4'	Total/NA	Solid	5030B	
880-51103-5	B-7-4'	Total/NA	Solid	5030B	
880-51103-6	B-8-4'	Total/NA	Solid	5030B	
880-51103-7	B-9-4'	Total/NA	Solid	5030B	
880-51103-8	B-10-4'	Total/NA	Solid	5030B	
880-51103-9	B-11-4'	Total/NA	Solid	5030B	
880-51103-10	B-12-4'	Total/NA	Solid	5030B	
880-51103-11	B-13-4'	Total/NA	Solid	5030B	
880-51103-12	B-14-4'	Total/NA	Solid	5030B	
880-51103-13	B-15-4'	Total/NA	Solid	5030B	
880-51103-14	B-16-4'	Total/NA	Solid	5030B	
880-50704-A-27-A MB	Method Blank	Total/NA	Solid	5030B	
MB 880-95743/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-95743/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-95743/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51103-1 MS	B-3-4'	Total/NA	Solid	5030B	
880-51103-1 MSD	B-3-4'	Total/NA	Solid	5030B	

Analysis Batch: 95764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-2	B-4-4'	Total/NA	Solid	8021B	95743
880-51103-3	B-5-4'	Total/NA	Solid	8021B	95743
880-51103-4	B-6-4'	Total/NA	Solid	8021B	95743
880-51103-5	B-7-4'	Total/NA	Solid	8021B	95743
880-51103-6	B-8-4'	Total/NA	Solid	8021B	95743
880-51103-7	B-9-4'	Total/NA	Solid	8021B	95743
880-51103-8	B-10-4'	Total/NA	Solid	8021B	95743
880-51103-9	B-11-4'	Total/NA	Solid	8021B	95743
880-51103-10	B-12-4'	Total/NA	Solid	8021B	95743
880-51103-11	B-13-4'	Total/NA	Solid	8021B	95743
880-51103-12	B-14-4'	Total/NA	Solid	8021B	95743
880-51103-13	B-15-4'	Total/NA	Solid	8021B	95743
880-51103-14	B-16-4'	Total/NA	Solid	8021B	95743
880-50704-A-27-A MB	Method Blank	Total/NA	Solid	8021B	95743
MB 880-95743/5-A	Method Blank	Total/NA	Solid	8021B	95743
LCS 880-95743/1-A	Lab Control Sample	Total/NA	Solid	8021B	95743
LCSD 880-95743/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	95743
880-51103-1 MS	B-3-4'	Total/NA	Solid	8021B	95743
880-51103-1 MSD	B-3-4'	Total/NA	Solid	8021B	95743

Analysis Batch: 95906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	8021B	95921
MB 880-95921/5-A	Method Blank	Total/NA	Solid	8021B	95921
LCS 880-95921/1-A	Lab Control Sample	Total/NA	Solid	8021B	95921
LCSD 880-95921/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	95921

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

GC VOA

Prep Batch: 95921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	5030B	
MB 880-95921/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-95921/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-95921/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 95930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	Total BTEX	
880-51103-2	B-4-4'	Total/NA	Solid	Total BTEX	
880-51103-3	B-5-4'	Total/NA	Solid	Total BTEX	
880-51103-4	B-6-4'	Total/NA	Solid	Total BTEX	
880-51103-5	B-7-4'	Total/NA	Solid	Total BTEX	
880-51103-6	B-8-4'	Total/NA	Solid	Total BTEX	
880-51103-7	B-9-4'	Total/NA	Solid	Total BTEX	
880-51103-8	B-10-4'	Total/NA	Solid	Total BTEX	
880-51103-9	B-11-4'	Total/NA	Solid	Total BTEX	
880-51103-10	B-12-4'	Total/NA	Solid	Total BTEX	
880-51103-11	B-13-4'	Total/NA	Solid	Total BTEX	
880-51103-12	B-14-4'	Total/NA	Solid	Total BTEX	
880-51103-13	B-15-4'	Total/NA	Solid	Total BTEX	
880-51103-14	B-16-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 95721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	8015B NM	95741
880-51103-2	B-4-4'	Total/NA	Solid	8015B NM	95741
880-51103-3	B-5-4'	Total/NA	Solid	8015B NM	95741
880-51103-4	B-6-4'	Total/NA	Solid	8015B NM	95741
880-51103-5	B-7-4'	Total/NA	Solid	8015B NM	95741
880-51103-6	B-8-4'	Total/NA	Solid	8015B NM	95741
880-51103-7	B-9-4'	Total/NA	Solid	8015B NM	95741
880-51103-8	B-10-4'	Total/NA	Solid	8015B NM	95741
880-51103-9	B-11-4'	Total/NA	Solid	8015B NM	95741
880-51103-10	B-12-4'	Total/NA	Solid	8015B NM	95741
880-51103-11	B-13-4'	Total/NA	Solid	8015B NM	95741
880-51103-12	B-14-4'	Total/NA	Solid	8015B NM	95741
880-51103-13	B-15-4'	Total/NA	Solid	8015B NM	95741
880-51103-14	B-16-4'	Total/NA	Solid	8015B NM	95741
MB 880-95741/1-A	Method Blank	Total/NA	Solid	8015B NM	95741
LCS 880-95741/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	95741
LCSD 880-95741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	95741

