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 #047
Soil Remediation/ Reclamation Summary and Closure Request Report
Incident No. nPAC0708526071
Case No. 1RP-1314

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
West Lovington Unit #047 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 #047

cc. Scott Foord – Arcadis
Morgan Jordan – Arcadis

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Chevron Environmental Management Company

2024 Soil Remediation/Reclamation Summary and Closure Request Report

West Lovington Unit #047

Incident # nPAC0708526071

Lea County, New Mexico

January 2025

2024 Soil Remediation/Reclamation Summary and Closure Request Report

West Lovington Unit #047
Incident # nPAC0708526071
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 #047 (Site) located at coordinates: 32.856327, -103.365962.

2 Project Summary

The Site is located on privately owned land approximately 6-miles southwest of the City of Lovington in Unit D, Section 9, 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 January 14, 2007, a buried high pressure injection line leaked believed to be caused by corrosion, releasing approximately 5 barrels (bbls) of produced water at the Site. The well was shut in and isolated. The leak was approximately 600 feet north of West Lovington Unit #047 pad. The affected area was approximately 20 feet (ft) by 30 ft according to the Initial C-141 Form that was submitted to the New Mexico Oil Conservation Division (NMOCD) on January 15, 2007. The Initial C-141 Form was approved on February 9, 2007, and assigned Remediation Permit Number 1RP-1314 and Incident Number nPAC0708526071.

3 Soil Assessment Activities

In March 2023, and subsequently in January, February, and April 2024, Arcadis performed soil assessment activities to evaluate soil impacts stemming from the release. A total of twenty-four (24) sample points (SB-1 through SB-24) were advanced to depths ranging from the surface to 15 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 23, 2024, the NMOCD approved the Work Plan. The approved Work Plan is included as **Appendix A**. On October 4, 2024, Arcadis requested a 400 square foot (sq ft) sampling variance by email to NMOCD. The NMOCD approved the 400 sq ft variance on October 9, 2024, and the correspondence is included in **Appendix B**.

4 Depth to Groundwater Determination Boring

An Application for Permit to Drill and a Plugging Plan were submitted to the New Mexico Office of the State Engineer (NMOSE) for approval to complete a depth to groundwater determination boring at the Site. Both were approved by NMOSE on November 5, 2024, via email and assigned well # L-15795 Pod 1. The correspondence is included in **Appendix B**.

On November 13, 2024, soil boring SB-1 was drilled to determine depth to groundwater at the Site. The boring was allowed to remain open for 72 hours and depth to groundwater was determined to be at 53 bgs. Following

verification of depth to groundwater onsite, Arcadis communicated the depth to groundwater verification results by email to NMOCD on November 18, 2024. NMOCD responded to add the revised information to the closure report and update site specific depth to groundwater characterization information when submitting closure report. The correspondence is included in **Appendix B**.

Remediation/reclamation activities at the Site have been completed at the Site utilizing applicable NMOCD Closure Criteria for a site with depth to groundwater greater than 50 feet bgs.

Additionally, per NMAC 19.15.29.11 A(5)(c), on November 13, 2024, vertical delineation was demonstrated at soil boring locations (SB-1 and SB-2). The soil boring locations are depicted in **Figure 5**. Boring logs are included in **Appendix C** and analytical results are included in **Table 1**.

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 confirmed with depth to groundwater greater than 50 feet bgs:

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 October 4 through December 3, 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 approximate 41,750 square foot (sq ft) area. Excavation activities were conducted to a maximum depth of approximately 4 feet bgs. Approximately 6,185 cubic yards of impacted soil was 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 22 through December 4, 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 400 square foot sample spacing or less for both sidewall and base of the excavated area as approved in e-mail correspondence with the NMOCD. This correspondence is presented in **Appendix 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 D.**

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 C**. Upon receiving laboratory analytical confirming impacted soil over the applicable restoration limits had been removed from the impacted area, the excavated area was backfilled with locally sourced, non-impacted "like" material suitable to establish vegetation growth.

Approximately 41,750 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 next applicable growing season. A separate revegetation report will be submitted to the NMOCD once revegetation activities have been completed.

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

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 original condition.

9 Remediation Closure Request

Remediation activities were conducted in accordance with the NMOCD approved variance request utilizing 400 sq ft 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 #047 for Incident Number nPAC0708526071.

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

Tables

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU 47
Lea County, New Mexico

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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)
NMAC Standard			**10**	--	--	--	**50**	--	--	**1,000**	--	**2,500**	**10,000**
Restoration Requirements			**10**	--	--	--	**50**	--	--	--	--	**100**	**600**
SW-1	2	11/22/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	181
SW-2	2	11/22/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	70.0
SW-3	2	11/22/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	14.0
SW-4	2	11/25/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	491
SW-5	2	11/25/2024	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	494
SW-6	2	11/22/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	24.7 J	24.7 J	<15.1	24.7 J	282
SW-7	2	11/22/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	222
SW-8	2	11/22/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	32.1
SW-9	2	11/22/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	43.7
SW-10	2	11/22/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	13.0
B-1	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	665
B-2	4	11/26/2024	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	799
B-3	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,730
B-4	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	1,190
B-5	4	11/26/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	675
B-6	4	11/26/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.7	<49.7	<49.7	<49.7	<49.7	671
B-7	4	11/26/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	326
B-8	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	289
B-9	4	11/26/2024	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	345
B-10	4	11/26/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	935
B-11	4	11/26/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	573
B-12	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	501
B-13	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	293
B-14	4	11/26/2024	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	394
B-15	4	11/26/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	460
B-16	4	11/26/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	357
B-17	4	11/26/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	283
B-18	4	11/26/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	588
B-19	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	608
B-20	4	11/26/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	439
B-21	4	11/26/2024	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	500 F1
B-22	4	12/02/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5 *+	<15.1 F1	<15.1 F1	<15.1	<15.1	349
B-23	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	236
B-24	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5 *+	<15.1	<15.1	<15.1	<15.1	198
B-25	4	12/02/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5 *+	<15.0	<15.0	<15.0	<15.0	384
B-26	4	12/02/2024	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5 *+	<15.1	<15.1	<15.1	<15.1	512
B-27	4	12/02/2024	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5 *+	<15.1	<15.1	<15.1	<15.1	528
B-28	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	652
B-29	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5 *+	<15.0	<15.0	<15.0	<15.0	1,140
B-30	4	12/02/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	481
B-31	4	12/02/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5 *+	<15.0	<15.0	<15.0	<15.0	229 F1
B-32	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,090
B-33	4	12/02/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5 *+	<15.1	<15.1	<15.1	<15.1	941
B-34	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,980
B-35	4	12/02/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5 *+	15.2 J	15.2 J	<15.0	15.2 J	771

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Table 1
Soil Analytical Results
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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)
NMAC Standard			**10**	--	--	--	**50**	--	--	**1,000**	--	**2,500**	**10,000**
Restoration Requirements			**10**	--	--	--	**50**	--	--	--	--	**100**	**600**
B-36	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5 *+	195	195	<15.1	195	900
B-37	4	12/02/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5 *+	<15.1	<15.1	<15.1	<15.1	600
B-38	4	12/02/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,570
B-39	4	12/02/2024	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,110
B-40	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,220
B-41	4	12/02/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5 *+	<15.1	<15.1	<15.1	<15.1	2,230 F1
B-42	4	12/02/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5 *+	<15.1	<15.1	<15.1	<15.1	1,100
B-43	4	12/02/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,010
B-44	4	12/03/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	394
B-45	4	12/03/2024	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	2,450
B-46	4	12/03/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	2,600
B-47	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.4	<15.0	<15.0	<15.0	<15.0	1,650
B-48	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,350
B-49	4	12/03/2024	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5	<15.1	<15.1	<15.1	<15.1	1,790
B-50	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,200
B-51	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,270
B-52	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	665 F1
B-53	4	12/03/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	16.7 J	16.7 J	<15.1	16.7 J	1,710
B-54	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	637
B-55	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,070
B-56	4	12/03/2024	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.5	<15.1	<15.1	<15.1	<15.1	1,130
B-57	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	1,450
B-58	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	769
B-59	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,380
B-60	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	944
B-61	4	12/03/2024	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	<14.4	<15.0	<15.0	<15.0	<15.0	930
B-62	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	628 F1
B-63	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,860
B-64	4	12/03/2024	<0.00140	<0.00202 F1	<0.00110 F2 F1	<0.00230 F2 F1	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	1,960
B-65	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,270
B-66	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	116
B-67	4	12/03/2024	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,150
B-68	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	15.9 J	15.9 J	<15.1	15.9 J	1,410
B-69	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	2,530
B-70	4	12/03/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,100
B-71	4	12/03/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	1,720
B-72	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,960 F1
B-73	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	289
B-74	4	12/03/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	838
B-75	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	2,060
B-76	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	2,080
B-77	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,540
B-78	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,280
B-79	4	12/03/2024	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	1,370
B-80	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	1,070
B-81	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,110
B-82	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,670 F1
B-83	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	1,090
B-84	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	<14.5	<15.1	<15.1	<15.1	<15.1	980
B-85	4	12/03/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	1,700
B-86	4	12/03/2024	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	<14.5	<15.1	<15.1	<15.1	<15.1	1,120
B-87	4	12/03/2024	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	1,070

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU 47
Lea County, New Mexico

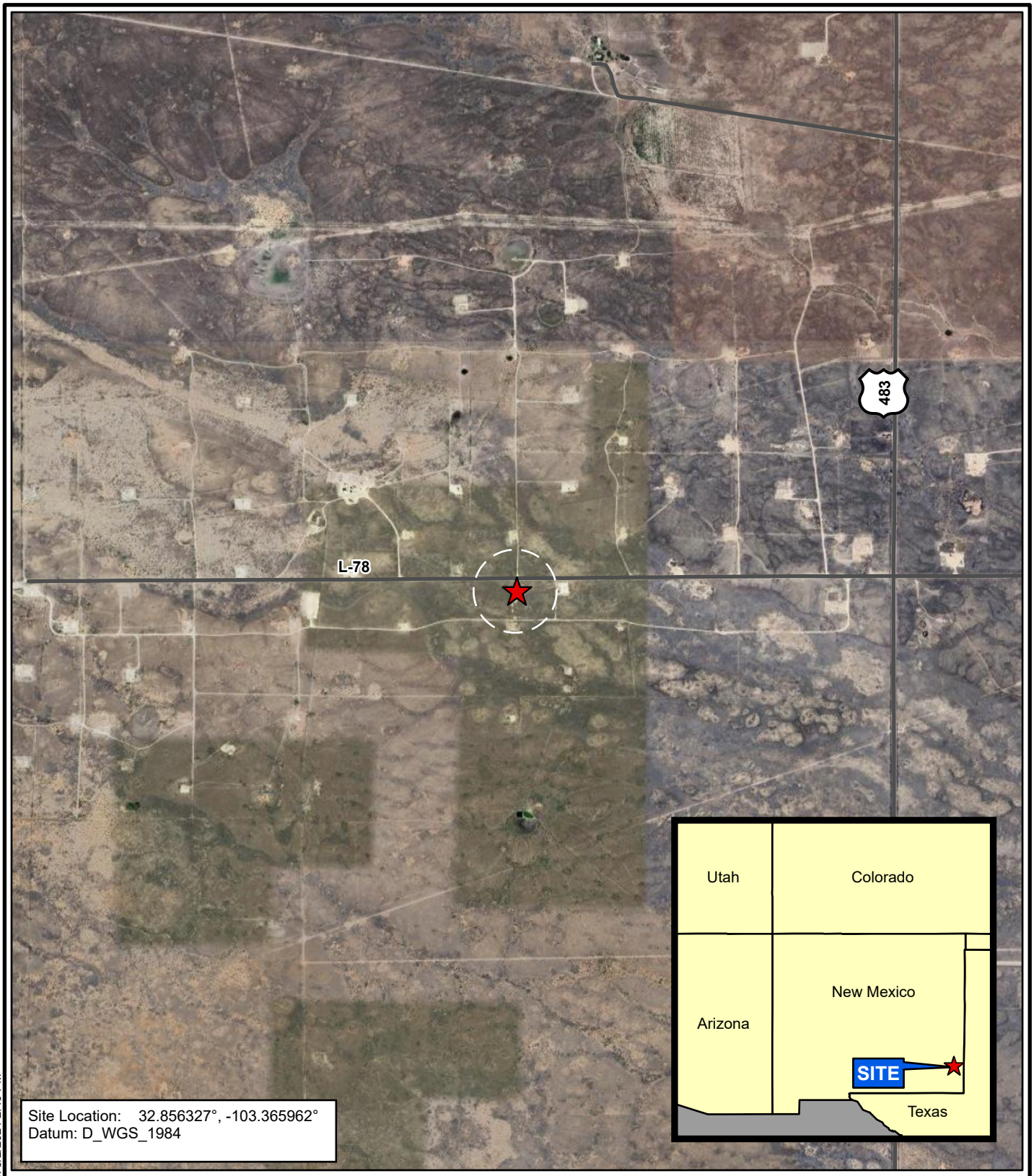
ARCADIS

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)
NMAC Standard			**10**	--	--	--	**50**	--	--	**1,000**	--	**2,500**	**10,000**
Restoration Requirements			**10**	--	--	--	**50**	--	--	--	--	**100**	**600**
B-88	4	12/03/2024	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	<14.4	<15.0	<15.0	<15.0	<15.0	971
B-89	4	12/03/2024	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	<14.5	<15.1	<15.1	<15.1	<15.1	722
B-90	4	12/03/2024	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	<14.5	<15.1	<15.1	<15.1	<15.1	583
B-91	4	12/03/2024	0.00933	0.00514	0.0253	0.0147	0.0545	<14.5	<15.1	<15.1	<15.1	<15.1	583
B-92	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	2,170
B-93	4	12/04/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	957
B-94	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	867
B-95	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	632
B-96	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	1,120
B-97	4	12/04/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,240
B-98	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	972 F1
B-99	4	12/04/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,140
B-100	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	2,130
B-101	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<49.7	<49.7	<49.7	<49.7	<49.7	735
B-102	4	12/04/2024	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	894
B-103	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	604
B-104	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	778
B-105	4	12/04/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	1,800
B-106	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	591
B-107	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	828
B-108	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	1,640
B-109	4	12/04/2024	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,320
B-110	4	12/04/2024	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	901
B-111	4	12/04/2024	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,920
B-112	4	12/04/2024	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	320
B-113	4	12/04/2024	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	675
SB-1	25	11/13/2024	--	--	--	--	--	--	--	--	--	--	826
SB-1	30	11/13/2024	--	--	--	--	--	--	--	--	--	--	585
SB-1	35	11/13/2024	--	--	--	--	--	--	--	--	--	--	306
SB-2	20	11/13/2024	--	--	--	--	--	--	--	--	--	--	299
SB-2	25	11/13/2024	--	--	--	--	--	--	--	--	--	--	86.3
SB-2	30	11/13/2024	--	--	--	--	--	--	--	--	--	--	22.3
Backfill	---	8/12/2024	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	<14.5	<15.1	<15.1	<15.1	<15.1	80.7

Legend:
J: Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Limit (MDL) and the concentration is an approximate value.
F1: Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds control limits.
F2: Matrix Spike (MS) and/or Matrix Spike Duplicate Relative Percent Difference (RPD) exceeds control limits
*+: Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) is outside acceptance limits.
<' : indicates the analyte was not detected at or above the MDL.
-- : Not analyzed
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 (C6-C10)
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics (C10-C28)
TPH MRO: Total Petroluem Hydrocarbons Oil Range Organics (C28-C36)
Total TPH: GRO + DRO +MRO
B: Base sample
SB : 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

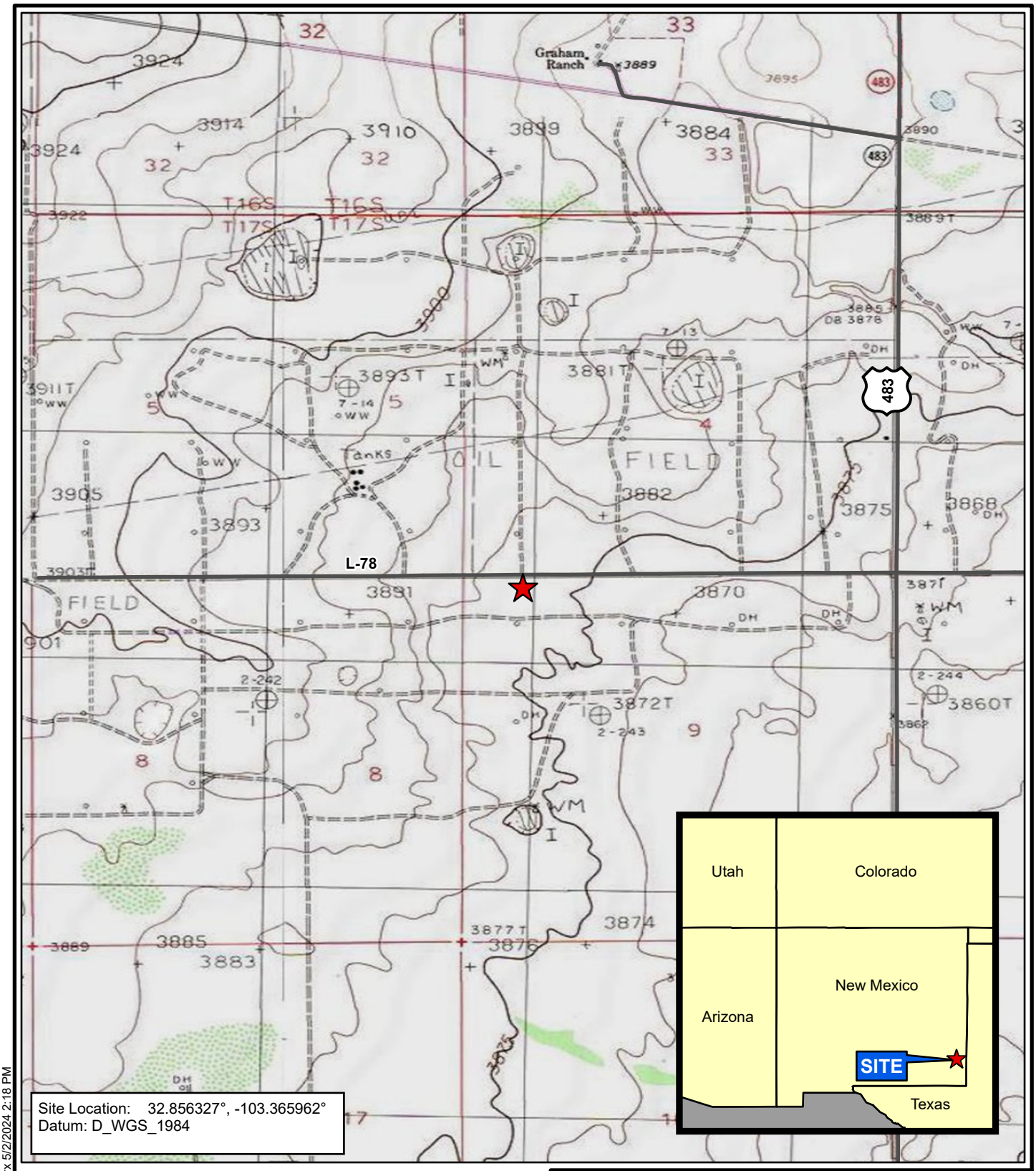
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

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_47_Pro\WLU_47.aprx 5/2/2024 2:49 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