Prep Batch: 95741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	8015NM Prep	
880-51103-2	B-4-4'	Total/NA	Solid	8015NM Prep	
880-51103-3	B-5-4'	Total/NA	Solid	8015NM Prep	
880-51103-4	B-6-4'	Total/NA	Solid	8015NM Prep	
880-51103-5	B-7-4'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 95741 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-6	B-8-4'	Total/NA	Solid	8015NM Prep	
880-51103-7	B-9-4'	Total/NA	Solid	8015NM Prep	
880-51103-8	B-10-4'	Total/NA	Solid	8015NM Prep	
880-51103-9	B-11-4'	Total/NA	Solid	8015NM Prep	
880-51103-10	B-12-4'	Total/NA	Solid	8015NM Prep	
880-51103-11	B-13-4'	Total/NA	Solid	8015NM Prep	
880-51103-12	B-14-4'	Total/NA	Solid	8015NM Prep	
880-51103-13	B-15-4'	Total/NA	Solid	8015NM Prep	
880-51103-14	B-16-4'	Total/NA	Solid	8015NM Prep	
MB 880-95741/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-95741/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-95741/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 95815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Total/NA	Solid	8015 NM	
880-51103-2	B-4-4'	Total/NA	Solid	8015 NM	
880-51103-3	B-5-4'	Total/NA	Solid	8015 NM	
880-51103-4	B-6-4'	Total/NA	Solid	8015 NM	
880-51103-5	B-7-4'	Total/NA	Solid	8015 NM	
880-51103-6	B-8-4'	Total/NA	Solid	8015 NM	
880-51103-7	B-9-4'	Total/NA	Solid	8015 NM	
880-51103-8	B-10-4'	Total/NA	Solid	8015 NM	
880-51103-9	B-11-4'	Total/NA	Solid	8015 NM	
880-51103-10	B-12-4'	Total/NA	Solid	8015 NM	
880-51103-11	B-13-4'	Total/NA	Solid	8015 NM	
880-51103-12	B-14-4'	Total/NA	Solid	8015 NM	
880-51103-13	B-15-4'	Total/NA	Solid	8015 NM	
880-51103-14	B-16-4'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 95782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Soluble	Solid	DI Leach	
880-51103-2	B-4-4'	Soluble	Solid	DI Leach	
880-51103-3	B-5-4'	Soluble	Solid	DI Leach	
880-51103-4	B-6-4'	Soluble	Solid	DI Leach	
880-51103-5	B-7-4'	Soluble	Solid	DI Leach	
880-51103-6	B-8-4'	Soluble	Solid	DI Leach	
880-51103-7	B-9-4'	Soluble	Solid	DI Leach	
880-51103-8	B-10-4'	Soluble	Solid	DI Leach	
880-51103-9	B-11-4'	Soluble	Solid	DI Leach	
880-51103-10	B-12-4'	Soluble	Solid	DI Leach	
880-51103-11	B-13-4'	Soluble	Solid	DI Leach	
880-51103-12	B-14-4'	Soluble	Solid	DI Leach	
880-51103-13	B-15-4'	Soluble	Solid	DI Leach	
880-51103-14	B-16-4'	Soluble	Solid	DI Leach	
MB 880-95782/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-95782/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-95782/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 95782 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1 MS	B-3-4'	Soluble	Solid	DI Leach	
880-51103-1 MSD	B-3-4'	Soluble	Solid	DI Leach	
880-51103-11 MS	B-13-4'	Soluble	Solid	DI Leach	
880-51103-11 MSD	B-13-4'	Soluble	Solid	DI Leach	