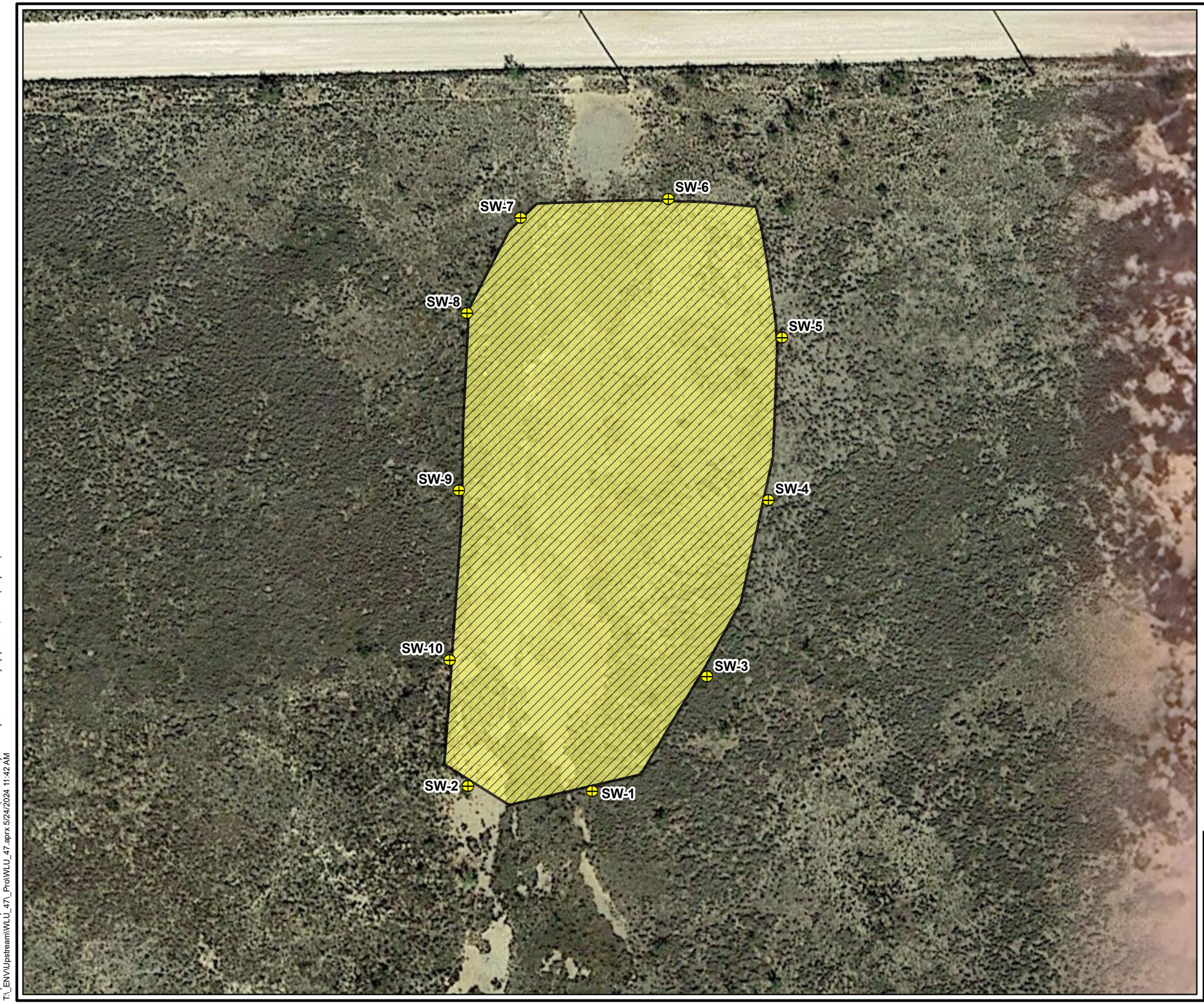
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

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_47_Proj\WLU_47.aprx 5/2/2024 2:18 PM



LEGEND:

- Sidewall Soil Sample Location
- Excavated Area

0 50 100 Feet

GRAPHIC SCALE

Datum: D_WGS_1984
Source: ESRI Online, Google Earth
Site Location: 32.856327°, -103.365962°

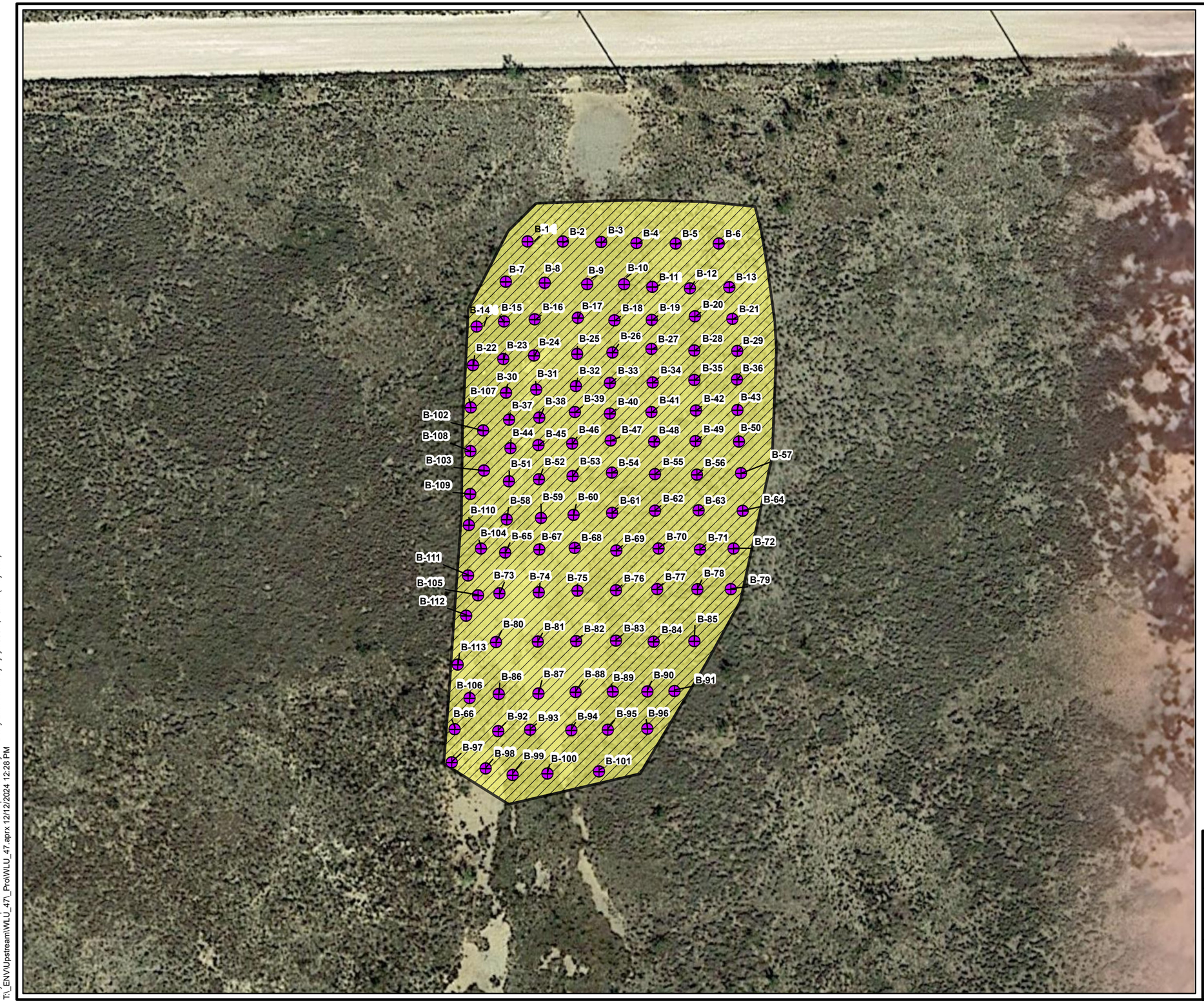
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WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

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_47_Pro\WLU_47.aprx 5/24/2024 11:42 AM



LEGEND:

- Base Soil Sample Location
- Excavated Area

0 50 100 Feet

GRAPHIC SCALE

Datum: D_WGS_1984
Source: ESRI Online, Google Earth
Site Location: 32.856327°, -103.365962°

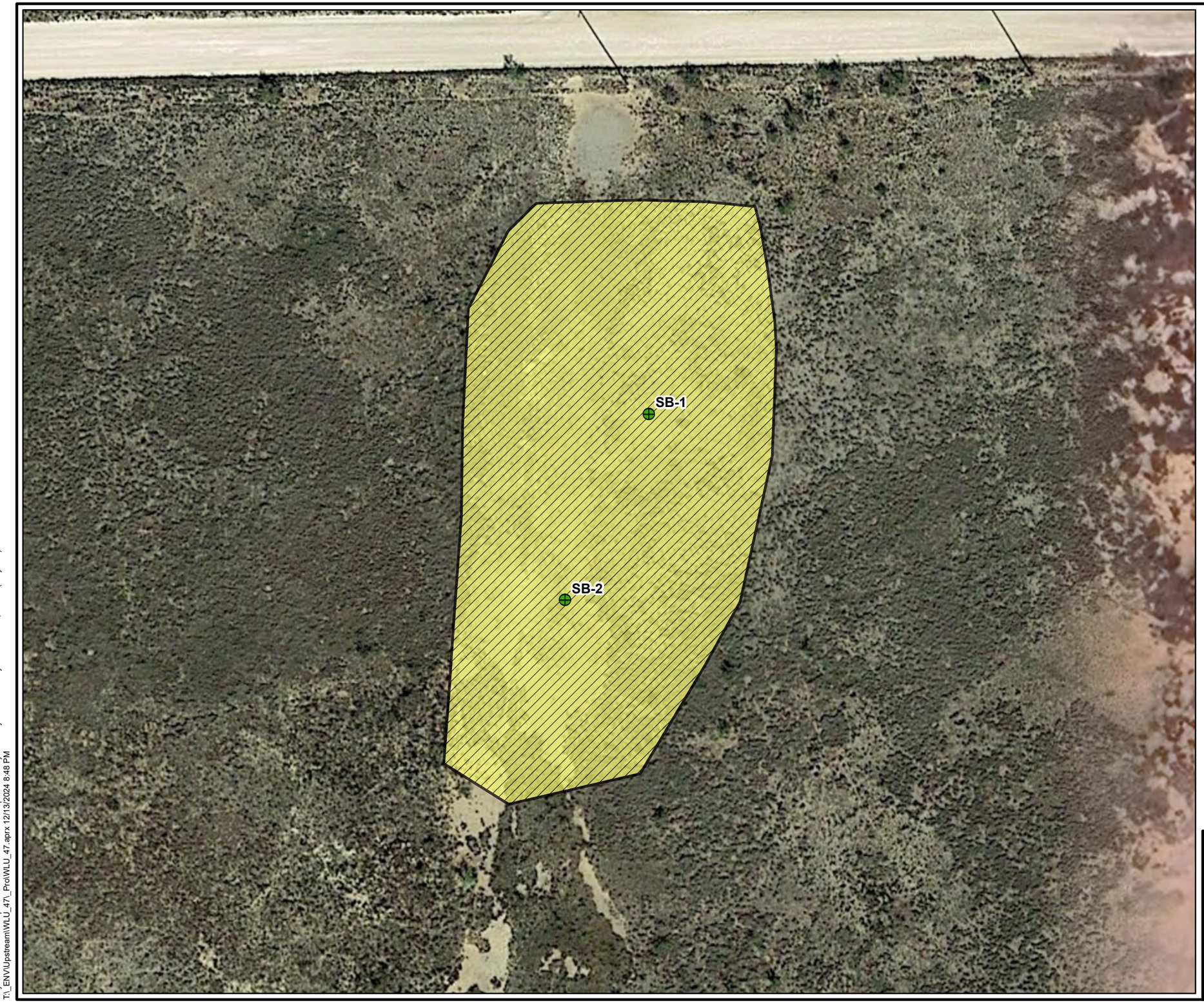
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

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_47_Pro\WLU_47.aprx 12/12/2024 12:28 PM



LEGEND:

- Test Trench Location
- Excavated Area

0 50 100 Feet

GRAPHIC SCALE

Datum: D_WGS_1984
Source: ESRI Online, Google Earth
Site Location: 32.856327°, -103.365962°

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

TEST TRENCH LOCATION MAP

ARCADIS

FIGURE 5

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: amirm1212 ; Client (Project #)
T:_ENV\Upstream\WLU_47_ProWLU_47.aprx 12/13/2024 8:48 PM

Appendix A

Work Plan

Chris Brand
Environmental Remediation/ Facility Decom Advisor

VIA ELECTRONIC MAIL

May 24, 2024

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

Re: West Lovington Unit #047
Soil Remediation Work Plan
Incident No. nPAC0708526071
Case No. 1RP-1314

Dear Whom it May Concern:

Please find enclosed for your files, copies of the following:
West Lovington Unit #047 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 USA.

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. West Lovington Unit #047 Work Plan

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 #047

Lea County, New Mexico

Incident # nPAC0708526071

May 2024

2024 Work Plan

West Lovington Unit #047
Incident # nPAC0708526071
Lea County, New Mexico

May 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 # nPAC0708526071 1
3 Site Characterization 1
4 NMAC Regulatory Criteria 2
5 Site Assessment Activities 2
6 Proposed Work Plan 3
7 Work Plan Approval Request 3

Tables

Table 1. Soil Analytical Results

Figures

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

Appendices

Appendix A. Initial C-141 Form Incident # nPAC0708526071
Appendix B. Laboratory Analytical Reports
Appendix C. NMOCD Correspondence

Released to Imaging: 1/10/2025 8:43:45 AM

2024 Work Plan
West Lovington Unit #047

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 #047 (Site) located at 32.856327, -103.365962. 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 private owned land approximately 6-miles southwest of the City of Lovington in Unit D, Section 9, 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 # nPAC0708526071

According to the Initial C-141 Form, on January 14, 2007, a buried high pressure injection line leaked believed caused by corrosion and released approximately 5 barrels (bbls) of produced water at the Site. The well was shut in and isolated. The leak was approximately 600 feet north of West Lovington Unit #47 pad. The affected area was approximately 20 feet (ft) by 30 ft according to the Initial C-141 Form that was submitted on January 15, 2007. The Initial C-141 Form was approved on February 9, 2007, and assigned remediation permit number 1RP-1314 and incident number nPAC0708526071. 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 USGS databases there is no groundwater data with 0.50 miles available in the databases, but there are eight unregistered groundwater monitoring wells located approximately 0.20 miles south of the Site associated with the Chevron West Lovington Unit #63 Site (Case No. 1RP-1993). The Chevron West Lovington Unit #63 monitoring well located within the closest proximity to the West Lovington Unit #047 site is located at coordinates 32.853407, -103.364185. The monitoring well was gauged by Arcadis on May 20, 2024. Depth to groundwater was verified at 49.09 ft below ground surface (bgs), therefore the most stringent NMOCD closure criteria will be applied for the Site.

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 26 and 50 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 0.50 and 1 mile;
- 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 other fresh water well or spring: Between 0.50 and 1 mile ;
- Distance to incorporated municipal boundaries or a defined municipal fresh water well field: Between 1 and 5 miles;
- Distance to wetland: Between 0.50 and 1 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

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 and within soil greater than 4 feet bgs due to depth to groundwater being verified less than 50 ft bgs.

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

5 Site Assessment Activities

In March 2023, and subsequently in January, February, and April 2024, Arcadis performed site assessment activities to evaluate soil impacts stemming from the release. A total of twenty-four (24) sample points (SB-1 through SB-24) were advanced to depths ranging from the surface to 15 feet bgs inside and surrounding the release area to evaluate the vertical and horizontal extents of the release. Soil sample locations are shown on **Figure 3**. 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 samples were analyzed for TPH by United States Environmental Protection Agency (EPA) Method 8015, modified BTEX by EPA Method 8021B, and chloride by EPA method 300.0. Soil samples analyzed for BTEX were reported with concentrations ranging from 0.00100 J mg/kg (S-15) to 0.00988 mg/kg (S-11). Soil samples analyzed for TPH were reported with concentrations ranging from 20.6 J mg/kg (S-1) to 182 mg/kg (S-11). Soil samples analyzed for chloride were reported with concentrations ranging from 3.84 J mg/kg (S-20) to 7,420 mg/kg (S-3).

Horizontal delineation was completed during assessment activities. Vertical assessment to depths of 15 feet bgs was conducted in the area of concern during recent assessment activities and will be continued during remediation 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 initial site assessment, including analytical methods, results, and chain-of-custody documents, are attached in **Appendix B.** NMOCD correspondence is shown in **Appendix C.**

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 33,500 square feet. An estimated 6,720 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 33,500 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 prepare and schedule 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.

Tables

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU 47

ARCADIS

Sample I.D.	Sample Depth (feet bgs)	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)
NMAC Standards			10	--	--	--	50	--	--	--	--	100	600
Restoration Requirements			10	--	--	--	50	--	--	--	--	100	600
SB-1	0-0.5'	03/24/23	<0.000384	<0.000455	<0.000564	<0.000343	<0.000343	20.6 J *+	<15.0 *+	20.6 J *+	<15.0	20.6 J	56.9
	2'	03/24/23	<0.000387	<0.000459	<0.000568	<0.000346	<0.000346	25.9 J *+	<15.0 *+	25.9 J *+	<15.0	25.9 J	214
SB-2	0-0.5'	03/24/23	<0.000383	<0.000454	<0.000563	<0.000343	<0.000343	20.9 J *+	<15.0 *+	20.9 J *+	<15.0	20.9 J	***3470***
	2'	03/24/23	<0.000383	<0.000453	<0.000562	<0.000342	<0.000342	22.7 J *+	<15.0 *+	22.7 J *+	<15.0	22.7 J	***2040***
SB-3	0-0.5'	03/24/23	<0.000387	<0.000458	<0.000567	<0.000345	<0.000345	32.6 J *+	<15.0	32.6 J *+	<15.0	32.6 J	***7,420***
	2'	03/24/23	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	40.6 J *+	20.0 J B *+	60.6 J B *+	<15.0	60.6	**2,120 F1**
SB-4	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	***1,970***
	2'	01/29/24	<0.000385	<0.000456	<0.000565	<0.00101	<0.00101	<24.8	<24.8	<24.8	<24.8	<24.8	***1,900 F1***
SB-5	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	272
	2'	01/29/24	<0.000382	<0.000452	<0.000561	<0.00100	<0.00100	<25.3	<25.3	<25.3	<25.3	<25.3	***1,640***
SB-6	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	290
	2'	01/29/24	<0.000389	<0.000461	<0.000571	<0.00102	<0.00102	<25.0	<25.0	<25.0	<25.0	<25.0	**1,670**
SB-7	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	***625***
	2'	01/29/24	<0.000388	<0.000460	<0.000570	<0.00102	<0.00102	<24.8	24.8 J	24.8 J	<24.8	24.8 J	***1,460***
SB-8	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	***2,530***
	2'	01/29/24	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	<24.8	25.5 J	25.5 J	<24.8	25.5 J	***2,520***
SB-9	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	***2,670***
	2'	01/29/24	<0.000384	<0.000455	<0.000564	<0.00101	<0.00101	<25.0	<25.0	<25.0	<25.0	<25.0	***2,400***
SB-10	1'	01/29/24	--	--	--	--	--	--	--	--	--	--	***1,050***
	2'	01/29/24	<0.000381	<0.000451	<0.000559	<0.00100	<0.00100	<24.9	<24.9	<24.9	<24.9	<24.9	***1,860***
	3'	01/29/24	--	--	--	--	--	--	--	--	--	--	***1,930***
SB-11	1'	02/02/24	--	--	--	--	--	--	--	--	--	--	***3,100***
	2'	02/02/24	0.00119 J	0.00131 J	0.00150 J	0.00588	0.00988	16.0 J B	166 B	182 J B	<14.9	***182***	361
SB-12	1'	02/02/24	--	--	--	--	--	--	--	--	--	--	161
	2'	02/02/24	<0.000383	<0.000453	<0.000562	<0.00100	<0.00100	32.4 J B	16.0 J B	48.4 J B	<15.0	48.4 J	***2,570***
SB-13	1'	02/02/24	--	--	--	--	--	--	--	--	--	--	462
	2'	02/02/24	0.000410 J	<0.000455	<0.000564	0.00148 J	0.00189 J	47.6 J B	114 B	162.6 J B	<15.1	***162***	271
SB-14	1'	02/02/24	--	--	--	--	--	--	--	--	--	--	308
	2'	02/02/24	<0.000387	<0.000459	<0.000568	<0.00102	<0.00102	20.3 J B	21.6 J B	41.9 J B	<15.1	41.9 J	***2,240***
SB-15	1'	02/05/24	--	--	--	--	--	--	--	--	--	--	50.2
	2'	02/05/24	<0.000383	0.000565 J	<0.000562	<0.00100	0.00100 J	48.2 J B	35.4 J	83.6 J B	<15.1	83.6	120
SB-16	1'	02/05/24	--	--	--	--	--	--	--	--	--	--	73.2
	2'	02/05/24	<0.000381	<0.000451	<0.000559	<0.00100	<0.00100	47.2 J B	35.0 J	82.2 J B	<15.1	82.2	66.1
SB-17	1'	02/05/24	--	--	--	--	--	--	--	--	--	--	98.1
	2'	02/05/24	<0.000389	<0.000461	<0.000571	<0.00102	<0.00102	47.2 J B	32.9 J	80.1 J B	<15.0	80.1	64.7
SB-18	4-5'	04/03/24	--	--	--	--	--	--	--	--	--	--	**2,260**
	10-11'	04/03/24	--	--	--	--	--	--	--	--	--	--	**1,640**
	14-15'	04/03/24	--	--	--	--	--	--	--	--	--	--	**1,130**
SB-19	0-1'	04/03/24	--	--	--	--	--	--	--	--	--	--	4.76 J
	2-3'	04/03/24	<0.000383	<0.000454	<0.000563	<0.00101	<0.00101	41.4 J B	32.7 J	74.1 J B	<14.9	74.1	6.65
SB-20	0-1'	04/03/24	--	--	--	--	--	--	--	--	--	--	3.84 J
	2-3'	04/03/24	<0.000387	<0.000459	<0.000568	<0.00102	<0.00102	48.0 J B	32.7 J	80.7 J B	<15.0	80.7	414
SB-21	0-1'	04/03/24	--	--	--	--	--	--	--	--	--	--	4.05 J
	2-3'	04/03/24	<0.000388	<0.000460	<0.000570	<0.00102	<0.00102	40.2 J B	36.3 J	76.5 J B	<15.0	76.5	321

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Table 1
Soil Analytical Results
Chevron Environmental Management Company
WLU 47