Analysis Batch: 95797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51103-1	B-3-4'	Soluble	Solid	300.0	95782
880-51103-2	B-4-4'	Soluble	Solid	300.0	95782
880-51103-3	B-5-4'	Soluble	Solid	300.0	95782
880-51103-4	B-6-4'	Soluble	Solid	300.0	95782
880-51103-5	B-7-4'	Soluble	Solid	300.0	95782
880-51103-6	B-8-4'	Soluble	Solid	300.0	95782
880-51103-7	B-9-4'	Soluble	Solid	300.0	95782
880-51103-8	B-10-4'	Soluble	Solid	300.0	95782
880-51103-9	B-11-4'	Soluble	Solid	300.0	95782
880-51103-10	B-12-4'	Soluble	Solid	300.0	95782
880-51103-11	B-13-4'	Soluble	Solid	300.0	95782
880-51103-12	B-14-4'	Soluble	Solid	300.0	95782
880-51103-13	B-15-4'	Soluble	Solid	300.0	95782
880-51103-14	B-16-4'	Soluble	Solid	300.0	95782
MB 880-95782/1-A	Method Blank	Soluble	Solid	300.0	95782
LCS 880-95782/2-A	Lab Control Sample	Soluble	Solid	300.0	95782
LCSD 880-95782/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	95782
880-51103-1 MS	B-3-4'	Soluble	Solid	300.0	95782
880-51103-1 MSD	B-3-4'	Soluble	Solid	300.0	95782
880-51103-11 MS	B-13-4'	Soluble	Solid	300.0	95782
880-51103-11 MSD	B-13-4'	Soluble	Solid	300.0	95782

Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-3-4' Lab Sample ID: 880-51103-1

Date Collected: 11/14/24 11:15 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	95921	11/18/24 09:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95906	11/18/24 14:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/18/24 14:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/14/24 22:24	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 22:24	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 12:15	CH	EET MID

Client Sample ID: B-4-4' Lab Sample ID: 880-51103-2

Date Collected: 11/14/24 11:25 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 11:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 11:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/14/24 22:40	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 22:40	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 12:31	CH	EET MID

Client Sample ID: B-5-4' Lab Sample ID: 880-51103-3

Date Collected: 11/14/24 11:40 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 12:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 12:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/14/24 22:56	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 22:56	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	95797	11/15/24 12:36	CH	EET MID

Client Sample ID: B-6-4' Lab Sample ID: 880-51103-4

Date Collected: 11/14/24 11:50 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 12:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 12:29	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-6-4'
Date Collected: 11/14/24 11:50
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-4
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			95815	11/14/24 23:12	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 23:12	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 12:41	CH	EET MID

Client Sample ID: B-7-4'
Date Collected: 11/14/24 12:10
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-5
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	5030B			5.01 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 12:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 12:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/14/24 23:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 23:28	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 12:46	CH	EET MID

Client Sample ID: B-8-4'
Date Collected: 11/14/24 12:25
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 13:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 13:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/14/24 23:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/14/24 23:46	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:02	CH	EET MID

Client Sample ID: B-9-4'
Date Collected: 11/14/24 12:35
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-7
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	5030B			5.02 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 13:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 13:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 00:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 00:01	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Client Sample ID: B-9-4' Lab Sample ID: 880-51103-7

Date Collected: 11/14/24 12:35 **Matrix: Solid**
Date Received: 11/14/24 15:45

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	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:07	CH	EET MID

Client Sample ID: B-10-4' Lab Sample ID: 880-51103-8

Date Collected: 11/14/24 12:50 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 13:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 13:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 00:18	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 00:18	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:13	CH	EET MID