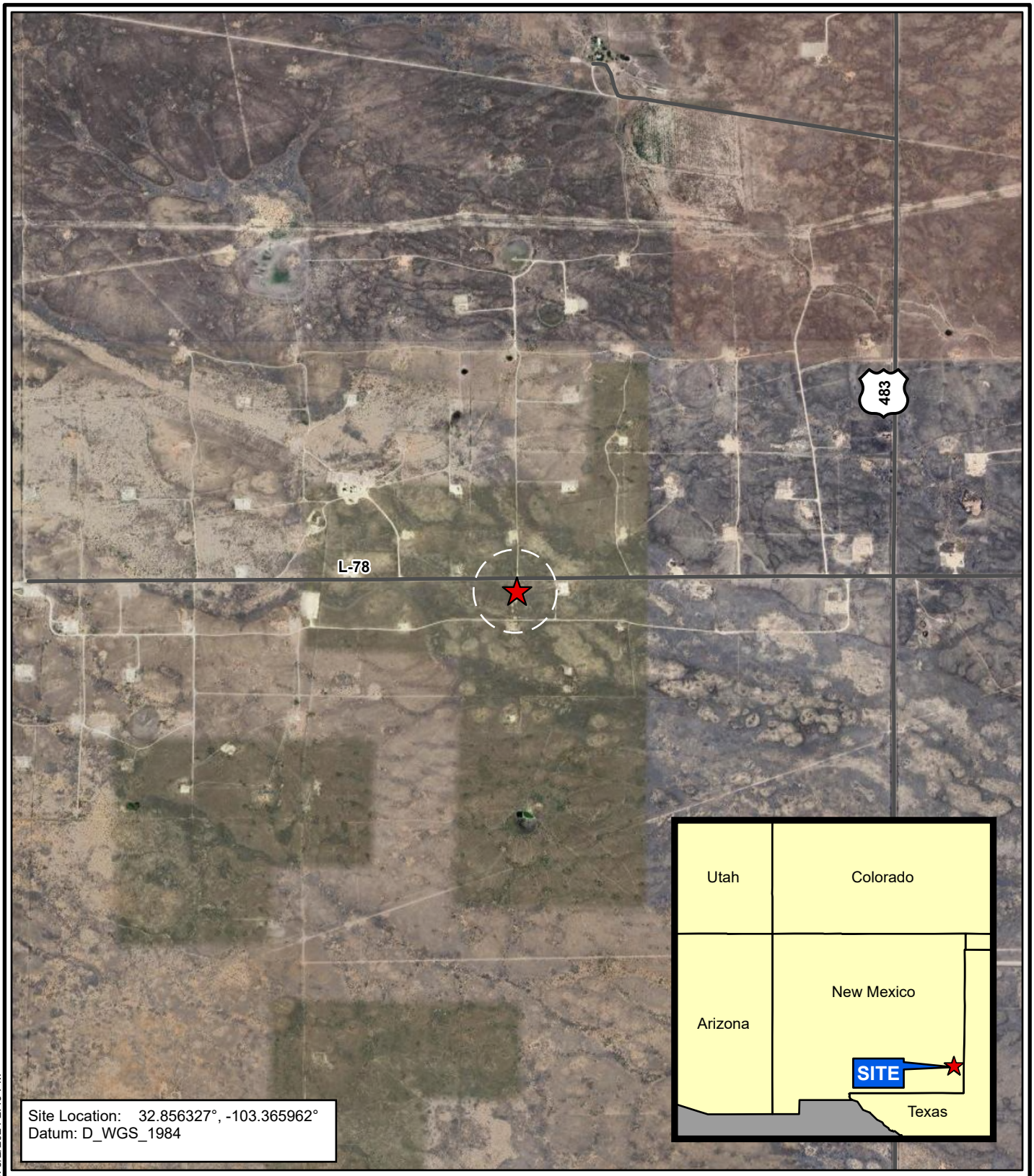
ARCADIS

Sample I.D.	Sample Depth (feet bgs)	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)
NMAC Standards			10	--	--	--	50	--	--	--	--	100	600
Restoration Requirements			10	--	--	--	50	--	--	--	--	100	600
SB-22	2-3'	04/04/24	0.0107 J	<0.00453	<0.00562	<0.0100	<0.0100	46.5 J	<15.0	46.5 J	<15.0	46.5 J	***637***
	8-9'	04/04/24	<0.000381	<0.000382	<0.000383	<0.000384	<0.000385	<0.000386	<0.000387	<0.000388	<0.000389	<0.000390	**1,380**
	12-13'	04/04/24	--	--	--	--	--	--	--	--	--	--	**1,090**
SB-23	4-5'	04/04/24	--	--	--	--	--	--	--	--	--	--	178
	8-9'	04/04/24	--	--	--	--	--	--	--	--	--	--	292
	10-11'	04/04/24	--	--	--	--	--	--	--	--	--	--	66.8
SB-24	0-1'	04/04/24	--	--	--	--	--	--	--	--	--	--	10.1
	2-3'	04/04/24	--	--	--	--	--	--	--	--	--	--	5.53

Legend:
BOLD = Analytes exceeding Restoration Requirement
J: Result is less than the Reporting Limit but greater than or equal to the MDL and the concentration is an approximate value
B: Compound was found in the blank and sample.
*+: Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) is outside acceptace limits, high biased.
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 of depth to groundwater of 51-100 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
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)

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Figures



Legend

Site Location

Credits: ESRI Online, Google Earth

0 2,000 4,000 Feet

GRAPHIC SCALE

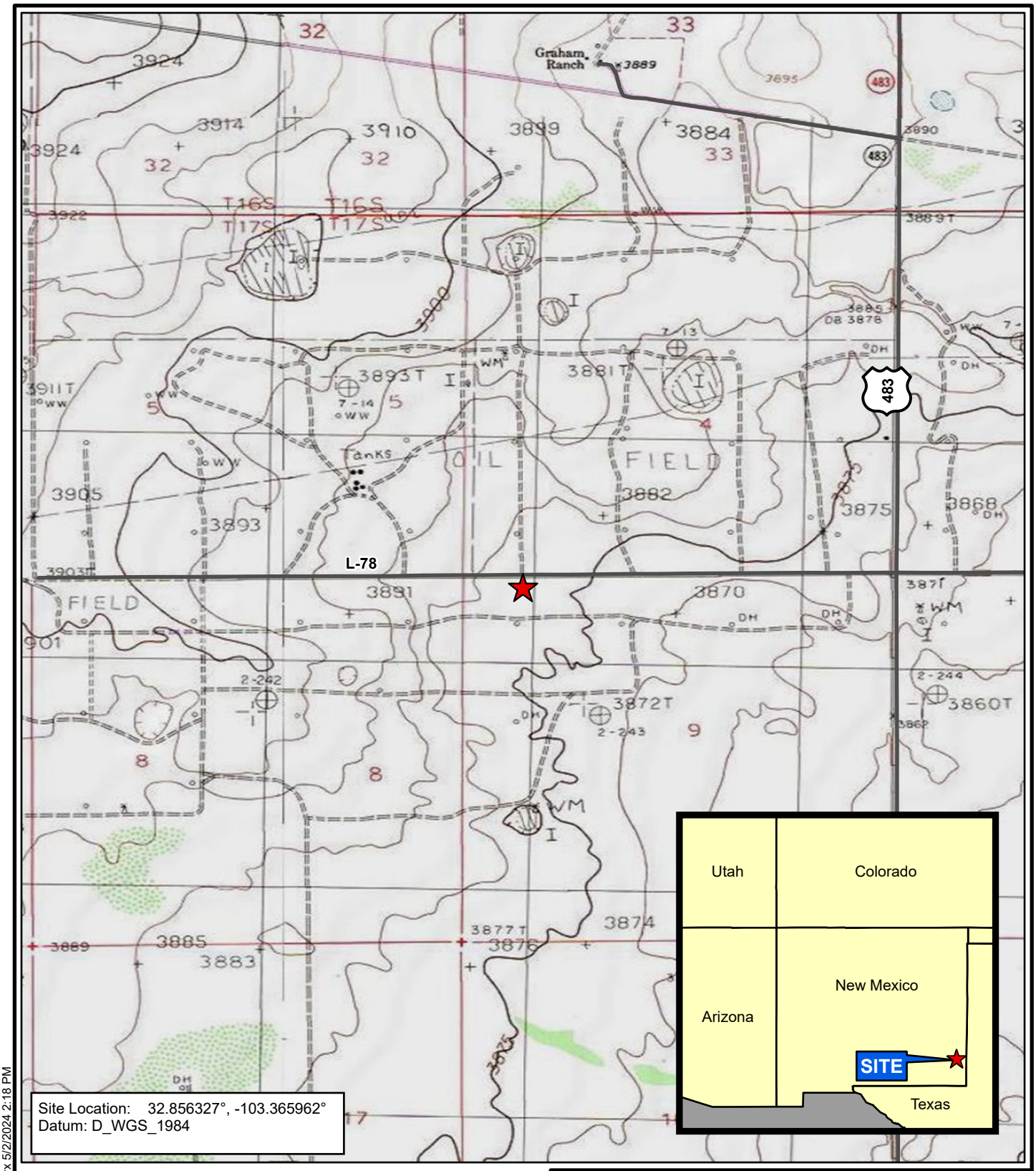
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

SITE LOCATION MAP

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FIGURE 1

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
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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

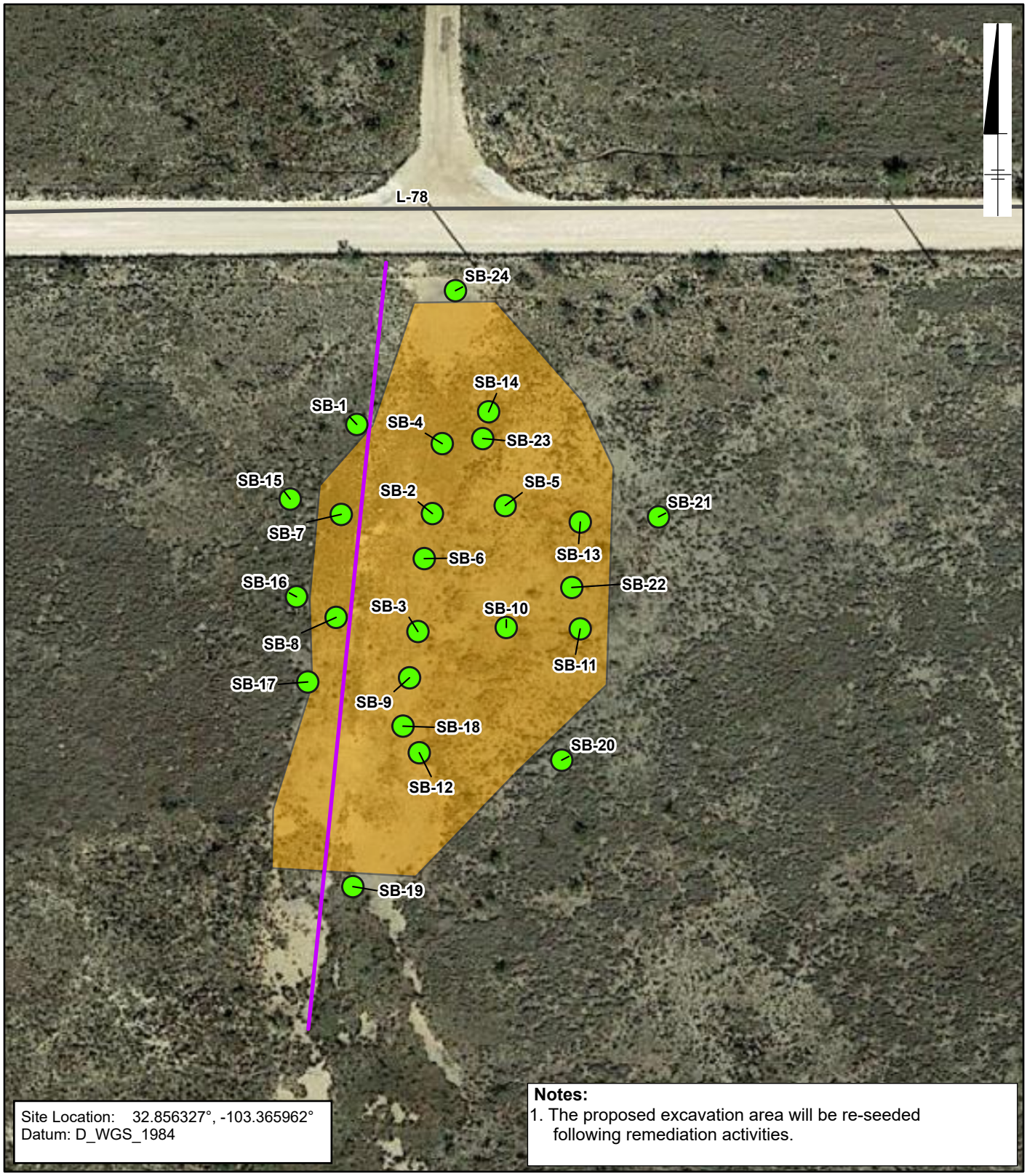
CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
LEA COUNTY, NEW MEXICO

TOPOGRAPHIC MAP

ARCADIS

FIGURE 2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: avi00976 ; Client (Project #)
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Site Location: 32.856327°, -103.365962°
Datum: D_WGS_1984

Notes:
1. The proposed excavation area will be re-seeded following remediation activities.

Legend

- Previous Assessment Sample Location
- Pipeline
- Proposed Excavation area

0 75 150 Feet
GRAPHIC SCALE

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
WEST LOVINGTON UNIT #047
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 #)
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Appendix A

Initial C-141 Form Incident # nPAC0708526071

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 Midcontinent LP	Contact Larry Ridenour
Address HCR 60 Box 423 Lovington, NM 88260	Telephone No. 505-396-4414 x102
Facility Name West Lovington Unit #47	Facility Type injection line

Surface Owner Darr Angell	Mineral Owner State	Lease No. B-7016

LOCATION OF RELEASE API#3002503920000

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	9	17S	36E	660	N	660	West	Lea

Latitude 32 deg 51 min 24.2 sec **Longitude** 103 deg 21 min 58 sec

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 5 bbls	Volume Recovered 0
Source of Release injection line	Date and Hour of Occurrence 1/14/07 8:00 AM	Date and Hour of Discovery 1/14/07 8:45 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Pat Caperton	
By Whom? Larry Ridenour	Date and Hour 1/15/07 7:45AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Received Hobbs OCD

Describe Cause of Problem and Remedial Action Taken.*
Buried high pressure injection line. Line and affected wells were shut in. At this time it has not been excavated. Probable cause is hole in line caused by corrosion. One call will be done, line excavated and contaminated soil removed.

Describe Area Affected and Cleanup Action Taken.*
Leak was approximately 600 ft north of WLU #47. Affected area approximately 20 ft x 30 ft.

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: Larry D Ridenour

Printed Name: Larry D. Ridenour

Title: Operations Representative

E-mail Address: LRidenour@Chevron.com

Date: Phone: 505-396-4414 x102

OIL CONSERVATION DIVISION

Approved by District Supervisor: Signed By Chris Williams

Approval Date: 2-9-07 Expiration Date: 3-9-07

Conditions of Approval: (1) Attached ☐

* Attach Additional Sheets If Necessary

Incident nPAC0712954774
application - pPAC0712954911

RP# 1314

Appendix B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

WLU 47

JOB NUMBER

880-26343-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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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

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4/11/2023 2:58:02 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 47

Laboratory Job ID: 880-26343-1

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Definitions/Glossary

Client: ARCADIS U.S. Inc Job ID: 880-26343-1
Project/Site: WLU 47

Qualifiers

GC VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
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
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 U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Job ID: 880-26343-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-26343-1

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

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-3-S-0-.5'-20230324 (880-26343-1), SB-3-S-2'-20230324 (880-26343-2), SB-2-S-0-.5'-20230324 (880-26343-3), SB-2-S-2'-20230324 (880-26343-4), SB-1-S-0-.5'-20230324 (880-26343-5) and SB-1-S-2'-20230324 (880-26343-6).

GC VOA
Method 8021B: Reanalysis of the following sample(s) was performed outside of the analytical holding time due to failure of quality control parameters in the initial analysis. SB-3-S-0-.5'-20230324 (880-26343-1)

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: (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 samples were outside control limits: SB-3-S-2'-20230324 (880-26343-2) and SB-2-S-2'-20230324 (880-26343-4). 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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50169 and analytical batch 880-50389 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-3-S-2'-20230324 (880-26343-2), SB-2-S-0-.5'-20230324 (880-26343-3), SB-2-S-2'-20230324 (880-26343-4), SB-1-S-0-.5'-20230324 (880-26343-5), SB-1-S-2'-20230324 (880-26343-6), (880-26343-A-2-C MS) and (880-26343-A-2-D MSD)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50170 and analytical batch 880-50390 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.

Released to Imaging: 1/10/2025 8:43:45 AM

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Client Sample ID: SB-3-S-0-.5'-20230324

Lab Sample ID: 880-26343-1

Date Collected: 03/24/23 09:30
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	<0.000387	U H	0.00201	0.000387	mg/Kg		04/10/23 16:18	04/11/23 14:55	1
Toluene	<0.000458	U H	0.00201	0.000458	mg/Kg		04/10/23 16:18	04/11/23 14:55	1
Ethylbenzene	<0.000567	U H	0.00201	0.000567	mg/Kg		04/10/23 16:18	04/11/23 14:55	1
m-Xylene & p-Xylene	<0.00101	U H	0.00402	0.00101	mg/Kg		04/10/23 16:18	04/11/23 14:55	1
o-Xylene	<0.000345	U H	0.00201	0.000345	mg/Kg		04/10/23 16:18	04/11/23 14:55	1
Xylenes, Total	<0.00101	U H	0.00402	0.00101	mg/Kg		04/10/23 16:18	04/11/23 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/10/23 16:18*	*04/11/23 14:55*	*1*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*	*04/10/23 16:18*	*04/11/23 14:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**32.6**	**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	**32.6**	**J *+**	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:01	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:01	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/30/23 12:21*	*03/31/23 16:01*	*1*
o-Terphenyl	*125*		*70 - 130*	*03/30/23 12:21*	*03/31/23 16:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7420**		24.9	1.97	mg/Kg			04/04/23 23:50	5

Client Sample ID: SB-3-S-2'-20230324

Lab Sample ID: 880-26343-2

Date Collected: 03/24/23 09:35
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	<0.000386	U	0.00200	0.000386	mg/Kg		04/05/23 13:17	04/06/23 01:37	1
Toluene	<0.000457	U	0.00200	0.000457	mg/Kg		04/05/23 13:17	04/06/23 01:37	1
Ethylbenzene	<0.000566	U	0.00200	0.000566	mg/Kg		04/05/23 13:17	04/06/23 01:37	1
m-Xylene & p-Xylene	<0.00101	U	0.00401	0.00101	mg/Kg		04/05/23 13:17	04/06/23 01:37	1
o-Xylene	<0.000345	U	0.00200	0.000345	mg/Kg		04/05/23 13:17	04/06/23 01:37	1
Xylenes, Total	<0.00101	U	0.00401	0.00101	mg/Kg		04/05/23 13:17	04/06/23 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/05/23 13:17*	*04/06/23 01:37*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*04/05/23 13:17*	*04/06/23 01:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**60.6**		49.9	15.0	mg/Kg			04/03/23 14:09	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Client Sample ID: SB-3-S-2'-20230324

Lab Sample ID: 880-26343-2
Matrix: Solid
Date Collected: 03/24/23 09:35
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	40.6	J *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:59	1
Diesel Range Organics (Over C10-C28)	20.0	J B *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:59	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/30/23 12:21*	*03/31/23 16:59*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*03/30/23 12:21*	*03/31/23 16:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2120	F1	25.1	1.98	mg/Kg			04/04/23 19:06	5

Client Sample ID: SB-2-S-0-.5'-20230324

Lab Sample ID: 880-26343-3
Matrix: Solid
Date Collected: 03/24/23 09:40
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	<0.000383	U	0.00199	0.000383	mg/Kg		04/05/23 13:17	04/06/23 01:58	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/05/23 13:17	04/06/23 01:58	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/05/23 13:17	04/06/23 01:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/05/23 13:17	04/06/23 01:58	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/05/23 13:17	04/06/23 01:58	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/05/23 13:17	04/06/23 01:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*04/05/23 13:17*	*04/06/23 01:58*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*04/05/23 13:17*	*04/06/23 01:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	20.9	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	20.9	J *+	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:20	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:20	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/30/23 12:21*	*03/31/23 17:20*	*1*
o-Terphenyl	*127*		*70 - 130*	*03/30/23 12:21*	*03/31/23 17:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3470		49.6	3.92	mg/Kg			04/04/23 19:20	10

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Client Sample ID: SB-2-S-2'-20230324

Lab Sample ID: 880-26343-4

Date Collected: 03/24/23 09:45
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		04/05/23 13:17	04/06/23 02:18	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		04/05/23 13:17	04/06/23 02:18	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		04/05/23 13:17	04/06/23 02:18	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		04/05/23 13:17	04/06/23 02:18	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		04/05/23 13:17	04/06/23 02:18	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		04/05/23 13:17	04/06/23 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**22.7**	**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	**22.7**	**J *+**	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:42	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:42	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		03/30/23 12:21	03/31/23 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*03/30/23 12:21*	*03/31/23 17:42*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*03/30/23 12:21*	*03/31/23 17:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2040**		24.9	1.97	mg/Kg			04/04/23 19:25	5