Client Sample ID: B-11-4' Lab Sample ID: 880-51103-9

Date Collected: 11/14/24 13:00 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 14:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 14:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 00:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 00:50	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:18	CH	EET MID

Client Sample ID: B-12-4' Lab Sample ID: 880-51103-10

Date Collected: 11/14/24 13:15 **Matrix: Solid**
Date Received: 11/14/24 15:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 14:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 14:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 01:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 01:06	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:23	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-13-4'
Date Collected: 11/14/24 13:25
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-11
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	5030B			4.97 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 17:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 17:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 01:22	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 01:22	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	95797	11/15/24 13:29	CH	EET MID

Client Sample ID: B-14-4'
Date Collected: 11/14/24 13:35
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-12
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	5030B			4.95 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 17:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 17:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 01:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 01:38	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:44	CH	EET MID

Client Sample ID: B-15-4'
Date Collected: 11/14/24 13:45
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-13
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	5030B			4.97 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 17:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 17:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			95815	11/15/24 01:54	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 01:54	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 13:50	CH	EET MID

Client Sample ID: B-16-4'
Date Collected: 11/14/24 14:00
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-14
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	5030B			4.99 g	5 mL	95743	11/14/24 16:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	95764	11/15/24 18:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			95930	11/15/24 18:08	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Client Sample ID: B-16-4'

Date Collected: 11/14/24 14:00
Date Received: 11/14/24 15:45

Lab Sample ID: 880-51103-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			95815	11/15/24 02:11	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	95741	11/14/24 16:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95721	11/15/24 02:11	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	95782	11/15/24 09:32	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95797	11/15/24 14:06	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis US Inc. Job ID: 880-51103-1
Project/Site: East Test Sat SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: Arcadis US Inc.
Project/Site: East Test Sat

Job ID: 880-51103-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51103-1	B-3-4'	Solid	11/14/24 11:15	11/14/24 15:45
880-51103-2	B-4-4'	Solid	11/14/24 11:25	11/14/24 15:45
880-51103-3	B-5-4'	Solid	11/14/24 11:40	11/14/24 15:45
880-51103-4	B-6-4'	Solid	11/14/24 11:50	11/14/24 15:45
880-51103-5	B-7-4'	Solid	11/14/24 12:10	11/14/24 15:45
880-51103-6	B-8-4'	Solid	11/14/24 12:25	11/14/24 15:45
880-51103-7	B-9-4'	Solid	11/14/24 12:35	11/14/24 15:45
880-51103-8	B-10-4'	Solid	11/14/24 12:50	11/14/24 15:45
880-51103-9	B-11-4'	Solid	11/14/24 13:00	11/14/24 15:45
880-51103-10	B-12-4'	Solid	11/14/24 13:15	11/14/24 15:45
880-51103-11	B-13-4'	Solid	11/14/24 13:25	11/14/24 15:45
880-51103-12	B-14-4'	Solid	11/14/24 13:35	11/14/24 15:45
880-51103-13	B-15-4'	Solid	11/14/24 13:45	11/14/24 15:45
880-51103-14	B-16-4'	Solid	11/14/24 14:00	11/14/24 15:45

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

Chain of Custody Record

880-51103 Chain of Custody

Client Information	Sampler:	Lab PM: Builes, John	Carrier Tracking No(s):	Page: Page 1 of 2
Client Contact: Mr. Morgan Jordan	Phone:	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	
Company: Arcadis U.S., Inc.	PWSID:		Analysis Requested	Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			Preservation Codes: N - None
City: Midland	TAT Requested (days): 48 hr TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sant	Project #: 30246045 Task 00004			Other:
Site: Lea County, NM	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-3-4'	11/14/24	1115	C	Solid			X	X	X	1	
B-4-4'		1125		Solid			X	X	X	1	
B-5-4'		1140		Solid			X	X	X	1	
B-6-4'		1150		Solid			X	X	X	1	
B-7-4'		1210		Solid			X	X	X	1	
B-8-4'		1225		Solid			X	X	X	1	
B-9-4'		1235		Solid			X	X	X	1	
B-10-4'		1250		Solid			X	X	X	1	
B-11-4'		1300		Solid			X	X	X	1	
B-12-4		1315		Solid			X	X	X	1	
B-13-4	X	1325	X	Solid			X	X	X	1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Chris Parker	11-14-24	Arcadis		11/14/24 1540	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.7/3.6 -1