Client Sample ID: SB-1-S-0-.5'-20230324

Lab Sample ID: 880-26343-5

Date Collected: 03/24/23 09:50
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	<0.000384	U	0.00200	0.000384	mg/Kg		04/05/23 13:17	04/06/23 02:39	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		04/05/23 13:17	04/06/23 02:39	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		04/05/23 13:17	04/06/23 02:39	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		04/05/23 13:17	04/06/23 02:39	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		04/05/23 13:17	04/06/23 02:39	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		04/05/23 13:17	04/06/23 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:39*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**20.6**	**J**	49.9	15.0	mg/Kg			04/03/23 14:09	1

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Client Sample ID: SB-1-S-0-.5'-20230324

Lab Sample ID: 880-26343-5
Matrix: Solid
Date Collected: 03/24/23 09:50
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	20.6	J *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:04	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:04	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/30/23 12:21*	*03/31/23 18:04*	*1*
o-Terphenyl	*126*		*70 - 130*	*03/30/23 12:21*	*03/31/23 18:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.9		4.98	0.393	mg/Kg			04/04/23 19:29	1

Client Sample ID: SB-1-S-2'-20230324

Lab Sample ID: 880-26343-6
Matrix: Solid
Date Collected: 03/24/23 09:55
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		04/05/23 13:17	04/06/23 02:59	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/05/23 13:17	04/06/23 02:59	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/05/23 13:17	04/06/23 02:59	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/05/23 13:17	04/06/23 02:59	1
o-Xylene	<0.000346	U	0.00201	0.000346	mg/Kg		04/05/23 13:17	04/06/23 02:59	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/05/23 13:17	04/06/23 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:59*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*04/05/23 13:17*	*04/06/23 02:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	25.9	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	25.9	J *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:25	1
Diesel Range Organics (Over C10-C28)	<15.0	U *+	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:25	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		03/30/23 12:21	03/31/23 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*03/30/23 12:21*	*03/31/23 18:25*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/30/23 12:21*	*03/31/23 18:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	214		5.00	0.395	mg/Kg			04/04/23 19:34	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

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)										
880-26343-1	SB-3-S-0-.5'-20230324	109	117										
880-26343-2	SB-3-S-2'-20230324	107	75										
880-26343-3	SB-2-S-0-.5'-20230324	92	90										
880-26343-4	SB-2-S-2'-20230324	87	94										
880-26343-5	SB-1-S-0-.5'-20230324	92	89										
880-26343-6	SB-1-S-2'-20230324	84	74										
LCS 880-50409/1-A	Lab Control Sample	91	116										
LCS 880-50846/1-A	Lab Control Sample	102	100										
LCSD 880-50409/2-A	Lab Control Sample Dup	115	111										
LCSD 880-50846/2-A	Lab Control Sample Dup	93	99										
MB 880-50409/5-A	Method Blank	77	71										
MB 880-50846/5-A	Method Blank	97	90										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
880-26343-1	SB-3-S-0-.5'-20230324	102	125										
880-26343-2	SB-3-S-2'-20230324	113	135 S1+										
880-26343-3	SB-2-S-0-.5'-20230324	104	127										
880-26343-4	SB-2-S-2'-20230324	106	131 S1+										
880-26343-5	SB-1-S-0-.5'-20230324	102	126										
880-26343-6	SB-1-S-2'-20230324	92	114										
LCS 880-49932/2-A	Lab Control Sample	139 S1+	159 S1+										
LCSD 880-49932/3-A	Lab Control Sample Dup	167 S1+	187 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 47

Job ID: 880-26343-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50409/5-A
Matrix: Solid
Analysis Batch: 50422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50409

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/05/23 13:17	04/05/23 19:28	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/05/23 13:17	04/05/23 19:28	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/05/23 13:17	04/05/23 19:28	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 13:17	04/05/23 19:28	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/05/23 13:17	04/05/23 19:28	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/05/23 13:17	04/05/23 19:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*04/05/23 13:17*	*04/05/23 19:28*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*04/05/23 13:17*	*04/05/23 19:28*	*1*

Lab Sample ID: LCS 880-50409/1-A
Matrix: Solid
Analysis Batch: 50422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50409

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1189		mg/Kg		119	70 - 130
Toluene	0.100	0.09996		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.09542		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1888		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09519		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-50409/2-A
Matrix: Solid
Analysis Batch: 50422

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50409

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1024		mg/Kg		102	70 - 130	15	35
Toluene	0.100	0.09449		mg/Kg		94	70 - 130	6	35
Ethylbenzene	0.100	0.09981		mg/Kg		100	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2109		mg/Kg		105	70 - 130	11	35
o-Xylene	0.100	0.1075		mg/Kg		107	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: MB 880-50846/5-A
Matrix: Solid
Analysis Batch: 50870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/10/23 16:18	04/11/23 11:26	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/10/23 16:18	04/11/23 11:26	1

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

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

Lab Sample ID: MB 880-50846/5-A
Matrix: Solid
Analysis Batch: 50870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/10/23 16:18	04/11/23 11:26	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/10/23 16:18	04/11/23 11:26	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/10/23 16:18	04/11/23 11:26	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/10/23 16:18	04/11/23 11:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*04/10/23 16:18*	*04/11/23 11:26*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*04/10/23 16:18*	*04/11/23 11:26*	*1*

Lab Sample ID: LCS 880-50846/1-A
Matrix: Solid
Analysis Batch: 50870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50846

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1109		mg/Kg		111	70 - 130
Toluene	0.100	0.1119		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1151		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2327		mg/Kg		116	70 - 130
o-Xylene	0.100	0.1020		mg/Kg		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-50846/2-A
Matrix: Solid
Analysis Batch: 50870

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50846

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1092		mg/Kg		109	70 - 130	2	35
Toluene	0.100	0.1073		mg/Kg		107	70 - 130	4	35
Ethylbenzene	0.100	0.1060		mg/Kg		106	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2107		mg/Kg		105	70 - 130	10	35
o-Xylene	0.100	0.09201		mg/Kg		92	70 - 130	10	35

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

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

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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

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

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
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*

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*

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 47

Job ID: 880-26343-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50169/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50389

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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50389

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: 880-26343-2 MS — **Client Sample ID: SB-3-S-2'-20230324**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50389

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2120	F1	1260	3038	F1	mg/Kg		73	90 - 110		

Lab Sample ID: 880-26343-2 MSD — **Client Sample ID: SB-3-S-2'-20230324**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50389

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2120	F1	1260	2831	F1	mg/Kg		56	90 - 110	7	20

Lab Sample ID: MB 880-50170/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50390

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 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50390

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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 50390

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

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

GC VOA

Prep Batch: 50409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2	SB-3-S-2'-20230324	Total/NA	Solid	5030B	
880-26343-3	SB-2-S-0-.5'-20230324	Total/NA	Solid	5030B	
880-26343-4	SB-2-S-2'-20230324	Total/NA	Solid	5030B	
880-26343-5	SB-1-S-0-.5'-20230324	Total/NA	Solid	5030B	
880-26343-6	SB-1-S-2'-20230324	Total/NA	Solid	5030B	
MB 880-50409/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-50409/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-50409/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 50422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2	SB-3-S-2'-20230324	Total/NA	Solid	8021B	50409
880-26343-3	SB-2-S-0-.5'-20230324	Total/NA	Solid	8021B	50409
880-26343-4	SB-2-S-2'-20230324	Total/NA	Solid	8021B	50409
880-26343-5	SB-1-S-0-.5'-20230324	Total/NA	Solid	8021B	50409
880-26343-6	SB-1-S-2'-20230324	Total/NA	Solid	8021B	50409
MB 880-50409/5-A	Method Blank	Total/NA	Solid	8021B	50409
LCS 880-50409/1-A	Lab Control Sample	Total/NA	Solid	8021B	50409
LCSD 880-50409/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50409

Prep Batch: 50846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	Total/NA	Solid	5030B	
MB 880-50846/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-50846/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-50846/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 50870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	Total/NA	Solid	8021B	50846
MB 880-50846/5-A	Method Blank	Total/NA	Solid	8021B	50846
LCS 880-50846/1-A	Lab Control Sample	Total/NA	Solid	8021B	50846
LCSD 880-50846/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50846

GC Semi VOA

Prep Batch: 49932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	Total/NA	Solid	8015NM Prep	
880-26343-2	SB-3-S-2'-20230324	Total/NA	Solid	8015NM Prep	
880-26343-3	SB-2-S-0-.5'-20230324	Total/NA	Solid	8015NM Prep	
880-26343-4	SB-2-S-2'-20230324	Total/NA	Solid	8015NM Prep	
880-26343-5	SB-1-S-0-.5'-20230324	Total/NA	Solid	8015NM Prep	
880-26343-6	SB-1-S-2'-20230324	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	

Analysis Batch: 49995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	Total/NA	Solid	8015B NM	49932

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

GC Semi VOA (Continued)

Analysis Batch: 49995 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2	SB-3-S-2'-20230324	Total/NA	Solid	8015B NM	49932
880-26343-3	SB-2-S-0-.5'-20230324	Total/NA	Solid	8015B NM	49932
880-26343-4	SB-2-S-2'-20230324	Total/NA	Solid	8015B NM	49932
880-26343-5	SB-1-S-0-.5'-20230324	Total/NA	Solid	8015B NM	49932
880-26343-6	SB-1-S-2'-20230324	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

Analysis Batch: 50203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	Total/NA	Solid	8015 NM	
880-26343-2	SB-3-S-2'-20230324	Total/NA	Solid	8015 NM	
880-26343-3	SB-2-S-0-.5'-20230324	Total/NA	Solid	8015 NM	
880-26343-4	SB-2-S-2'-20230324	Total/NA	Solid	8015 NM	
880-26343-5	SB-1-S-0-.5'-20230324	Total/NA	Solid	8015 NM	
880-26343-6	SB-1-S-2'-20230324	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2	SB-3-S-2'-20230324	Soluble	Solid	DI Leach	
880-26343-3	SB-2-S-0-.5'-20230324	Soluble	Solid	DI Leach	
880-26343-4	SB-2-S-2'-20230324	Soluble	Solid	DI Leach	
880-26343-5	SB-1-S-0-.5'-20230324	Soluble	Solid	DI Leach	
880-26343-6	SB-1-S-2'-20230324	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	
880-26343-2 MS	SB-3-S-2'-20230324	Soluble	Solid	DI Leach	
880-26343-2 MSD	SB-3-S-2'-20230324	Soluble	Solid	DI Leach	

Leach Batch: 50170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	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	

Analysis Batch: 50389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2	SB-3-S-2'-20230324	Soluble	Solid	300.0	50169
880-26343-3	SB-2-S-0-.5'-20230324	Soluble	Solid	300.0	50169
880-26343-4	SB-2-S-2'-20230324	Soluble	Solid	300.0	50169
880-26343-5	SB-1-S-0-.5'-20230324	Soluble	Solid	300.0	50169
880-26343-6	SB-1-S-2'-20230324	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
880-26343-2 MS	SB-3-S-2'-20230324	Soluble	Solid	300.0	50169

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

HPLC/IC (Continued)

Analysis Batch: 50389 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-2 MSD	SB-3-S-2'-20230324	Soluble	Solid	300.0	50169

Analysis Batch: 50390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26343-1	SB-3-S-0-.5'-20230324	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

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: WLU 47

Job ID: 880-26343-1

Client Sample ID: SB-3-S-0-.5'-20230324

Lab Sample ID: 880-26343-1
Matrix: Solid
Date Collected: 03/24/23 09:30
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			4.98 g	5 mL	50846	04/10/23 16:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50870	04/11/23 14:55	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 16:01	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		5	50 mL	50 mL	50390	04/04/23 23:50	SMC	EET MID

Client Sample ID: SB-3-S-2'-20230324

Lab Sample ID: 880-26343-2
Matrix: Solid
Date Collected: 03/24/23 09:35
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	50409	04/05/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50422	04/06/23 01:37	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 16:59	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		5	50 mL	50 mL	50389	04/04/23 19:06	SMC	EET MID

Client Sample ID: SB-2-S-0-.5'-20230324

Lab Sample ID: 880-26343-3
Matrix: Solid
Date Collected: 03/24/23 09:40
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			5.02 g	5 mL	50409	04/05/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50422	04/06/23 01:58	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 17:20	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	50389	04/04/23 19:20	SMC	EET MID

Client Sample ID: SB-2-S-2'-20230324

Lab Sample ID: 880-26343-4
Matrix: Solid
Date Collected: 03/24/23 09:45
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	50409	04/05/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50422	04/06/23 02:18	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 17:42	SM	EET MID

Lab Chronicle

Client: ARCADIS U.S. Inc
Job ID: 880-26343-1
Project/Site: WLU 47

Client Sample ID: SB-2-S-2'-20230324
Lab Sample ID: 880-26343-4
Date Collected: 03/24/23 09:45
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
Soluble	Leach	DI Leach			5.02 g	50 mL	50169	04/03/23 11:15	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	50389	04/04/23 19:25	SMC	EET MID

Client Sample ID: SB-1-S-0-.5'-20230324
Lab Sample ID: 880-26343-5
Date Collected: 03/24/23 09:50
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			5.01 g	5 mL	50409	04/05/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50422	04/06/23 02:39	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 18:04	SM	EET MID
Soluble	Leach	DI Leach			5.02 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 19:29	SMC	EET MID

Client Sample ID: SB-1-S-2'-20230324
Lab Sample ID: 880-26343-6
Date Collected: 03/24/23 09:55
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	50409	04/05/23 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50422	04/06/23 02:59	MNR	EET MID
Total/NA	Analysis	8015 NM		1			50203	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 18:25	SM	EET MID
Soluble	Leach	DI Leach			5 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 19:34	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 47

Job ID: 880-26343-1

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 47

Job ID: 880-26343-1

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 47

Job ID: 880-26343-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-26343-1	SB-3-S-0-.5'-20230324	Solid	03/24/23 09:30	03/24/23 15:09
880-26343-2	SB-3-S-2'-20230324	Solid	03/24/23 09:35	03/24/23 15:09
880-26343-3	SB-2-S-0-.5'-20230324	Solid	03/24/23 09:40	03/24/23 15:09
880-26343-4	SB-2-S-2'-20230324	Solid	03/24/23 09:45	03/24/23 15:09
880-26343-5	SB-1-S-0-.5'-20230324	Solid	03/24/23 09:50	03/24/23 15:09
880-26343-6	SB-1-S-2'-20230324	Solid	03/24/23 09:55	03/24/23 15:09

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

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262343

Client Information	Sampler: Daniel McKee	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5487-720 2
Client Contact: Douglas Jordan	Phone: 432-999-2280	E-Mail: John Builes@et eurofinsus com	State of Origin: NM	Page: Page ~~2 of 2~~ 1 of 1
Company: ARCADIS U S Inc	PWSID:	Analysis Requested		Job #:
Address: 10205 Westheimer Rd Suite 800	Due Date 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:
City: Houston	TAT Requested (days): Standard			
State Zip: TX 77042	Compliance Project: Δ Yes Δ No			
Phone: 713-953-4739(Tel)	PO #: PN 30172230 - 0002C			
Email: douglas jordan@arcadis com	WO #:			
Project Name: ~~Lovington~~ WLU 47	Project #: 88001697			
Site:	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)	300_ORGFM_28D, 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note.
			Preservation Code:				N		
SB-3-S-0-.5'-20230324	3-24-23	0930	G	Solid			X	1	402
SB-3-S-2'-20230324	"	0935	"	Solid			X	1	
SB-2-S-0-.5'-20230324	"	0940	"	Solid			X	1	
SB-2-S-2'-20230324	"	0945	"	Solid			X	1	
SB-1-S-0-.5'-20230324	3-24-23	0950	G	Solid			X	1	
SB-1-S-2'-20230324	3-24-23	0955	G	Solid			X	1	
				Solid					
				Solid					
				Solid					

RAM 3-24-23

880-26343 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
	3-24-23 1500	Arcadis		3/24/23	
Relinquished by	Date/Time	Company	Received by	Date/Time: 1509	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.
		1.3 | 1.0

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 880-26343-1

Login Number: 26343
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 2/12/2024 12:18:30 PM

JOB DESCRIPTION

WLU 47
Lovington, NM

JOB NUMBER

880-38720-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
2/12/2024 12:18:30 PM

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

Client: ARCADIS US Inc
Project/Site: WLU 47

Laboratory Job ID: 880-38720-1
SDG: Lovington, NM

Table of Contents

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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
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.
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: WLU 47

Job ID: 880-38720-1

Job ID: 880-38720-1 Eurofins Midland

Job Narrative
880-38720-1

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 1/31/2024 1:17 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 3.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-5-S-1'-240129 (880-38720-1), SB-5-S-2'-240129 (880-38720-2), SB-6-S-1'-240129 (880-38720-3), SB-6-S-2'-240129 (880-38720-4), SB-7-S-1'-240129 (880-38720-5), SB-7-S-2'-240129 (880-38720-6), SB-8-S-1'-240129 (880-38720-7), SB-8-S-2'-240129 (880-38720-8), SB-4-S-1'-240129 (880-38720-9), SB-4-S-2'-240129 (880-38720-10), SB-9-S-1'-240129 (880-38720-11), SB-9-S-2'-240129 (880-38720-12), SB-10-S-1'-240129 (880-38720-13), SB-10-S-2'-240129 (880-38720-14) and SB-10-S-3'-240129 (880-38720-15).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-5-S-2'-240129 (880-38720-2), (880-38702-A-1-I MS) and (880-38702-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-72065 and analytical batch 880-72068 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 US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-5-S-1'-240129

Lab Sample ID: 880-38720-1
Matrix: Solid
Date Collected: 01/29/24 09:30
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	272		4.99	0.394	mg/Kg			02/01/24 00:36	1

Client Sample ID: SB-5-S-2'-240129

Lab Sample ID: 880-38720-2
Matrix: Solid
Date Collected: 01/29/24 09:40
Date Received: 01/31/24 13:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000382	U	0.00198	0.000382	mg/Kg		02/06/24 13:45	02/09/24 23:03	1
Toluene	<0.000452	U	0.00198	0.000452	mg/Kg		02/06/24 13:45	02/09/24 23:03	1
Ethylbenzene	<0.000561	U	0.00198	0.000561	mg/Kg		02/06/24 13:45	02/09/24 23:03	1
m-Xylene & p-Xylene	<0.00100	U	0.00397	0.00100	mg/Kg		02/06/24 13:45	02/09/24 23:03	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		02/06/24 13:45	02/09/24 23:03	1
Xylenes, Total	<0.00100	U	0.00397	0.00100	mg/Kg		02/06/24 13:45	02/09/24 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:03*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:03*	*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	0.00397	0.00100	mg/Kg			02/09/24 23:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<25.3	U	50.5	25.3	mg/Kg			02/05/24 04:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<25.3	U	50.5	25.3	mg/Kg		02/01/24 14:15	02/05/24 04:03	1
Diesel Range Organics (Over C10-C28)	<25.3	U	50.5	25.3	mg/Kg		02/01/24 14:15	02/05/24 04:03	1
OII Range Organics (Over C28-C36)	<25.3	U	50.5	25.3	mg/Kg		02/01/24 14:15	02/05/24 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*02/01/24 14:15*	*02/05/24 04:03*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*02/01/24 14:15*	*02/05/24 04:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		25.1	1.98	mg/Kg			02/01/24 00:43	5

Client Sample ID: SB-6-S-1'-240129

Lab Sample ID: 880-38720-3
Matrix: Solid
Date Collected: 01/29/24 10:10
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		4.98	0.393	mg/Kg			02/01/24 00:50	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-6-S-2'-240129

Lab Sample ID: 880-38720-4
Matrix: Solid
Date Collected: 01/29/24 10:20
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/09/24 23:24	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		02/06/24 13:45	02/09/24 23:24	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		02/06/24 13:45	02/09/24 23:24	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		02/06/24 13:45	02/09/24 23:24	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		02/06/24 13:45	02/09/24 23:24	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		02/06/24 13:45	02/09/24 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:24*	*1*
1,4-Difluorobenzene (Surr)	*113*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00404	0.00102	mg/Kg			02/09/24 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	<25.0	U	49.9	25.0	mg/Kg			02/05/24 04:24	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	<25.0	U	49.9	25.0	mg/Kg		02/01/24 14:15	02/05/24 04:24	1
Diesel Range Organics (Over C10-C28)	<25.0	U	49.9	25.0	mg/Kg		02/01/24 14:15	02/05/24 04:24	1
OII Range Organics (Over C28-C36)	<25.0	U	49.9	25.0	mg/Kg		02/01/24 14:15	02/05/24 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/01/24 14:15*	*02/05/24 04:24*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/01/24 14:15*	*02/05/24 04:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1670**		24.9	1.96	mg/Kg			02/01/24 00:57	5

Client Sample ID: SB-7-S-1'-240129

Lab Sample ID: 880-38720-5
Matrix: Solid
Date Collected: 01/29/24 11:00
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**625**		5.05	0.399	mg/Kg			02/01/24 01:18	1

Client Sample ID: SB-7-S-2'-240129

Lab Sample ID: 880-38720-6
Matrix: Solid
Date Collected: 01/29/24 11:10
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/09/24 23:44	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		02/06/24 13:45	02/09/24 23:44	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		02/06/24 13:45	02/09/24 23:44	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-7-S-2'-240129

Lab Sample ID: 880-38720-6
Matrix: Solid
Date Collected: 01/29/24 11:10
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/09/24 23:44	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		02/06/24 13:45	02/09/24 23:44	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		02/06/24 13:45	02/09/24 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:44*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*02/06/24 13:45*	*02/09/24 23:44*	*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			02/09/24 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**24.8**	**J**	49.5	24.8	mg/Kg			02/05/24 04:44	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	<24.8	U	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 04:44	1
Diesel Range Organics (Over C10-C28)	**24.8**	**J**	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 04:44	1
OII Range Organics (Over C28-C36)	<24.8	U	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/01/24 14:15*	*02/05/24 04:44*	*1*
o-Terphenyl	*127*		*70 - 130*	*02/01/24 14:15*	*02/05/24 04:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1460**		25.2	1.99	mg/Kg			02/01/24 01:24	5

Client Sample ID: SB-8-S-1'-240129

Lab Sample ID: 880-38720-7
Matrix: Solid
Date Collected: 01/29/24 11:40
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2530**		25.2	1.99	mg/Kg			02/01/24 01:31	5

Client Sample ID: SB-8-S-2'-240129

Lab Sample ID: 880-38720-8
Matrix: Solid
Date Collected: 01/29/24 11:50
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/10/24 00:05	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		02/06/24 13:45	02/10/24 00:05	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		02/06/24 13:45	02/10/24 00:05	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		02/06/24 13:45	02/10/24 00:05	1
o-Xylene	<0.000342	U	0.00199	0.000342	mg/Kg		02/06/24 13:45	02/10/24 00:05	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		02/06/24 13:45	02/10/24 00:05	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-8-S-2'-240129

Lab Sample ID: 880-38720-8
Matrix: Solid
Date Collected: 01/29/24 11:50
Date Received: 01/31/24 13:17

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:05*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:05*	*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			02/10/24 00:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**25.5**	**J**	49.6	24.8	mg/Kg			02/05/24 05:05	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	<24.8	U	49.6	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:05	1
Diesel Range Organics (Over C10-C28)	**25.5**	**J**	49.6	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:05	1
OII Range Organics (Over C28-C36)	<24.8	U	49.6	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:05*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2520**		24.9	1.97	mg/Kg			02/01/24 01:38	5

Client Sample ID: SB-4-S-1'-240129

Lab Sample ID: 880-38720-9
Matrix: Solid
Date Collected: 01/29/24 09:00
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1970**		25.0	1.98	mg/Kg			02/01/24 01:45	5

Client Sample ID: SB-4-S-2'-240129

Lab Sample ID: 880-38720-10
Matrix: Solid
Date Collected: 01/29/24 09:10
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/10/24 00:25	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/06/24 13:45	02/10/24 00:25	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/06/24 13:45	02/10/24 00:25	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/06/24 13:45	02/10/24 00:25	1
o-Xylene	**0.000457**	**J**	0.00200	0.000344	mg/Kg		02/06/24 13:45	02/10/24 00:25	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/06/24 13:45	02/10/24 00:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:25*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:25*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-4-S-2'-240129

Lab Sample ID: 880-38720-10
Matrix: Solid
Date Collected: 01/29/24 09:10
Date Received: 01/31/24 13:17

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg			02/10/24 00:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<24.8	U	49.5	24.8	mg/Kg			02/05/24 05:26	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	<24.8	U	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:26	1
Diesel Range Organics (Over C10-C28)	<24.8	U	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:26	1
OII Range Organics (Over C28-C36)	<24.8	U	49.5	24.8	mg/Kg		02/01/24 14:15	02/05/24 05:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:26*	*1*
o-Terphenyl	*116*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1900**	**F1**	24.9	1.96	mg/Kg			02/01/24 01:52	5

Client Sample ID: SB-9-S-1'-240129

Lab Sample ID: 880-38720-11
Matrix: Solid
Date Collected: 01/29/24 13:00
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2670**		25.1	1.98	mg/Kg			02/01/24 02:13	5

Client Sample ID: SB-9-S-2'-240129

Lab Sample ID: 880-38720-12
Matrix: Solid
Date Collected: 01/29/24 13:10
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/10/24 00:46	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		02/06/24 13:45	02/10/24 00:46	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		02/06/24 13:45	02/10/24 00:46	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		02/06/24 13:45	02/10/24 00:46	1
o-Xylene	**0.000468**	**J**	0.00200	0.000343	mg/Kg		02/06/24 13:45	02/10/24 00:46	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		02/06/24 13:45	02/10/24 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:46*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/06/24 13:45*	*02/10/24 00:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			02/10/24 00:46	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-9-S-2'-240129

Lab Sample ID: 880-38720-12
Matrix: Solid
Date Collected: 01/29/24 13:10
Date Received: 01/31/24 13:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<25.0	U	50.0	25.0	mg/Kg			02/05/24 05:46	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	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/05/24 05:46	1
Diesel Range Organics (Over C10-C28)	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/05/24 05:46	1
Oil Range Organics (Over C28-C36)	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/05/24 05:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:46*	*1*
o-Terphenyl	*114*		*70 - 130*	*02/01/24 14:15*	*02/05/24 05:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		25.1	1.98	mg/Kg			02/01/24 02:19	5

Client Sample ID: SB-10-S-1'-240129

Lab Sample ID: 880-38720-13
Matrix: Solid
Date Collected: 01/29/24 13:50
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1050**		24.9	1.97	mg/Kg			02/01/24 02:40	5

Client Sample ID: SB-10-S-2'-240129

Lab Sample ID: 880-38720-14
Matrix: Solid
Date Collected: 01/29/24 14:00
Date Received: 01/31/24 13:17

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		02/06/24 13:45	02/10/24 01:06	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		02/06/24 13:45	02/10/24 01:06	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		02/06/24 13:45	02/10/24 01:06	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		02/06/24 13:45	02/10/24 01:06	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		02/06/24 13:45	02/10/24 01:06	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		02/06/24 13:45	02/10/24 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*02/06/24 13:45*	*02/10/24 01:06*	*1*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*	*02/06/24 13:45*	*02/10/24 01:06*	*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			02/10/24 01:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<24.9	U	49.7	24.9	mg/Kg			02/05/24 06:07	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-10-S-2'-240129

Lab Sample ID: 880-38720-14
Matrix: Solid
Date Collected: 01/29/24 14:00
Date Received: 01/31/24 13:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<24.9	U	49.7	24.9	mg/Kg		02/01/24 14:15	02/05/24 06:07	1
Diesel Range Organics (Over C10-C28)	<24.9	U	49.7	24.9	mg/Kg		02/01/24 14:15	02/05/24 06:07	1
OII Range Organics (Over C28-C36)	<24.9	U	49.7	24.9	mg/Kg		02/01/24 14:15	02/05/24 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*02/01/24 14:15*	*02/05/24 06:07*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/01/24 14:15*	*02/05/24 06:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1860**		24.8	1.96	mg/Kg			02/01/24 02:47	5

Client Sample ID: SB-10-S-3'-240129

Lab Sample ID: 880-38720-15
Matrix: Solid
Date Collected: 01/29/24 14:10
Date Received: 01/31/24 13:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1930**		25.0	1.98	mg/Kg			02/01/24 02:54	5

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, 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)										
880-38720-2	SB-5-S-2'-240129	109	113										
880-38720-4	SB-6-S-2'-240129	114	113										
880-38720-6	SB-7-S-2'-240129	108	115										
880-38720-8	SB-8-S-2'-240129	109	110										
880-38720-10	SB-4-S-2'-240129	113	120										
880-38720-12	SB-9-S-2'-240129	108	116										
880-38720-14	SB-10-S-2'-240129	118	116										
LCS 880-72504/1-A	Lab Control Sample	103	108										
LCSD 880-72504/2-A	Lab Control Sample Dup	95	105										
MB 880-72504/5-A	Method Blank	119	127										

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)										
880-38720-2	SB-5-S-2'-240129	116	133 S1+										
880-38720-4	SB-6-S-2'-240129	94	108										
880-38720-6	SB-7-S-2'-240129	112	127										
880-38720-8	SB-8-S-2'-240129	109	126										
880-38720-10	SB-4-S-2'-240129	101	116										
880-38720-12	SB-9-S-2'-240129	99	114										
880-38720-14	SB-10-S-2'-240129	110	126										
LCS 870-17963/1-A	Lab Control Sample	120	116										
LCSD 870-17963/2-A	Lab Control Sample Dup	122	117										
MB 870-17963/3-A	Method Blank	112	117										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-72504/5-A
Matrix: Solid
Analysis Batch: 72754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/06/24 13:45	02/09/24 16:39	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/06/24 13:45	02/09/24 16:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*02/06/24 13:45*	*02/09/24 16:39*	*1*
1,4-Difluorobenzene (Surr)	*127*		*70 - 130*	*02/06/24 13:45*	*02/09/24 16:39*	*1*

Lab Sample ID: LCS 880-72504/1-A
Matrix: Solid
Analysis Batch: 72754

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72504

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1096		mg/Kg		110	70 - 130		
Toluene			0.100	0.09393		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09541		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.2141		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.09277		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-72504/2-A
Matrix: Solid
Analysis Batch: 72754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72504

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1034		mg/Kg		103	70 - 130	6	35
Toluene			0.100	0.09777		mg/Kg		98	70 - 130	4	35
Ethylbenzene			0.100	0.09367		mg/Kg		94	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1975		mg/Kg		99	70 - 130	8	35
o-Xylene			0.100	0.08515		mg/Kg		85	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

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

Lab Sample ID: MB 870-17963/3-A
Matrix: Solid
Analysis Batch: 17706

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 17963

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/04/24 22:33	1
Diesel Range Organics (Over C10-C28)	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/04/24 22:33	1
Oil Range Organics (Over C28-C36)	<25.0	U	50.0	25.0	mg/Kg		02/01/24 14:15	02/04/24 22:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/01/24 14:15*	*02/04/24 22:33*	*1*
o-Terphenyl	*117*		*70 - 130*	*02/01/24 14:15*	*02/04/24 22:33*	*1*

Lab Sample ID: LCS 870-17963/1-A
Matrix: Solid
Analysis Batch: 17706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 17963

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1020	874.5		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1010	1046		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: LCSD 870-17963/2-A
Matrix: Solid
Analysis Batch: 17706

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 17963

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1020	1011		mg/Kg		99	70 - 130	14	20
Diesel Range Organics (Over C10-C28)			1010	1027		mg/Kg		102	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72065/1-A
Matrix: Solid
Analysis Batch: 72068

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			01/31/24 23:55	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-72065/2-A
Matrix: Solid
Analysis Batch: 72068

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	260.7		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-72065/3-A
Matrix: Solid
Analysis Batch: 72068

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	258.2		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-38720-10 MS
Matrix: Solid
Analysis Batch: 72068

Client Sample ID: SB-4-S-2'-240129
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1900	F1	1240	3053		mg/Kg		92	90 - 110		

Lab Sample ID: 880-38720-10 MSD
Matrix: Solid
Analysis Batch: 72068

Client Sample ID: SB-4-S-2'-240129
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1900	F1	1240	3000	F1	mg/Kg		88	90 - 110	2	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

GC VOA

Prep Batch: 72504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	5030B	
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	5030B	
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	5030B	
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	5030B	
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	5030B	
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	5030B	
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	5030B	
MB 880-72504/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-72504/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-72504/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 72754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	8021B	72504
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	8021B	72504
MB 880-72504/5-A	Method Blank	Total/NA	Solid	8021B	72504
LCS 880-72504/1-A	Lab Control Sample	Total/NA	Solid	8021B	72504
LCSD 880-72504/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	72504

Analysis Batch: 72853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	Total BTEX	
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 17706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	8015B NM	17963
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	8015B NM	17963
MB 870-17963/3-A	Method Blank	Total/NA	Solid	8015B NM	17963
LCS 870-17963/1-A	Lab Control Sample	Total/NA	Solid	8015B NM	17963
LCSD 870-17963/2-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17963

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

GC Semi VOA

Prep Batch: 17963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	8015NM Prep	
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	8015NM Prep	
MB 870-17963/3-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 870-17963/1-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 870-17963/2-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 17993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-2	SB-5-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-4	SB-6-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-6	SB-7-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-8	SB-8-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-10	SB-4-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-12	SB-9-S-2'-240129	Total/NA	Solid	8015 NM	
880-38720-14	SB-10-S-2'-240129	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 72065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-1	SB-5-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-2	SB-5-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-3	SB-6-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-4	SB-6-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-5	SB-7-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-6	SB-7-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-7	SB-8-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-8	SB-8-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-9	SB-4-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-10	SB-4-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-11	SB-9-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-12	SB-9-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-13	SB-10-S-1'-240129	Soluble	Solid	DI Leach	
880-38720-14	SB-10-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-15	SB-10-S-3'-240129	Soluble	Solid	DI Leach	
MB 880-72065/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72065/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72065/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-38720-10 MS	SB-4-S-2'-240129	Soluble	Solid	DI Leach	
880-38720-10 MSD	SB-4-S-2'-240129	Soluble	Solid	DI Leach	

Analysis Batch: 72068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-1	SB-5-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-2	SB-5-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-3	SB-6-S-1'-240129	Soluble	Solid	300.0	72065

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

HPLC/IC (Continued)

Analysis Batch: 72068 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38720-4	SB-6-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-5	SB-7-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-6	SB-7-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-7	SB-8-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-8	SB-8-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-9	SB-4-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-10	SB-4-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-11	SB-9-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-12	SB-9-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-13	SB-10-S-1'-240129	Soluble	Solid	300.0	72065
880-38720-14	SB-10-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-15	SB-10-S-3'-240129	Soluble	Solid	300.0	72065
MB 880-72065/1-A	Method Blank	Soluble	Solid	300.0	72065
LCS 880-72065/2-A	Lab Control Sample	Soluble	Solid	300.0	72065
LCSD 880-72065/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72065
880-38720-10 MS	SB-4-S-2'-240129	Soluble	Solid	300.0	72065
880-38720-10 MSD	SB-4-S-2'-240129	Soluble	Solid	300.0	72065

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-5-S-1'-240129

Lab Sample ID: 880-38720-1
Matrix: Solid
Date Collected: 01/29/24 09:30
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		1			72068	02/01/24 00:36	CH	EET MID

Client Sample ID: SB-5-S-2'-240129

Lab Sample ID: 880-38720-2
Matrix: Solid
Date Collected: 01/29/24 09:40
Date Received: 01/31/24 13:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.04 g	5 mL	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 23:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/09/24 23:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 04:03	CC	EET DAL
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 04:03	WP	EET DAL
Soluble	Leach	DI Leach			4.98 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 00:43	CH	EET MID

Client Sample ID: SB-6-S-1'-240129

Lab Sample ID: 880-38720-3
Matrix: Solid
Date Collected: 01/29/24 10:10
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		1			72068	02/01/24 00:50	CH	EET MID

Client Sample ID: SB-6-S-2'-240129

Lab Sample ID: 880-38720-4
Matrix: Solid
Date Collected: 01/29/24 10:20
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 23:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/09/24 23:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 04:24	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 04:24	WP	EET DAL
Soluble	Leach	DI Leach			5.03 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 00:57	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-7-S-1'-240129

Lab Sample ID: 880-38720-5
Matrix: Solid
Date Collected: 01/29/24 11:00
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		1			72068	02/01/24 01:18	CH	EET MID

Client Sample ID: SB-7-S-2'-240129

Lab Sample ID: 880-38720-6
Matrix: Solid
Date Collected: 01/29/24 11:10
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/09/24 23:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/09/24 23:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 04:44	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 04:44	WP	EET DAL
Soluble	Leach	DI Leach			4.97 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 01:24	CH	EET MID

Client Sample ID: SB-8-S-1'-240129

Lab Sample ID: 880-38720-7
Matrix: Solid
Date Collected: 01/29/24 11:40
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 01:31	CH	EET MID

Client Sample ID: SB-8-S-2'-240129

Lab Sample ID: 880-38720-8
Matrix: Solid
Date Collected: 01/29/24 11:50
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/10/24 00:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/10/24 00:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 05:05	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 05:05	WP	EET DAL
Soluble	Leach	DI Leach			5.02 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 01:38	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-4-S-1'-240129

Lab Sample ID: 880-38720-9
Matrix: Solid
Date Collected: 01/29/24 09:00
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 01:45	CH	EET MID

Client Sample ID: SB-4-S-2'-240129

Lab Sample ID: 880-38720-10
Matrix: Solid
Date Collected: 01/29/24 09:10
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/10/24 00:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/10/24 00:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 05:26	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 05:26	WP	EET DAL
Soluble	Leach	DI Leach			5.03 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 01:52	CH	EET MID

Client Sample ID: SB-9-S-1'-240129

Lab Sample ID: 880-38720-11
Matrix: Solid
Date Collected: 01/29/24 13:00
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 02:13	CH	EET MID

Client Sample ID: SB-9-S-2'-240129

Lab Sample ID: 880-38720-12
Matrix: Solid
Date Collected: 01/29/24 13:10
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/10/24 00:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/10/24 00:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 05:46	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 05:46	WP	EET DAL
Soluble	Leach	DI Leach			4.99 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 02:19	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Client Sample ID: SB-10-S-1'-240129

Lab Sample ID: 880-38720-13
Matrix: Solid
Date Collected: 01/29/24 13:50
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 02:40	CH	EET MID

Client Sample ID: SB-10-S-2'-240129

Lab Sample ID: 880-38720-14
Matrix: Solid
Date Collected: 01/29/24 14:00
Date Received: 01/31/24 13:17

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	72504	02/06/24 13:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	72754	02/10/24 01:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			72853	02/10/24 01:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			17993	02/05/24 06:07	CC	EET DAL
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	17963	02/01/24 14:15	WP	EET DAL
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	17706	02/05/24 06:07	WP	EET DAL
Soluble	Leach	DI Leach			5.04 g	50 mL	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 02:47	CH	EET MID

Client Sample ID: SB-10-S-3'-240129

Lab Sample ID: 880-38720-15
Matrix: Solid
Date Collected: 01/29/24 14:10
Date Received: 01/31/24 13:17

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	72065	01/31/24 15:13	SMC	EET MID
Soluble	Analysis	300.0		5			72068	02/01/24 02:54	CH	EET MID

Laboratory References:

EET DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

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 47

Job ID: 880-38720-1
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
Total BTEX		Solid	Total BTEX

Laboratory: Eurofins Dallas

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704295-23-34	06-30-24

Method Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
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 DAL
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET DAL
300.0	Anions, Ion Chromatography	EPA	EET MID
5030B	Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET DAL
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 DAL = Eurofins Dallas, 9701 Harry Hines Blvd, Dallas, TX 75220, TEL (214)902-0300

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

Sample Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-38720-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-38720-1	SB-5-S-1'-240129	Solid	01/29/24 09:30	01/31/24 13:17
880-38720-2	SB-5-S-2'-240129	Solid	01/29/24 09:40	01/31/24 13:17
880-38720-3	SB-6-S-1'-240129	Solid	01/29/24 10:10	01/31/24 13:17
880-38720-4	SB-6-S-2'-240129	Solid	01/29/24 10:20	01/31/24 13:17
880-38720-5	SB-7-S-1'-240129	Solid	01/29/24 11:00	01/31/24 13:17
880-38720-6	SB-7-S-2'-240129	Solid	01/29/24 11:10	01/31/24 13:17
880-38720-7	SB-8-S-1'-240129	Solid	01/29/24 11:40	01/31/24 13:17
880-38720-8	SB-8-S-2'-240129	Solid	01/29/24 11:50	01/31/24 13:17
880-38720-9	SB-4-S-1'-240129	Solid	01/29/24 09:00	01/31/24 13:17
880-38720-10	SB-4-S-2'-240129	Solid	01/29/24 09:10	01/31/24 13:17
880-38720-11	SB-9-S-1'-240129	Solid	01/29/24 13:00	01/31/24 13:17
880-38720-12	SB-9-S-2'-240129	Solid	01/29/24 13:10	01/31/24 13:17
880-38720-13	SB-10-S-1'-240129	Solid	01/29/24 13:50	01/31/24 13:17
880-38720-14	SB-10-S-2'-240129	Solid	01/29/24 14:00	01/31/24 13:17
880-38720-15	SB-10-S-3'-240129	Solid	01/29/24 14:10	01/31/24 13:17

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Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins | Environment Testing

720

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No.: 880-8032-1136 6
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John Builes@et.eurofinsus com	State of Origin: NM	Page: ~~Page 8 of 14~~ Page 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: WLU 47	Project #: ~~88002020~~ 30209661			
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-5-S-1'-240129	1/29/24	930	G	Solid				X		
SB-5-S-2'-240129		940		Solid			X	X		
SB-6-S-1'-240129		1010		Solid				X		
SB-6-S-2'-240129		1020		Solid			X	X		
SB-7-S-1'-240129		1100		Solid				X		
SB-7-S-2'-240129		1110		Solid			X	X		
SB 8-S-1'-240129		1140		Solid				X		
SB-8-S-2'-240129		1150		Solid			X	X		
SB-4-S-1'-240129		900		Solid				X		
SB-4-S-2'-240129	X	910	X	Solid			X	X		
	X			Solid				X		

880-38720 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: 1/29/24 1625	Company: Arcadis	Received by: 46 Date/Time: 4·27 Company
Relinquished by: Madira Gonzalez	Date/Time:	Company	Received by: Date/Time: 1/31/24 Company
Relinquished by:	Date/Time	Company	Received by: Date/Time: 1317 Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 2.8/3.0