Ver: 05/06/2024

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11/18/2024
Received by OCD: 1/9/2025 1:18:24 PM
Released to Imaging: 1/10/2025 9:43:03 AM

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler:	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-10757-1562.1
Client Contact: Mr. Morgan Jordan	Phone:	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page 2 of 2
Company: Arcadis U.S., Inc.	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			Preservation Codes: N - None
City: Midland	TAT Requested (days): 48 hr TAT			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 281-644-9437(Tel)	PO #:			
Email: douglas.jordan@arcadis.com	WO #:			
Project Name: East Test Sat	Project #: 30246645 Task 00004			
Site: Lea County, NM	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-14-4'	11/14/24	1335	G	Solid			X	X	X	1	
B-15-4'	1	1345	C	Solid			X	X	X	1	
B-16-4'	X	1400	C	Solid			X	X	X	1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Chris M	Date/Time: 11-14-24	Company: Arcadis	Received by:	Date/Time: 11/14/24	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:18:24 PM
11/18/2024
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Released to Imaging: 1/10/2025 9:43:03 AM

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51103-1
SDG Number: Lea County, NM

Login Number: 51103
List Number: 1
Creator: Lee, Randell

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: Mr. Morgan Jordan
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 11/25/2024 5:41:04 PM

JOB DESCRIPTION

East Test SAT
Lea County, NM

JOB NUMBER

880-51461-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 9:45:05 AM

Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
11/25/2024 5:41:04 PM

Authorized for release by
John Builes, Project Manager
John.Builes@et.eurofinsus.com
(561)558-4549

Client: Arcadis US Inc.
Project/Site: East Test SAT

Laboratory Job ID: 880-51461-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51461-1
Project/Site: East Test SAT SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low 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: Arcadis US Inc.
Project: East Test SAT

Job ID: 880-51461-1

Job ID: 880-51461-1 Eurofins Midland

Job Narrative
880-51461-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

Receipt
The sample was received on 11/22/2024 4:20 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.5°C.

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SW-4-2' (880-51461-1).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SW-4-2' (880-51461-1). Evidence of matrix interferences is not obvious.

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

Diesel Range Organics
Method 8015MOD_NM: The method blank for preparation batch 880-96407 and analytical batch 880-96491 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-96407/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-4-2' (880-51461-1). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Client Sample ID: SW-4-2'

Date Collected: 11/22/24 09:30
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51461-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00198	0.00138	mg/Kg		11/23/24 16:57	11/23/24 23:24	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		11/23/24 16:57	11/23/24 23:24	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		11/23/24 16:57	11/23/24 23:24	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		11/23/24 16:57	11/23/24 23:24	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		11/23/24 16:57	11/23/24 23:24	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		11/23/24 16:57	11/23/24 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*11/23/24 16:57*	*11/23/24 23:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/23/24 16:57*	*11/23/24 23:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			11/23/24 23:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			11/25/24 14:36	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	<14.5	U	50.0	14.5	mg/Kg		11/22/24 15:51	11/25/24 14:36	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 14:36	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*11/22/24 15:51*	*11/25/24 14:36*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 14:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.0**		10.0	0.396	mg/Kg			11/25/24 11:52	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

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)
880-51461-1	SW-4-2'	132 S1+	97
LCS 880-96444/1-A	Lab Control Sample	109	101
LCS 880-96444/2-A	Lab Control Sample	101	101
MB 880-96444/5-A	Method Blank	97	94

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-51461-1	SW-4-2'	78	69 S1-
LCS 880-96407/2-A	Lab Control Sample	114	93
LCSD 880-96407/3-A	Lab Control Sample Dup	109	88
MB 880-96407/1-A	Method Blank	78	69 S1-

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96444/5-A
Matrix: Solid
Analysis Batch: 96440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96444