Ver: 01/16/2019

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2/12/2024
Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM

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Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins 720 Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-8032-1136 6
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 6 of 14~~ Page 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: WLU 47	Project #: ~~88002020~~ 30209661			
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-9-S-1'-240129	1/29/24	1300	G	Solid				X		
SB-9-S-2'-240129		1310		Solid			X	X		
SB-10-S-1'-240129		1350		Solid				X		
SB-10-S-2'-240129		1400		Solid			X	X		
SB-10-S-3'-240129		1410		Solid				X		
				Solid						
				Solid						
				Solid						
				Solid						
				Solid						
				Solid						

Loc: 880
38720

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		1/29/24 1625	Arcadis		4.27	
2	Yadira Gonzalez				1/31/24 1317	
3						

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

Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM
2/12/2024
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Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record

eurofins | Environment Testing

2/12/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-9104.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 880-38720-1
Address: 9701 Harry Hines Blvd, ,	Due Date Requested: 2/6/2024			
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75220				
Phone: 214-902-0300(Tel)	PO #:			
Email:	WO #:			
Project Name: WLU 47	Project #: 88002020			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SB-5-S-2'-240129 (880-38720-2)	1/29/24	09:40 Central		Solid			X	X	1	
SB-6-S-2'-240129 (880-38720-4)	1/29/24	10:20 Central		Solid			X	X	1	
SB-7-S-2'-240129 (880-38720-6)	1/29/24	11:10 Central		Solid			X	X	1	
SB-8-S-2'-240129 (880-38720-8)	1/29/24	11:50 Central		Solid			X	X	1	
SB-4-S-2'-240129 (880-38720-10)	1/29/24	09:10 Central		Solid			X	X	1	
SB-9-S-2'-240129 (880-38720-12)	1/29/24	13:10 Central		Solid			X	X	1	
SB-10-S-2'-240129 (880-38720-14)	1/29/24	14:00 Central		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by: FedEx	Date/Time:	Company
Relinquished by: FedEx	Date/Time: 2/3/24 1125	Company	Received by: MS	Date/Time: 2/3/24 1125	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

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Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 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 (Sub Contract Lab)	Sampler:	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-9104.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 880-38720-1
Address: 9701 Harry Hines Blvd, ,	Due Date Requested: 2/6/2024			
City: Dallas	TAT Requested (days):			
State, Zip: TX, 75220				
Phone: 214-902-0300(Tel)	PO #:			
Email:	WO #:			
Project Name: WLU 47	Project #: 88002020			
Site:	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, Y - Trizma, Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep Full TPH	Total Number of containers	Special Instructions/Note:
		Preservation Code:								
SB-5-S-2'-240129 (880-38720-2)	1/29/24	09:40 Central		Solid			X	X	1	
SB-6-S-2'-240129 (880-38720-4)	1/29/24	10:20 Central		Solid			X	X	1	
SB-7-S-2'-240129 (880-38720-6)	1/29/24	11:10 Central		Solid			X	X	1	
SB-8-S-2'-240129 (880-38720-8)	1/29/24	11:50 Central		Solid			X	X	1	
SB-4-S-2'-240129 (880-38720-10)	1/29/24	09:10 Central		Solid			X	X	1	
SB-9-S-2'-240129 (880-38720-12)	1/29/24	13:10 Central		Solid			X	X	1	
SB-10-S-2'-240129 (880-38720-14)	1/29/24	14:00 Central		Solid			X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

Relinquished by: AJ FedEx	Date/Time: 2/2/24 11:00	Company	Received by: FedEx	Date/Time:	Company
Relinquished by: FedEx	Date/Time: 2/3/24 1125	Company	Received by: MS	Date/Time: 2/3/24 1125	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 AM

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-38720-1
SDG Number: Lovington, NM

Login Number: 38720
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-38720-1
SDG Number: Lovington, NM

Login Number: 38720
List Number: 2
Creator: Thompson, Christopher

List Source: Eurofins Dallas
List Creation: 02/03/24 01:45 PM

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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis U.S., Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 3/6/2024 12:38:22 PM

JOB DESCRIPTION

WLU 47
Lovington, NM

JOB NUMBER

880-38875-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

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Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization

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3/6/2024 12:38:22 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 47

Laboratory Job ID: 880-38875-1
SDG: Lovington, NM

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Definitions/Glossary

Client: Arcadis U.S., Inc. Job ID: 880-38875-1
Project/Site: WLU 47 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, low 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.
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: WLU 47

Job ID: 880-38875-1

Job ID: 880-38875-1 Eurofins Midland

Job Narrative
880-38875-1

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 2/5/2024 8:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-11-S-1'-240202 (880-38875-1), SB-11-S-2'-240202 (880-38875-2), SB-12-S-1'-240202 (880-38875-3), SB-12-S-2'-240202 (880-38875-4), SB-13-S-1'-240202 (880-38875-5), SB-13-S-2'-240202 (880-38875-6), SB-14-S-1'-240202 (880-38875-7) and SB-14-S-2'-240202 (880-38875-8).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SB-11-S-2'-240202 (880-38875-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-72461 and analytical batch 880-72692 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-72461 and analytical batch 880-72692 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-11-S-1'-240202

Lab Sample ID: 880-38875-1
Matrix: Solid
Date Collected: 02/02/24 10:20
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3100		24.9	1.97	mg/Kg			02/05/24 20:53	5

Client Sample ID: SB-11-S-2'-240202

Lab Sample ID: 880-38875-2
Matrix: Solid
Date Collected: 02/02/24 10:30
Date Received: 02/05/24 08:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00119	J	0.00199	0.000383	mg/Kg		02/15/24 08:59	02/15/24 16:06	1
Toluene	0.00131	J	0.00199	0.000454	mg/Kg		02/15/24 08:59	02/15/24 16:06	1
Ethylbenzene	0.00150	J	0.00199	0.000563	mg/Kg		02/15/24 08:59	02/15/24 16:06	1
m-Xylene & p-Xylene	0.00416		0.00398	0.00101	mg/Kg		02/15/24 08:59	02/15/24 16:06	1
o-Xylene	0.00172	J	0.00199	0.000343	mg/Kg		02/15/24 08:59	02/15/24 16:06	1
Xylenes, Total	0.00588		0.00398	0.00101	mg/Kg		02/15/24 08:59	02/15/24 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*56*	*S1-*	*70 - 130*	*02/15/24 08:59*	*02/15/24 16:06*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/15/24 08:59*	*02/15/24 16:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00988		0.00398	0.00101	mg/Kg			02/15/24 16:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	182		49.6	14.9	mg/Kg			02/10/24 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	16.0	J B	49.6	14.9	mg/Kg		02/06/24 10:38	02/10/24 04:08	1
Diesel Range Organics (Over C10-C28)	166	B	49.6	14.9	mg/Kg		02/06/24 10:38	02/10/24 04:08	1
Oil Range Organics (Over C28-C36)	<14.9	U	49.6	14.9	mg/Kg		02/06/24 10:38	02/10/24 04:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*02/06/24 10:38*	*02/10/24 04:08*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/06/24 10:38*	*02/10/24 04:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	361		5.04	0.398	mg/Kg			02/05/24 21:08	1

Client Sample ID: SB-12-S-1'-240202

Lab Sample ID: 880-38875-3
Matrix: Solid
Date Collected: 02/02/24 10:50
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	161		5.02	0.397	mg/Kg			02/05/24 21:12	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-12-S-2'-240202

Lab Sample ID: 880-38875-4
Matrix: Solid
Date Collected: 02/02/24 11:00
Date Received: 02/05/24 08:42

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		02/15/24 08:59	02/15/24 16:27	1
Toluene	<0.000453	U	0.00199	0.000453	mg/Kg		02/15/24 08:59	02/15/24 16:27	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		02/15/24 08:59	02/15/24 16:27	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		02/15/24 08:59	02/15/24 16:27	1
o-Xylene	**0.000460**	**J**	0.00199	0.000342	mg/Kg		02/15/24 08:59	02/15/24 16:27	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		02/15/24 08:59	02/15/24 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*02/15/24 08:59*	*02/15/24 16:27*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/15/24 08:59*	*02/15/24 16:27*	*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			02/15/24 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**48.4**	**J**	50.2	15.0	mg/Kg			02/10/24 01:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**32.4**	**J B**	50.2	15.0	mg/Kg		02/06/24 10:38	02/10/24 01:55	1
Diesel Range Organics (Over C10-C28)	**16.0**	**J B**	50.2	15.0	mg/Kg		02/06/24 10:38	02/10/24 01:55	1
OII Range Organics (Over C28-C36)	<15.0	U	50.2	15.0	mg/Kg		02/06/24 10:38	02/10/24 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*02/06/24 10:38*	*02/10/24 01:55*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/06/24 10:38*	*02/10/24 01:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2570**		24.9	1.96	mg/Kg			02/05/24 21:27	5

Client Sample ID: SB-13-S-1'-240202

Lab Sample ID: 880-38875-5
Matrix: Solid
Date Collected: 02/02/24 11:20
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**462**		4.96	0.392	mg/Kg			02/05/24 21:32	1

Client Sample ID: SB-13-S-2'-240202

Lab Sample ID: 880-38875-6
Matrix: Solid
Date Collected: 02/02/24 11:30
Date Received: 02/05/24 08:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.000410**	**J**	0.00200	0.000384	mg/Kg		02/15/24 08:59	02/15/24 16:47	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		02/15/24 08:59	02/15/24 16:47	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		02/15/24 08:59	02/15/24 16:47	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-13-S-2'-240202

Lab Sample ID: 880-38875-6
Matrix: Solid
Date Collected: 02/02/24 11:30
Date Received: 02/05/24 08:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	0.00107	J	0.00399	0.00101	mg/Kg		02/15/24 08:59	02/15/24 16:47	1
o-Xylene	0.000411	J	0.00200	0.000343	mg/Kg		02/15/24 08:59	02/15/24 16:47	1
Xylenes, Total	0.00148	J	0.00399	0.00101	mg/Kg		02/15/24 08:59	02/15/24 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*02/15/24 08:59*	*02/15/24 16:47*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/15/24 08:59*	*02/15/24 16:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00189	J	0.00399	0.00101	mg/Kg			02/15/24 16:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	162		50.3	15.1	mg/Kg			02/10/24 03:46	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	47.6	J B	50.3	15.1	mg/Kg		02/06/24 10:38	02/10/24 03:46	1
Diesel Range Organics (Over C10-C28)	114	B	50.3	15.1	mg/Kg		02/06/24 10:38	02/10/24 03:46	1
OII Range Organics (Over C28-C36)	<15.1	U	50.3	15.1	mg/Kg		02/06/24 10:38	02/10/24 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*02/06/24 10:38*	*02/10/24 03:46*	*1*
o-Terphenyl	*93*		*70 - 130*	*02/06/24 10:38*	*02/10/24 03:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	271		4.99	0.394	mg/Kg			02/05/24 21:37	1

Client Sample ID: SB-14-S-1'-240202

Lab Sample ID: 880-38875-7
Matrix: Solid
Date Collected: 02/02/24 11:40
Date Received: 02/05/24 08:42

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	308		5.00	0.395	mg/Kg			02/05/24 21:42	1

Client Sample ID: SB-14-S-2'-240202

Lab Sample ID: 880-38875-8
Matrix: Solid
Date Collected: 02/02/24 11:50
Date Received: 02/05/24 08:42

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		02/15/24 08:59	02/15/24 17:08	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		02/15/24 08:59	02/15/24 17:08	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		02/15/24 08:59	02/15/24 17:08	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		02/15/24 08:59	02/15/24 17:08	1
o-Xylene	0.000347	J	0.00201	0.000346	mg/Kg		02/15/24 08:59	02/15/24 17:08	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		02/15/24 08:59	02/15/24 17:08	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-14-S-2'-240202

Date Collected: 02/02/24 11:50
Date Received: 02/05/24 08:42

Lab Sample ID: 880-38875-8

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*02/15/24 08:59*	*02/15/24 17:08*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*02/15/24 08:59*	*02/15/24 17:08*	*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	0.00402	0.00102	mg/Kg			02/15/24 17:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**41.9**	**J**	50.5	15.1	mg/Kg			02/10/24 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**20.3**	**J B**	50.5	15.1	mg/Kg		02/06/24 10:38	02/10/24 02:17	1
Diesel Range Organics (Over C10-C28)	**21.6**	**J B**	50.5	15.1	mg/Kg		02/06/24 10:38	02/10/24 02:17	1
OII Range Organics (Over C28-C36)	<15.1	U	50.5	15.1	mg/Kg		02/06/24 10:38	02/10/24 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*02/06/24 10:38*	*02/10/24 02:17*	*1*
o-Terphenyl	*106*		*70 - 130*	*02/06/24 10:38*	*02/10/24 02:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2240**		25.2	1.99	mg/Kg			02/05/24 21:47	5

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, 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)
880-38875-2	SB-11-S-2'-240202	56 S1-	86
880-38875-4	SB-12-S-2'-240202	110	98
880-38875-6	SB-13-S-2'-240202	97	88
880-38875-8	SB-14-S-2'-240202	101	89
LCS 880-73222/1-A	Lab Control Sample	120	84
LCSD 880-73222/2-A	Lab Control Sample Dup	114	94
MB 880-73222/5-A	Method Blank	82	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)
880-38875-2	SB-11-S-2'-240202	123	103
880-38875-4	SB-12-S-2'-240202	103	88
880-38875-6	SB-13-S-2'-240202	116	93
880-38875-8	SB-14-S-2'-240202	124	106
LCS 880-72461/2-A	Lab Control Sample	96	97
LCSD 880-72461/3-A	Lab Control Sample Dup	100	100
MB 880-72461/1-A	Method Blank	176 S1+	161 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73222/5-A
Matrix: Solid
Analysis Batch: 73209

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73222

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/15/24 08:59	02/15/24 11:17	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/15/24 08:59	02/15/24 11:17	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/15/24 08:59	02/15/24 11:17	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/15/24 08:59	02/15/24 11:17	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/15/24 08:59	02/15/24 11:17	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/15/24 08:59	02/15/24 11:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*02/15/24 08:59*	*02/15/24 11:17*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/15/24 08:59*	*02/15/24 11:17*	*1*

Lab Sample ID: LCS 880-73222/1-A
Matrix: Solid
Analysis Batch: 73209

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73222

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09819		mg/Kg		98	70 - 130		
Toluene			0.100	0.1209		mg/Kg		121	70 - 130		
Ethylbenzene			0.100	0.1149		mg/Kg		115	70 - 130		
m-Xylene & p-Xylene			0.200	0.2350		mg/Kg		117	70 - 130		
o-Xylene			0.100	0.1174		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: LCSD 880-73222/2-A
Matrix: Solid
Analysis Batch: 73209

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73222

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1042		mg/Kg		104	70 - 130	6	35
Toluene			0.100	0.1198		mg/Kg		120	70 - 130	1	35
Ethylbenzene			0.100	0.1131		mg/Kg		113	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2284		mg/Kg		114	70 - 130	3	35
o-Xylene			0.100	0.1137		mg/Kg		114	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

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

Lab Sample ID: MB 880-72461/1-A
Matrix: Solid
Analysis Batch: 72692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72461

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.54	J	50.0	15.0	mg/Kg		02/06/24 10:38	02/09/24 19:17	1
Diesel Range Organics (Over C10-C28)	18.24	J	50.0	15.0	mg/Kg		02/06/24 10:38	02/09/24 19:17	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		02/06/24 10:38	02/09/24 19:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*176*	*S1+*	*70 - 130*	*02/06/24 10:38*	*02/09/24 19:17*	*1*
o-Terphenyl	*161*	*S1+*	*70 - 130*	*02/06/24 10:38*	*02/09/24 19:17*	*1*

Lab Sample ID: LCS 880-72461/2-A
Matrix: Solid
Analysis Batch: 72692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72461

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1024		mg/Kg		102	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	902.7		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*96*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: LCSD 880-72461/3-A
Matrix: Solid
Analysis Batch: 72692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72461

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1068		mg/Kg		107	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	966.8		mg/Kg		97	70 - 130	7	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72356/1-A
Matrix: Solid
Analysis Batch: 72369

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			02/05/24 19:29	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-72356/2-A
Matrix: Solid
Analysis Batch: 72369

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	237.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-72356/3-A
Matrix: Solid
Analysis Batch: 72369

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	239.6		mg/Kg		96	90 - 110	1	20

Lab Sample ID: 880-38875-1 MS
Matrix: Solid
Analysis Batch: 72369

Client Sample ID: SB-11-S-1'-240202
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3100		1250	4271		mg/Kg		94	90 - 110		

Lab Sample ID: 880-38875-1 MSD
Matrix: Solid
Analysis Batch: 72369

Client Sample ID: SB-11-S-1'-240202
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3100		1250	4255		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

GC VOA

Analysis Batch: 73209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	8021B	73222
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	8021B	73222
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	8021B	73222
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	8021B	73222
MB 880-73222/5-A	Method Blank	Total/NA	Solid	8021B	73222
LCS 880-73222/1-A	Lab Control Sample	Total/NA	Solid	8021B	73222
LCSD 880-73222/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73222

Prep Batch: 73222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	5030B	
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	5030B	
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	5030B	
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	5030B	
MB 880-73222/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-73222/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-73222/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 73310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	Total BTEX	
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	Total BTEX	
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	Total BTEX	
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 72461

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	8015NM Prep	
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	8015NM Prep	
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	8015NM Prep	
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	8015NM Prep	
MB 880-72461/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-72461/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-72461/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 72692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	8015B NM	72461
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	8015B NM	72461
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	8015B NM	72461
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	8015B NM	72461
MB 880-72461/1-A	Method Blank	Total/NA	Solid	8015B NM	72461
LCS 880-72461/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	72461
LCSD 880-72461/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	72461

Analysis Batch: 72951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-2	SB-11-S-2'-240202	Total/NA	Solid	8015 NM	
880-38875-4	SB-12-S-2'-240202	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

GC Semi VOA (Continued)

Analysis Batch: 72951 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-6	SB-13-S-2'-240202	Total/NA	Solid	8015 NM	
880-38875-8	SB-14-S-2'-240202	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 72356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-1	SB-11-S-1'-240202	Soluble	Solid	DI Leach	
880-38875-2	SB-11-S-2'-240202	Soluble	Solid	DI Leach	
880-38875-3	SB-12-S-1'-240202	Soluble	Solid	DI Leach	
880-38875-4	SB-12-S-2'-240202	Soluble	Solid	DI Leach	
880-38875-5	SB-13-S-1'-240202	Soluble	Solid	DI Leach	
880-38875-6	SB-13-S-2'-240202	Soluble	Solid	DI Leach	
880-38875-7	SB-14-S-1'-240202	Soluble	Solid	DI Leach	
880-38875-8	SB-14-S-2'-240202	Soluble	Solid	DI Leach	
MB 880-72356/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72356/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72356/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-38875-1 MS	SB-11-S-1'-240202	Soluble	Solid	DI Leach	
880-38875-1 MSD	SB-11-S-1'-240202	Soluble	Solid	DI Leach	

Analysis Batch: 72369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-38875-1	SB-11-S-1'-240202	Soluble	Solid	300.0	72356
880-38875-2	SB-11-S-2'-240202	Soluble	Solid	300.0	72356
880-38875-3	SB-12-S-1'-240202	Soluble	Solid	300.0	72356
880-38875-4	SB-12-S-2'-240202	Soluble	Solid	300.0	72356
880-38875-5	SB-13-S-1'-240202	Soluble	Solid	300.0	72356
880-38875-6	SB-13-S-2'-240202	Soluble	Solid	300.0	72356
880-38875-7	SB-14-S-1'-240202	Soluble	Solid	300.0	72356
880-38875-8	SB-14-S-2'-240202	Soluble	Solid	300.0	72356
MB 880-72356/1-A	Method Blank	Soluble	Solid	300.0	72356
LCS 880-72356/2-A	Lab Control Sample	Soluble	Solid	300.0	72356
LCSD 880-72356/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72356
880-38875-1 MS	SB-11-S-1'-240202	Soluble	Solid	300.0	72356
880-38875-1 MSD	SB-11-S-1'-240202	Soluble	Solid	300.0	72356

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-11-S-1'-240202

Lab Sample ID: 880-38875-1
Matrix: Solid
Date Collected: 02/02/24 10:20
Date Received: 02/05/24 08:42

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	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		5			72369	02/05/24 20:53	CH	EET MID

Client Sample ID: SB-11-S-2'-240202

Lab Sample ID: 880-38875-2
Matrix: Solid
Date Collected: 02/02/24 10:30
Date Received: 02/05/24 08:42

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	73222	02/15/24 08:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73209	02/15/24 16:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73310	02/15/24 16:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			72951	02/10/24 04:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	72461	02/06/24 10:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72692	02/10/24 04:08	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:08	CH	EET MID

Client Sample ID: SB-12-S-1'-240202

Lab Sample ID: 880-38875-3
Matrix: Solid
Date Collected: 02/02/24 10:50
Date Received: 02/05/24 08:42

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	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:12	CH	EET MID

Client Sample ID: SB-12-S-2'-240202

Lab Sample ID: 880-38875-4
Matrix: Solid
Date Collected: 02/02/24 11:00
Date Received: 02/05/24 08:42

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	73222	02/15/24 08:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73209	02/15/24 16:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73310	02/15/24 16:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			72951	02/10/24 01:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	72461	02/06/24 10:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72692	02/10/24 01:55	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		5			72369	02/05/24 21:27	CH	EET MID

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Client Sample ID: SB-13-S-1'-240202

Lab Sample ID: 880-38875-5
Matrix: Solid
Date Collected: 02/02/24 11:20
Date Received: 02/05/24 08:42

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	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:32	CH	EET MID

Client Sample ID: SB-13-S-2'-240202

Lab Sample ID: 880-38875-6
Matrix: Solid
Date Collected: 02/02/24 11:30
Date Received: 02/05/24 08:42

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	73222	02/15/24 08:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73209	02/15/24 16:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73310	02/15/24 16:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			72951	02/10/24 03:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	72461	02/06/24 10:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72692	02/10/24 03:46	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:37	CH	EET MID

Client Sample ID: SB-14-S-1'-240202

Lab Sample ID: 880-38875-7
Matrix: Solid
Date Collected: 02/02/24 11:40
Date Received: 02/05/24 08:42

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	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		1			72369	02/05/24 21:42	CH	EET MID

Client Sample ID: SB-14-S-2'-240202

Lab Sample ID: 880-38875-8
Matrix: Solid
Date Collected: 02/02/24 11:50
Date Received: 02/05/24 08:42

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	73222	02/15/24 08:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73209	02/15/24 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			73310	02/15/24 17:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			72951	02/10/24 02:17	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	72461	02/06/24 10:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72692	02/10/24 02:17	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	72356	02/05/24 10:33	SMC	EET MID
Soluble	Analysis	300.0		5			72369	02/05/24 21:47	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: WLU 47

Job ID: 880-38875-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-38875-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-38875-1	SB-11-S-1'-240202	Solid	02/02/24 10:20	02/05/24 08:42
880-38875-2	SB-11-S-2'-240202	Solid	02/02/24 10:30	02/05/24 08:42
880-38875-3	SB-12-S-1'-240202	Solid	02/02/24 10:50	02/05/24 08:42
880-38875-4	SB-12-S-2'-240202	Solid	02/02/24 11:00	02/05/24 08:42
880-38875-5	SB-13-S-1'-240202	Solid	02/02/24 11:20	02/05/24 08:42
880-38875-6	SB-13-S-2'-240202	Solid	02/02/24 11:30	02/05/24 08:42
880-38875-7	SB-14-S-1'-240202	Solid	02/02/24 11:40	02/05/24 08:42
880-38875-8	SB-14-S-2'-240202	Solid	02/02/24 11:50	02/05/24 08:42

Page 115 of 560

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

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875

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-8032-1136 11
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page 13 of 14 — 1 of 1
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 47	Project #: (13) ~~88002020~~ 30209661			
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_ORGEM_288, 8015MOD_NM, 8021B (12)	300-0295FM-7820	Total Number of containers	Special Instructions/Note
			Preservation Code:				N			
SB-11-S-1'-240202	2/2/24	1020	G	Solid				X		
SB-11-S-2'-240202	"	1030	"	Solid			X	X		
SB-12-S-1'-240202	"	1050	"	Solid				X		
SB-12-S-2'-240202	"	1100	"	Solid			X	X		
SB-13-S-1'-240202	"	1120	"	Solid				X		
SB-13-S-2'-240202	"	1130	"	Solid			X	X		
SB-14-S-1'-240202	"	1140	"	Solid				X		
SB-14-S-2'-240202	X	1150	X	Solid			X	X		
				Solid						
				Solid						
				Solid						

880-38875 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	[signature]	2/2/24 1500	Arcadis	[signature]	2-2-24 2154	
2				[signature]	2/5/24 842	
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No

Cooler Temperature(s) °C and Other Remarks: 1-3|1.5

Ver: 01/16/2019

Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 AM

3/6/2024

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-38875-1
SDG Number: Lovington, NM

Login Number: 38875
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 2/19/2024 5:45:06 PM

JOB DESCRIPTION

WLU 47
Lovington NM

JOB NUMBER

880-39033-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
2/19/2024 5:45:06 PM

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

Client: ARCADIS US Inc
Project/Site: WLU 47

Laboratory Job ID: 880-39033-1
SDG: Lovington NM

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Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
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, low 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.
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 US Inc
Project: WLU 47

Job ID: 880-39033-1

Job ID: 880-39033-1 Eurofins Midland

Job Narrative
880-39033-1

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 2/7/2024 12:54 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 1.2°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-15-S-1-240205 (880-39033-1), SB-15-S-2-240205 (880-39033-2), SB-16-S-1-240205 (880-39033-3), SB-16-S-2-240205 (880-39033-4), SB-17-S-1-240205 (880-39033-5) and SB-17-S-2-240205 (880-39033-6).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-73192 and analytical batch 880-73320 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SB-15-S-2-240205 (880-39033-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-72531 and analytical batch 880-72814 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-72531 and analytical batch 880-72814 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Client Sample ID: SB-15-S-1-240205

Lab Sample ID: 880-39033-1
Matrix: Solid
Date Collected: 02/05/24 09:00
Date Received: 02/07/24 12:54

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.2		4.99	0.394	mg/Kg			02/09/24 23:35	1

Client Sample ID: SB-15-S-2-240205

Lab Sample ID: 880-39033-2
Matrix: Solid
Date Collected: 02/05/24 09:10
Date Received: 02/07/24 12:54

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		02/14/24 16:48	02/16/24 11:28	1
Toluene	0.000565	J	0.00199	0.000453	mg/Kg		02/14/24 16:48	02/16/24 11:28	1
Ethylbenzene	<0.000562	U	0.00199	0.000562	mg/Kg		02/14/24 16:48	02/16/24 11:28	1
m-Xylene & p-Xylene	<0.00100	U	0.00398	0.00100	mg/Kg		02/14/24 16:48	02/16/24 11:28	1
o-Xylene	0.000437	J	0.00199	0.000342	mg/Kg		02/14/24 16:48	02/16/24 11:28	1
Xylenes, Total	<0.00100	U	0.00398	0.00100	mg/Kg		02/14/24 16:48	02/16/24 11:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*56*	*S1-*	*70 - 130*	*02/14/24 16:48*	*02/16/24 11:28*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/14/24 16:48*	*02/16/24 11:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00100	J	0.00398	0.00100	mg/Kg			02/16/24 11:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	83.6		50.4	15.1	mg/Kg			02/12/24 03:47	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	48.2	J B	50.4	15.1	mg/Kg		02/07/24 13:35	02/12/24 03:47	1
Diesel Range Organics (Over C10-C28)	35.4	J	50.4	15.1	mg/Kg		02/07/24 13:35	02/12/24 03:47	1
OII Range Organics (Over C28-C36)	<15.1	U	50.4	15.1	mg/Kg		02/07/24 13:35	02/12/24 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*02/07/24 13:35*	*02/12/24 03:47*	*1*
o-Terphenyl	*123*		*70 - 130*	*02/07/24 13:35*	*02/12/24 03:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		4.98	0.393	mg/Kg			02/09/24 23:40	1

Client Sample ID: SB-16-S-1-240205

Lab Sample ID: 880-39033-3
Matrix: Solid
Date Collected: 02/05/24 09:20
Date Received: 02/07/24 12:54

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.2		5.00	0.395	mg/Kg			02/09/24 23:45	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Client Sample ID: SB-16-S-2-240205

Lab Sample ID: 880-39033-4
Matrix: Solid
Date Collected: 02/05/24 09:30
Date Received: 02/07/24 12:54

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		02/14/24 16:48	02/16/24 11:49	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		02/14/24 16:48	02/16/24 11:49	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		02/14/24 16:48	02/16/24 11:49	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		02/14/24 16:48	02/16/24 11:49	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		02/14/24 16:48	02/16/24 11:49	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		02/14/24 16:48	02/16/24 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*02/14/24 16:48*	*02/16/24 11:49*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/14/24 16:48*	*02/16/24 11:49*	*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			02/16/24 11:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**82.2**		50.3	15.1	mg/Kg			02/12/24 04:09	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	**47.2**	**J B**	50.3	15.1	mg/Kg		02/07/24 13:35	02/12/24 04:09	1
Diesel Range Organics (Over C10-C28)	**35.0**	**J**	50.3	15.1	mg/Kg		02/07/24 13:35	02/12/24 04:09	1
OII Range Organics (Over C28-C36)	<15.1	U	50.3	15.1	mg/Kg		02/07/24 13:35	02/12/24 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*02/07/24 13:35*	*02/12/24 04:09*	*1*
o-Terphenyl	*119*		*70 - 130*	*02/07/24 13:35*	*02/12/24 04:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.1**		5.02	0.397	mg/Kg			02/09/24 23:59	1

Client Sample ID: SB-17-S-1-240205

Lab Sample ID: 880-39033-5
Matrix: Solid
Date Collected: 02/05/24 09:40
Date Received: 02/07/24 12:54

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98.1**		5.03	0.397	mg/Kg			02/10/24 00:03	1

Client Sample ID: SB-17-S-2-240205

Lab Sample ID: 880-39033-6
Matrix: Solid
Date Collected: 02/05/24 09:50
Date Received: 02/07/24 12:54

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		02/14/24 16:48	02/16/24 12:09	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		02/14/24 16:48	02/16/24 12:09	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		02/14/24 16:48	02/16/24 12:09	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Client Sample ID: SB-17-S-2-240205

Date Collected: 02/05/24 09:50
Date Received: 02/07/24 12:54

Lab Sample ID: 880-39033-6

Matrix: Solid

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	0.00404	0.00102	mg/Kg		02/14/24 16:48	02/16/24 12:09	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		02/14/24 16:48	02/16/24 12:09	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		02/14/24 16:48	02/16/24 12:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*02/14/24 16:48*	*02/16/24 12:09*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*02/14/24 16:48*	*02/16/24 12:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00404	0.00102	mg/Kg			02/16/24 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	**80.1**		50.2	15.0	mg/Kg			02/12/24 04:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**47.2**	**J B**	50.2	15.0	mg/Kg		02/07/24 13:35	02/12/24 04:30	1
Diesel Range Organics (Over C10-C28)	**32.9**	**J**	50.2	15.0	mg/Kg		02/07/24 13:35	02/12/24 04:30	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.2	15.0	mg/Kg		02/07/24 13:35	02/12/24 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*02/07/24 13:35*	*02/12/24 04:30*	*1*
o-Terphenyl	*125*		*70 - 130*	*02/07/24 13:35*	*02/12/24 04:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**64.7**		4.99	0.394	mg/Kg			02/10/24 00:17	1

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington 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)
880-39033-2	SB-15-S-2-240205	56 S1-	97
880-39033-2 MS	SB-15-S-2-240205	116	122
880-39033-2 MSD	SB-15-S-2-240205	113	121
880-39033-4	SB-16-S-2-240205	76	94
880-39033-6	SB-17-S-2-240205	75	97
LCS 880-73192/1-A	Lab Control Sample	112	120
LCSD 880-73192/2-A	Lab Control Sample Dup	112	120
MB 880-73192/5-A	Method Blank	66 S1-	98

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-39033-2	SB-15-S-2-240205	118	123
880-39033-4	SB-16-S-2-240205	112	119
880-39033-6	SB-17-S-2-240205	120	125
LCS 880-72531/2-A	Lab Control Sample	120	115
LCSD 880-72531/3-A	Lab Control Sample Dup	105	101
MB 880-72531/1-A	Method Blank	204 S1+	221 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73192/5-A
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 73192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		02/14/24 16:48	02/16/24 11:06	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		02/14/24 16:48	02/16/24 11:06	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		02/14/24 16:48	02/16/24 11:06	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		02/14/24 16:48	02/16/24 11:06	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		02/14/24 16:48	02/16/24 11:06	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		02/14/24 16:48	02/16/24 11:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*02/14/24 16:48*	*02/16/24 11:06*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*02/14/24 16:48*	*02/16/24 11:06*	*1*

Lab Sample ID: LCS 880-73192/1-A
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 73192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09329		mg/Kg		93	70 - 130		
Toluene			0.100	0.08754		mg/Kg		88	70 - 130		
Ethylbenzene			0.100	0.09520		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.2018		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.09753		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: LCSD 880-73192/2-A
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 73192

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09399		mg/Kg		94	70 - 130	1	35
Toluene			0.100	0.08640		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.09818		mg/Kg		98	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2054		mg/Kg		103	70 - 130	2	35
o-Xylene			0.100	0.09884		mg/Kg		99	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: 880-39033-2 MS
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: SB-15-S-2-240205
Prep Type: Total/NA
Prep Batch: 73192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.000383	U	0.100	0.09558		mg/Kg		95	70 - 130		
Toluene	0.000565	J	0.100	0.09032		mg/Kg		90	70 - 130		

Eurofins Midland

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

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

Lab Sample ID: 880-39033-2 MS
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: SB-15-S-2-240205
Prep Type: Total/NA
Prep Batch: 73192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000562	U	0.100	0.1022		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	<0.00100	U	0.200	0.2133		mg/Kg		106	70 - 130
o-Xylene	0.000437	J	0.100	0.1035		mg/Kg		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*

Lab Sample ID: 880-39033-2 MSD
Matrix: Solid
Analysis Batch: 73320

Client Sample ID: SB-15-S-2-240205
Prep Type: Total/NA
Prep Batch: 73192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000383	U	0.101	0.1046		mg/Kg		104	70 - 130	9	35
Toluene	0.000565	J	0.101	0.09485		mg/Kg		94	70 - 130	5	35
Ethylbenzene	<0.000562	U	0.101	0.1090		mg/Kg		108	70 - 130	6	35
m-Xylene & p-Xylene	<0.00100	U	0.201	0.2261		mg/Kg		112	70 - 130	6	35
o-Xylene	0.000437	J	0.101	0.1101		mg/Kg		109	70 - 130	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

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

Lab Sample ID: MB 880-72531/1-A
Matrix: Solid
Analysis Batch: 72814

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 72531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	23.70	J	50.0	15.0	mg/Kg		02/06/24 16:51	02/11/24 19:18	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		02/06/24 16:51	02/11/24 19:18	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		02/06/24 16:51	02/11/24 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*204*	*S1+*	*70 - 130*	*02/06/24 16:51*	*02/11/24 19:18*	*1*
o-Terphenyl	*221*	*S1+*	*70 - 130*	*02/06/24 16:51*	*02/11/24 19:18*	*1*

Lab Sample ID: LCS 880-72531/2-A
Matrix: Solid
Analysis Batch: 72814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1019		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

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

Lab Sample ID: LCS 880-72531/2-A
Matrix: Solid
Analysis Batch: 72814

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 72531

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: LCSD 880-72531/3-A
Matrix: Solid
Analysis Batch: 72814

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 72531

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	903.6		mg/Kg		90	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	932.7		mg/Kg		93	70 - 130	10	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72595/1-A
Matrix: Solid
Analysis Batch: 72647

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			02/09/24 22:26	1

Lab Sample ID: LCS 880-72595/2-A
Matrix: Solid
Analysis Batch: 72647

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.9		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-72595/3-A
Matrix: Solid
Analysis Batch: 72647

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	248.2		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 880-39033-3 MS
Matrix: Solid
Analysis Batch: 72647

Client Sample ID: SB-16-S-1-240205
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	73.2		250	307.8		mg/Kg		94	90 - 110		

QC Sample Results

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-39033-3 MSD
Matrix: Solid
Analysis Batch: 72647

Client Sample ID: SB-16-S-1-240205
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	73.2		250	310.5		mg/Kg		95	90 - 110	1	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

GC VOA

Prep Batch: 73192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	5030B	
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	5030B	
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	5030B	
MB 880-73192/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-73192/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-73192/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-39033-2 MS	SB-15-S-2-240205	Total/NA	Solid	5030B	
880-39033-2 MSD	SB-15-S-2-240205	Total/NA	Solid	5030B	

Analysis Batch: 73320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	8021B	73192
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	8021B	73192
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	8021B	73192
MB 880-73192/5-A	Method Blank	Total/NA	Solid	8021B	73192
LCS 880-73192/1-A	Lab Control Sample	Total/NA	Solid	8021B	73192
LCSD 880-73192/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73192
880-39033-2 MS	SB-15-S-2-240205	Total/NA	Solid	8021B	73192
880-39033-2 MSD	SB-15-S-2-240205	Total/NA	Solid	8021B	73192

Analysis Batch: 73583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	Total BTEX	
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	Total BTEX	
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 72531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	8015NM Prep	
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	8015NM Prep	
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	8015NM Prep	
MB 880-72531/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-72531/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-72531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 72814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	8015B NM	72531
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	8015B NM	72531
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	8015B NM	72531
MB 880-72531/1-A	Method Blank	Total/NA	Solid	8015B NM	72531
LCS 880-72531/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	72531
LCSD 880-72531/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	72531

Analysis Batch: 72977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-2	SB-15-S-2-240205	Total/NA	Solid	8015 NM	
880-39033-4	SB-16-S-2-240205	Total/NA	Solid	8015 NM	
880-39033-6	SB-17-S-2-240205	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

HPLC/IC

Leach Batch: 72595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-1	SB-15-S-1-240205	Soluble	Solid	DI Leach	
880-39033-2	SB-15-S-2-240205	Soluble	Solid	DI Leach	
880-39033-3	SB-16-S-1-240205	Soluble	Solid	DI Leach	
880-39033-4	SB-16-S-2-240205	Soluble	Solid	DI Leach	
880-39033-5	SB-17-S-1-240205	Soluble	Solid	DI Leach	
880-39033-6	SB-17-S-2-240205	Soluble	Solid	DI Leach	
MB 880-72595/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72595/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72595/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-39033-3 MS	SB-16-S-1-240205	Soluble	Solid	DI Leach	
880-39033-3 MSD	SB-16-S-1-240205	Soluble	Solid	DI Leach	

Analysis Batch: 72647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39033-1	SB-15-S-1-240205	Soluble	Solid	300.0	72595
880-39033-2	SB-15-S-2-240205	Soluble	Solid	300.0	72595
880-39033-3	SB-16-S-1-240205	Soluble	Solid	300.0	72595
880-39033-4	SB-16-S-2-240205	Soluble	Solid	300.0	72595
880-39033-5	SB-17-S-1-240205	Soluble	Solid	300.0	72595
880-39033-6	SB-17-S-2-240205	Soluble	Solid	300.0	72595
MB 880-72595/1-A	Method Blank	Soluble	Solid	300.0	72595
LCS 880-72595/2-A	Lab Control Sample	Soluble	Solid	300.0	72595
LCSD 880-72595/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72595
880-39033-3 MS	SB-16-S-1-240205	Soluble	Solid	300.0	72595
880-39033-3 MSD	SB-16-S-1-240205	Soluble	Solid	300.0	72595

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Client Sample ID: SB-15-S-1-240205
Date Collected: 02/05/24 09:00
Date Received: 02/07/24 12:54

Lab Sample ID: 880-39033-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/09/24 23:35	CH	EET MID

Client Sample ID: SB-15-S-2-240205
Date Collected: 02/05/24 09:10
Date Received: 02/07/24 12:54

Lab Sample ID: 880-39033-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	73192	02/14/24 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/16/24 11:28	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73583	02/16/24 11:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			72977	02/12/24 03:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	72531	02/07/24 13:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72814	02/12/24 03:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/09/24 23:40	CH	EET MID

Client Sample ID: SB-16-S-1-240205
Date Collected: 02/05/24 09:20
Date Received: 02/07/24 12:54

Lab Sample ID: 880-39033-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/09/24 23:45	CH	EET MID

Client Sample ID: SB-16-S-2-240205
Date Collected: 02/05/24 09:30
Date Received: 02/07/24 12:54

Lab Sample ID: 880-39033-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	73192	02/14/24 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/16/24 11:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73583	02/16/24 11:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			72977	02/12/24 04:09	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	72531	02/07/24 13:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72814	02/12/24 04:09	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/09/24 23:59	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: WLU 47

Job ID: 880-39033-1
SDG: Lovington NM

Client Sample ID: SB-17-S-1-240205

Lab Sample ID: 880-39033-5
Matrix: Solid
Date Collected: 02/05/24 09:40
Date Received: 02/07/24 12:54

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	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/10/24 00:03	CH	EET MID

Client Sample ID: SB-17-S-2-240205

Lab Sample ID: 880-39033-6
Matrix: Solid
Date Collected: 02/05/24 09:50
Date Received: 02/07/24 12:54

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	73192	02/14/24 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/16/24 12:09	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73583	02/16/24 12:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			72977	02/12/24 04:30	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	72531	02/07/24 13:35	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	72814	02/12/24 04:30	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	72595	02/07/24 15:07	SA	EET MID
Soluble	Analysis	300.0		1			72647	02/10/24 00:17	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 47

Job ID: 880-39033-1
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 47

Job ID: 880-39033-1
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 47

Job ID: 880-39033-1
SDG: Lovington NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-39033-1	SB-15-S-1-240205	Solid	02/05/24 09:00	02/07/24 12:54
880-39033-2	SB-15-S-2-240205	Solid	02/05/24 09:10	02/07/24 12:54
880-39033-3	SB-16-S-1-240205	Solid	02/05/24 09:20	02/07/24 12:54
880-39033-4	SB-16-S-2-240205	Solid	02/05/24 09:30	02/07/24 12:54
880-39033-5	SB-17-S-1-240205	Solid	02/05/24 09:40	02/07/24 12:54
880-39033-6	SB-17-S-2-240205	Solid	02/05/24 09:50	02/07/24 12:54

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

Eurofins Midland
1211 W Florida Ave
Midland TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins Environment Testing

9033

Client Information	Sampler: Heath Boyd	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-8032-1136 12
Client Contact: Mr Morgan Jordan	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: Page ~~12 of 14~~ 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested: Standard			
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: WLU 47	Project #: ~~88002020~~ 30209661			
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	Total Number of containers	Special Instructions/Note
			Preservation Code:			N			
SB-15-S-1-240205	02/05/24	0900	G	Solid			X		
SB-15-S-2-240205		0910		Solid		X	X		
SB-16-S-1-240205		0920		Solid			X		
SB-16-S-2-240205		0930		Solid		X	X		
SB-17-S-1-240205		0940		Solid			X		
SB-17-S-2-240205	X	0950	X	Solid		X	X		
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					

880-39033 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
Luis Esparza	02/05/24	Arcadis	Dathne Gonzalez	2/5/24	
DATHNE Gonzales	Date/Time:	Company	Received by:	Date/Time: 2/7/24 1254	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:
		1.3/1.2

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-39033-1
SDG Number: Lovington NM

Login Number: 39033
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 4/10/2024 5:14:20 PM

JOB DESCRIPTION

WLU 47
Lovington, NM

JOB NUMBER

880-41890-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
4/10/2024 5:14:20 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 47

Laboratory Job ID: 880-41890-1
SDG: Lovington, NM

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Definitions/Glossary

Client: Arcadis U.S., Inc. Job ID: 880-41890-1
Project/Site: WLU 47 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.
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.
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
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 47

Job ID: 880-41890-1

Job ID: 880-41890-1 Eurofins Midland

Job Narrative
880-41890-1

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 4/5/2024 11:04 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 2.2°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-18-4'-5' (880-41890-1), SB-18-10'-11' (880-41890-2), SB-18-14'-15' (880-41890-3), SB-19-0'-1' (880-41890-4), SB-19-2'-3' (880-41890-5), SB-20-0'-1' (880-41890-6), SB-20-2'-3' (880-41890-7), SB-21-0'-1' (880-41890-8) and SB-21-2'-3' (880-41890-9).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-19-2'-3' (880-41890-5), SB-20-2'-3' (880-41890-7), SB-21-2'-3' (880-41890-9), (880-41880-A-1-G) and (880-41880-A-1-H MS). 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 880-77497 and analytical batch 880-77422 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 continuing calibration verification (CCV) associated with batch 880-77422 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-77422/31).