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		11/23/24 16:57	11/23/24 19:57	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/23/24 16:57	11/23/24 19:57	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/23/24 16:57	11/23/24 19:57	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/23/24 16:57	11/23/24 19:57	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/23/24 16:57	11/23/24 19:57	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/23/24 16:57	11/23/24 19:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*11/23/24 16:57*	*11/23/24 19:57*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/23/24 16:57*	*11/23/24 19:57*	*1*

Lab Sample ID: LCS 880-96444/1-A
Matrix: Solid
Analysis Batch: 96440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1098		mg/Kg		110	70 - 130
Toluene	0.100	0.1086		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1156		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2234		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1252		mg/Kg		125	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCS 880-96444/2-A
Matrix: Solid
Analysis Batch: 96440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96444

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1077		mg/Kg		108	70 - 130
Toluene	0.100	0.1062		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1127		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	0.200	0.2161		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1209		mg/Kg		121	70 - 130

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

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-96407/1-A
Matrix: Solid
Analysis Batch: 96491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96407

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.49	J	50.0	14.5	mg/Kg		11/22/24 15:51	11/25/24 10:56	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 10:56	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*11/22/24 15:51*	*11/25/24 10:56*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 10:56*	*1*

Lab Sample ID: LCS 880-96407/2-A
Matrix: Solid
Analysis Batch: 96491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96407

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1198		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	882.5		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*93*		*70 - 130*

Lab Sample ID: LCSD 880-96407/3-A
Matrix: Solid
Analysis Batch: 96491

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96407

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1099		mg/Kg		110	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	820.1		mg/Kg		82	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*88*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96463/1-A
Matrix: Solid
Analysis Batch: 96475

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	10.0	0.395	mg/Kg			11/25/24 10:06	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-96463/2-A
Matrix: Solid
Analysis Batch: 96475

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.0		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-96463/3-A
Matrix: Solid
Analysis Batch: 96475

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.7		mg/Kg		99	90 - 110	1	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 96440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	8021B	96444
MB 880-96444/5-A	Method Blank	Total/NA	Solid	8021B	96444
LCS 880-96444/1-A	Lab Control Sample	Total/NA	Solid	8021B	96444
LCS 880-96444/2-A	Lab Control Sample	Total/NA	Solid	8021B	96444

Prep Batch: 96444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	5030B	
MB 880-96444/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-96444/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCS 880-96444/2-A	Lab Control Sample	Total/NA	Solid	5030B	

Analysis Batch: 96525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	8015NM Prep	
MB 880-96407/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96407/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96407/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	8015B NM	96407
MB 880-96407/1-A	Method Blank	Total/NA	Solid	8015B NM	96407
LCS 880-96407/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96407
LCSD 880-96407/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96407

Analysis Batch: 96570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 96463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Soluble	Solid	DI Leach	
MB 880-96463/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96463/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96463/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 96475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51461-1	SW-4-2'	Soluble	Solid	300.0	96463
MB 880-96463/1-A	Method Blank	Soluble	Solid	300.0	96463
LCS 880-96463/2-A	Lab Control Sample	Soluble	Solid	300.0	96463
LCSD 880-96463/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96463

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Client Sample ID: SW-4-2'

Date Collected: 11/22/24 09:30
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51461-1

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	5030B			5.05 g	5 mL	96444	11/23/24 16:57	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96440	11/23/24 23:24	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96525	11/23/24 23:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			96570	11/25/24 14:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96407	11/22/24 15:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96491	11/25/24 14:36	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96463	11/25/24 07:58	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96475	11/25/24 11:52	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

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

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

Method Summary

Client: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	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: Arcadis US Inc.
Project/Site: East Test SAT

Job ID: 880-51461-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51461-1	SW-4-2'	Solid	11/22/24 09:30	11/22/24 16:20

Released to Imaging: 1/10/2025 9:43:03 AM
Received by OCD: 1/9/2025 1:18:24 PM

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

Chain of Custody Record



Client Information	Sampler: Luis Esparza	Lab PM: Builes, John	Carrier Tracking No(s):
Client Contact: Mr. Morgan Jordan	Phone: 575-441-1484	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM
Company: Arcadis U.S., Inc.	PWSID:		
Address: 1004 North Big Spring Suite 300	Due Date Requested:		
City: Midland	TAT Requested (days): 24 Hr Rush		
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No		
Phone: 281-644-9437(Tel)	PO #:		
Email: douglas.jordan@arcadis.com	WO #:		
Project Name: East Test SAT	Project #: 30241616045		
Site: Lea County, NM.	SSOW#:		

Analysis Requested

Preservation Codes: N - None; Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SW-4-2'	11/22/24	0930	G	Solid	N	N	X	X	X	1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Chris Payton	11-22-24	Arcadis		11/22/24 1650	
2						
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6/3.5 -1

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51461-1
SDG Number: Lea County, NM

Login Number: 51461
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	

Appendix C

Photo Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit East Test Satellite	Lea County, NM	nLWJ1016954547

Photo No.	Date:
1	12/9/2024

Coordinates:

32.861623, -103.366948

Description:

Excavation completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit East Test Satellite	Lea County, NM	nLWJ1016954547

Photo No.	Date:
2	12/9/2024

Coordinates:

32.861623, -103.366948

Description:

Excavation completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit East Test Satellite	Lea County, NM	nLWJ1016954547

Photo No.	Date:
3	12/16/2024

Coordinates:

32.861623, -103.366948

Description:

Excavation backfilling in progress.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit East Test Satellite	Lea County, NM	nLWJ1016954547

Photo No.	Date:
4	12/19/2024

Coordinates:

32.861623, -103.366948

Description:

Excavation backfilling and contouring completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit East Test Satellite	Lea County, NM	nLWJ1016954547

Photo No.	Date:
5	12/19/2024

Coordinates:

32.861623, -103.366948

Description:

Excavation backfilling, contouring, and reclamation completed.



Arcadis U.S., Inc.
1330 Post Oak Blvd., Suite 2250
Houston
Texas 77056
Phone: 713 953 4800
www.arcadis.com

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 419075

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419075
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nLWJ1016954547**
Incident Name	**NLWJ1016954547 WEST LOVINGTON UNIT EAST TEST SATELLITE @ 30-025-03873**
Incident Type	**Produced Water Release**
Incident Status	**Reclamation Report Received**
Incident Well	**[30-025-03873] WEST LOVINGTON UNIT #023**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	WEST LOVINGTON UNIT EAST TEST SATELLITE
Date Release Discovered	06/10/2010
Surface Owner	State

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: Equipment Failure | Flow Line - Injection | Produced Water | Released: 7 BBL | Recovered: 5 BBL | Lost: 2 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.*

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
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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: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 07/23/2024

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QUESTIONS (continued)

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QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

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)	3260
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	618
GRO+DRO (EPA SW-846 Method 8015M)	104
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	08/23/2024
On what date will (or did) the final sampling or liner inspection occur	08/24/2024
On what date will (or was) the remediation complete(d)	09/23/2024
What is the estimated surface area (in square feet) that will be reclaimed	10500
What is the estimated volume (in cubic yards) that will be reclaimed	800
What is the estimated surface area (in square feet) that will be remediated	10500
What is the estimated volume (in cubic yards) that will be remediated	800
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

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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	R360 ARTESIA LLC LANDFARM [fEEM0112340644]
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	No
OR is the **off-site** disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
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: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 07/23/2024
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)

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QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**400732**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/12/2024**
What was the (estimated) number of samples that were to be gathered	**75**
What was the sampling surface area in square feet	**10500**

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	10800
What was the total volume (cubic yards) remediated	1600
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	10800
What was the total volume (in cubic yards) reclaimed	1600
Summarize any additional remediation activities not included by answers (above)	none

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: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 01/09/2025

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QUESTIONS (continued)

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QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	10800
What was the total volume of replacement material (in cubic yards) for this site	1600
Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	04/01/2025
Summarize any additional reclamation activities not included by answers (above)	none
The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 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: Chris Brand Title: Lead Environmental Specialist Email: Chrisbrand@chevron.com Date: 01/09/2025

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QUESTIONS (continued)

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	Action Number: 419075
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.	
Requesting a restoration complete approval with this submission	No
Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.	

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CONDITIONS

Operator:	OGRID:
CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	4323
	Action Number: 419075
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this 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; or if the location fails to revegetate properly. In addition, the OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	1/10/2025
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	1/10/2025