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 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-18-4'-5'

Lab Sample ID: 880-41890-1
Matrix: Solid
Date Collected: 04/03/24 10:50
Date Received: 04/05/24 11:04
Sample Depth: 4-5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2260		24.8	1.96	mg/Kg			04/09/24 20:57	5

Client Sample ID: SB-18-10'-11'

Lab Sample ID: 880-41890-2
Matrix: Solid
Date Collected: 04/03/24 11:40
Date Received: 04/05/24 11:04
Sample Depth: 10-11

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		25.2	1.99	mg/Kg			04/09/24 21:03	5

Client Sample ID: SB-18-14'-15'

Lab Sample ID: 880-41890-3
Matrix: Solid
Date Collected: 04/03/24 12:15
Date Received: 04/05/24 11:04
Sample Depth: 14-15

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1130		5.03	0.397	mg/Kg			04/09/24 21:22	1

Client Sample ID: SB-19-0'-1'

Lab Sample ID: 880-41890-4
Matrix: Solid
Date Collected: 04/03/24 13:30
Date Received: 04/05/24 11:04
Sample Depth: 0-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.76	J	4.96	0.392	mg/Kg			04/09/24 21:28	1

Client Sample ID: SB-19-2'-3'

Lab Sample ID: 880-41890-5
Matrix: Solid
Date Collected: 04/03/24 13:35
Date Received: 04/05/24 11:04
Sample Depth: 2-3

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		04/08/24 09:22	04/08/24 12:58	1
Toluene	<0.000454	U	0.00199	0.000454	mg/Kg		04/08/24 09:22	04/08/24 12:58	1
Ethylbenzene	<0.000563	U	0.00199	0.000563	mg/Kg		04/08/24 09:22	04/08/24 12:58	1
m-Xylene & p-Xylene	<0.00101	U	0.00398	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:58	1
o-Xylene	<0.000343	U	0.00199	0.000343	mg/Kg		04/08/24 09:22	04/08/24 12:58	1
Xylenes, Total	<0.00101	U	0.00398	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:58*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:58*	*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			04/08/24 12:58	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-19-2'-3'

Lab Sample ID: 880-41890-5
Matrix: Solid
Date Collected: 04/03/24 13:35
Date Received: 04/05/24 11:04
Sample Depth: 2-3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	74.1		49.8	14.9	mg/Kg			04/06/24 04:10	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	41.4	J B	49.8	14.9	mg/Kg		04/05/24 14:44	04/06/24 04:10	1
Diesel Range Organics (Over C10-C28)	32.7	J	49.8	14.9	mg/Kg		04/05/24 14:44	04/06/24 04:10	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/05/24 14:44	04/06/24 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*04/05/24 14:44*	*04/06/24 04:10*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*04/05/24 14:44*	*04/06/24 04:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.65		5.04	0.398	mg/Kg			04/09/24 21:35	1

Client Sample ID: SB-20-0'-1'

Lab Sample ID: 880-41890-6
Matrix: Solid
Date Collected: 04/03/24 14:00
Date Received: 04/05/24 11:04
Sample Depth: 0-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.84	J	5.00	0.395	mg/Kg			04/09/24 21:41	1

Client Sample ID: SB-20-2'-3'

Lab Sample ID: 880-41890-7
Matrix: Solid
Date Collected: 04/03/24 14:05
Date Received: 04/05/24 11:04
Sample Depth: 2-3

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		04/08/24 09:22	04/08/24 13:19	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		04/08/24 09:22	04/08/24 13:19	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		04/08/24 09:22	04/08/24 13:19	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		04/08/24 09:22	04/08/24 13:19	1
o-Xylene	0.000780	J	0.00201	0.000346	mg/Kg		04/08/24 09:22	04/08/24 13:19	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		04/08/24 09:22	04/08/24 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*04/08/24 09:22*	*04/08/24 13:19*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*04/08/24 09:22*	*04/08/24 13:19*	*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	0.00402	0.00102	mg/Kg			04/08/24 13:19	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-20-2'-3'

Lab Sample ID: 880-41890-7
Matrix: Solid
Date Collected: 04/03/24 14:05
Date Received: 04/05/24 11:04
Sample Depth: 2-3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	80.7		50.0	15.0	mg/Kg			04/06/24 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	48.0	J B	50.0	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:31	1
Diesel Range Organics (Over C10-C28)	32.7	J	50.0	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:31	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*04/05/24 14:44*	*04/06/24 04:31*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*04/05/24 14:44*	*04/06/24 04:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	414		5.03	0.397	mg/Kg			04/09/24 21:47	1

Client Sample ID: SB-21-0'-1'

Lab Sample ID: 880-41890-8
Matrix: Solid
Date Collected: 04/03/24 14:35
Date Received: 04/05/24 11:04
Sample Depth: 0-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.05	J	5.00	0.395	mg/Kg			04/09/24 21:54	1

Client Sample ID: SB-21-2'-3'

Lab Sample ID: 880-41890-9
Matrix: Solid
Date Collected: 04/03/24 14:40
Date Received: 04/05/24 11:04
Sample Depth: 2-3

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		04/08/24 09:22	04/08/24 13:39	1
Toluene	<0.000460	U	0.00202	0.000460	mg/Kg		04/08/24 09:22	04/08/24 13:39	1
Ethylbenzene	<0.000570	U	0.00202	0.000570	mg/Kg		04/08/24 09:22	04/08/24 13:39	1
m-Xylene & p-Xylene	<0.00102	U	0.00403	0.00102	mg/Kg		04/08/24 09:22	04/08/24 13:39	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		04/08/24 09:22	04/08/24 13:39	1
Xylenes, Total	<0.00102	U	0.00403	0.00102	mg/Kg		04/08/24 09:22	04/08/24 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*04/08/24 09:22*	*04/08/24 13:39*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*04/08/24 09:22*	*04/08/24 13:39*	*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			04/08/24 13:39	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-21-2'-3'
Date Collected: 04/03/24 14:40
Date Received: 04/05/24 11:04
Sample Depth: 2-3

Lab Sample ID: 880-41890-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	76.5		49.9	15.0	mg/Kg			04/06/24 04:52	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	40.2	J B	49.9	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:52	1
Diesel Range Organics (Over C10-C28)	36.3	J	49.9	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:52	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/05/24 14:44	04/06/24 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*144*	*S1+*	*70 - 130*	*04/05/24 14:44*	*04/06/24 04:52*	*1*
o-Terphenyl	*166*	*S1+*	*70 - 130*	*04/05/24 14:44*	*04/06/24 04:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	321		5.03	0.397	mg/Kg			04/09/24 22:00	1

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, 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)
880-41890-5	SB-19-2'-3'	84	91
880-41890-5 MS	SB-19-2'-3'	104	120
880-41890-5 MSD	SB-19-2'-3'	123	121
880-41890-7	SB-20-2'-3'	78	91
880-41890-9	SB-21-2'-3'	80	99
LCS 880-77564/1-A	Lab Control Sample	101	117
LCSD 880-77564/2-A	Lab Control Sample Dup	117	101
MB 880-77564/5-A	Method Blank	71	105

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)
880-41890-5	SB-19-2'-3'	122	138 S1+
880-41890-7	SB-20-2'-3'	129	145 S1+
880-41890-9	SB-21-2'-3'	144 S1+	166 S1+
LCS 880-77497/2-A	Lab Control Sample	88	105
LCSD 880-77497/3-A	Lab Control Sample Dup	79	94
MB 880-77497/1-A	Method Blank	115	127

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-77564/5-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:36*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:36*	*1*

Lab Sample ID: LCS 880-77564/1-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09146		mg/Kg		91	70 - 130
Toluene	0.100	0.09023		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09523		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1934		mg/Kg		97	70 - 130
o-Xylene	0.100	0.09499		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: LCSD 880-77564/2-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09181		mg/Kg		92	70 - 130	0	35
Toluene	0.100	0.09962		mg/Kg		100	70 - 130	10	35
Ethylbenzene	0.100	0.1108		mg/Kg		111	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.2274		mg/Kg		114	70 - 130	16	35
o-Xylene	0.100	0.1118		mg/Kg		112	70 - 130	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-41890-5 MS
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: SB-19-2'-3'
Prep Type: Total/NA
Prep Batch: 77564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000383	U	0.0996	0.08151		mg/Kg		82	70 - 130
Toluene	<0.000454	U	0.0996	0.08030		mg/Kg		81	70 - 130

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

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

Lab Sample ID: 880-41890-5 MS
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: SB-19-2'-3'
Prep Type: Total/NA
Prep Batch: 77564

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.000563	U	0.0996	0.08519		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.199	0.1742		mg/Kg		87	70 - 130
o-Xylene	<0.000343	U	0.0996	0.08512		mg/Kg		85	70 - 130

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

Lab Sample ID: 880-41890-5 MSD
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: SB-19-2'-3'
Prep Type: Total/NA
Prep Batch: 77564

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000383	U	0.101	0.08833		mg/Kg		88	70 - 130	8	35
Toluene	<0.000454	U	0.101	0.08277		mg/Kg		82	70 - 130	3	35
Ethylbenzene	<0.000563	U	0.101	0.07872		mg/Kg		78	70 - 130	8	35
m-Xylene & p-Xylene	<0.00101	U	0.202	0.1673		mg/Kg		83	70 - 130	4	35
o-Xylene	<0.000343	U	0.101	0.1049		mg/Kg		104	70 - 130	21	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*121*		*70 - 130*

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

Lab Sample ID: MB 880-77497/1-A
Matrix: Solid
Analysis Batch: 77422

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	22.07	J	50.0	15.0	mg/Kg		04/05/24 14:44	04/05/24 20:49	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		04/05/24 14:44	04/05/24 20:49	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/05/24 14:44	04/05/24 20:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*04/05/24 14:44*	*04/05/24 20:49*	*1*
o-Terphenyl	*127*		*70 - 130*	*04/05/24 14:44*	*04/05/24 20:49*	*1*

Lab Sample ID: LCS 880-77497/2-A
Matrix: Solid
Analysis Batch: 77422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	873.7		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	757.4		mg/Kg		76	70 - 130

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QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

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

Lab Sample ID: LCS 880-77497/2-A
Matrix: Solid
Analysis Batch: 77422

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77497

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-77497/3-A
Matrix: Solid
Analysis Batch: 77422

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77497

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	863.2		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	791.1		mg/Kg		79	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	79		70 - 130
o-Terphenyl	94		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-77629/1-A
Matrix: Solid
Analysis Batch: 77728

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			04/09/24 16:46	1

Lab Sample ID: LCS 880-77629/2-A
Matrix: Solid
Analysis Batch: 77728

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	250.1		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-77629/3-A
Matrix: Solid
Analysis Batch: 77728

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	252.6		mg/Kg		101	90 - 110	1	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

GC VOA

Prep Batch: 77564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	5030B	
880-41890-7	SB-20-2'-3'	Total/NA	Solid	5030B	
880-41890-9	SB-21-2'-3'	Total/NA	Solid	5030B	
MB 880-77564/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-77564/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-77564/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-41890-5 MS	SB-19-2'-3'	Total/NA	Solid	5030B	
880-41890-5 MSD	SB-19-2'-3'	Total/NA	Solid	5030B	

Analysis Batch: 77568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	8021B	77564
880-41890-7	SB-20-2'-3'	Total/NA	Solid	8021B	77564
880-41890-9	SB-21-2'-3'	Total/NA	Solid	8021B	77564
MB 880-77564/5-A	Method Blank	Total/NA	Solid	8021B	77564
LCS 880-77564/1-A	Lab Control Sample	Total/NA	Solid	8021B	77564
LCSD 880-77564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	77564
880-41890-5 MS	SB-19-2'-3'	Total/NA	Solid	8021B	77564
880-41890-5 MSD	SB-19-2'-3'	Total/NA	Solid	8021B	77564

Analysis Batch: 77721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	Total BTEX	
880-41890-7	SB-20-2'-3'	Total/NA	Solid	Total BTEX	
880-41890-9	SB-21-2'-3'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 77422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	8015B NM	77497
880-41890-7	SB-20-2'-3'	Total/NA	Solid	8015B NM	77497
880-41890-9	SB-21-2'-3'	Total/NA	Solid	8015B NM	77497
MB 880-77497/1-A	Method Blank	Total/NA	Solid	8015B NM	77497
LCS 880-77497/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	77497
LCSD 880-77497/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	77497

Prep Batch: 77497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	8015NM Prep	
880-41890-7	SB-20-2'-3'	Total/NA	Solid	8015NM Prep	
880-41890-9	SB-21-2'-3'	Total/NA	Solid	8015NM Prep	
MB 880-77497/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-77497/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-77497/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 77658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-5	SB-19-2'-3'	Total/NA	Solid	8015 NM	
880-41890-7	SB-20-2'-3'	Total/NA	Solid	8015 NM	
880-41890-9	SB-21-2'-3'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

HPLC/IC

Leach Batch: 77629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-1	SB-18-4'-5'	Soluble	Solid	DI Leach	
880-41890-2	SB-18-10'-11'	Soluble	Solid	DI Leach	
880-41890-3	SB-18-14'-15'	Soluble	Solid	DI Leach	
880-41890-4	SB-19-0'-1'	Soluble	Solid	DI Leach	
880-41890-5	SB-19-2'-3'	Soluble	Solid	DI Leach	
880-41890-6	SB-20-0'-1'	Soluble	Solid	DI Leach	
880-41890-7	SB-20-2'-3'	Soluble	Solid	DI Leach	
880-41890-8	SB-21-0'-1'	Soluble	Solid	DI Leach	
880-41890-9	SB-21-2'-3'	Soluble	Solid	DI Leach	
MB 880-77629/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-77629/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-77629/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 77728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41890-1	SB-18-4'-5'	Soluble	Solid	300.0	77629
880-41890-2	SB-18-10'-11'	Soluble	Solid	300.0	77629
880-41890-3	SB-18-14'-15'	Soluble	Solid	300.0	77629
880-41890-4	SB-19-0'-1'	Soluble	Solid	300.0	77629
880-41890-5	SB-19-2'-3'	Soluble	Solid	300.0	77629
880-41890-6	SB-20-0'-1'	Soluble	Solid	300.0	77629
880-41890-7	SB-20-2'-3'	Soluble	Solid	300.0	77629
880-41890-8	SB-21-0'-1'	Soluble	Solid	300.0	77629
880-41890-9	SB-21-2'-3'	Soluble	Solid	300.0	77629
MB 880-77629/1-A	Method Blank	Soluble	Solid	300.0	77629
LCS 880-77629/2-A	Lab Control Sample	Soluble	Solid	300.0	77629
LCSD 880-77629/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	77629

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-18-4'-5'

Lab Sample ID: 880-41890-1
Matrix: Solid
Date Collected: 04/03/24 10:50
Date Received: 04/05/24 11:04

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	77728	04/09/24 20:57	SMC	EET MID

Client Sample ID: SB-18-10'-11'

Lab Sample ID: 880-41890-2
Matrix: Solid
Date Collected: 04/03/24 11:40
Date Received: 04/05/24 11:04

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	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	77728	04/09/24 21:03	SMC	EET MID

Client Sample ID: SB-18-14'-15'

Lab Sample ID: 880-41890-3
Matrix: Solid
Date Collected: 04/03/24 12:15
Date Received: 04/05/24 11:04

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	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:22	SMC	EET MID

Client Sample ID: SB-19-0'-1'

Lab Sample ID: 880-41890-4
Matrix: Solid
Date Collected: 04/03/24 13:30
Date Received: 04/05/24 11:04

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	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:28	SMC	EET MID

Client Sample ID: SB-19-2'-3'

Lab Sample ID: 880-41890-5
Matrix: Solid
Date Collected: 04/03/24 13:35
Date Received: 04/05/24 11:04

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	77564	04/08/24 09:22	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	77568	04/08/24 12:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			77721	04/08/24 12:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			77658	04/06/24 04:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	77497	04/05/24 14:44	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	77422	04/06/24 04:10	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:35	SMC	EET MID

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Client Sample ID: SB-20-0'-1'

Lab Sample ID: 880-41890-6
Matrix: Solid
Date Collected: 04/03/24 14:00
Date Received: 04/05/24 11:04

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	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:41	SMC	EET MID

Client Sample ID: SB-20-2'-3'

Lab Sample ID: 880-41890-7
Matrix: Solid
Date Collected: 04/03/24 14:05
Date Received: 04/05/24 11:04

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	77564	04/08/24 09:22	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	77568	04/08/24 13:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			77721	04/08/24 13:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			77658	04/06/24 04:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	77497	04/05/24 14:44	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	77422	04/06/24 04:31	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:47	SMC	EET MID

Client Sample ID: SB-21-0'-1'

Lab Sample ID: 880-41890-8
Matrix: Solid
Date Collected: 04/03/24 14:35
Date Received: 04/05/24 11:04

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	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 21:54	SMC	EET MID

Client Sample ID: SB-21-2'-3'

Lab Sample ID: 880-41890-9
Matrix: Solid
Date Collected: 04/03/24 14:40
Date Received: 04/05/24 11:04

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	77564	04/08/24 09:22	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	77568	04/08/24 13:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			77721	04/08/24 13:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			77658	04/06/24 04:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	77497	04/05/24 14:44	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	77422	04/06/24 04:52	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	77629	04/08/24 14:29	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77728	04/09/24 22:00	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 47

Job ID: 880-41890-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41890-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-41890-1	SB-18-4'-5'	Solid	04/03/24 10:50	04/05/24 11:04	4-5
880-41890-2	SB-18-10'-11'	Solid	04/03/24 11:40	04/05/24 11:04	10-11
880-41890-3	SB-18-14'-15'	Solid	04/03/24 12:15	04/05/24 11:04	14-15
880-41890-4	SB-19-0'-1'	Solid	04/03/24 13:30	04/05/24 11:04	0-1
880-41890-5	SB-19-2'-3'	Solid	04/03/24 13:35	04/05/24 11:04	2-3
880-41890-6	SB-20-0'-1'	Solid	04/03/24 14:00	04/05/24 11:04	0-1
880-41890-7	SB-20-2'-3'	Solid	04/03/24 14:05	04/05/24 11:04	2-3
880-41890-8	SB-21-0'-1'	Solid	04/03/24 14:35	04/05/24 11:04	0-1
880-41890-9	SB-21-2'-3'	Solid	04/03/24 14:40	04/05/24 11:04	2-3

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-41890-1
SDG Number: Lovington, NM

Login Number: 41890
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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis U.S., Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

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JOB DESCRIPTION

WLU 47
Lovington, NM

JOB NUMBER

880-41919-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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

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

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Laboratory Job ID: 880-41919-1
SDG: Lovington, NM

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Definitions/Glossary

Client: Arcadis U.S., Inc. Job ID: 880-41919-1
Project/Site: WLU 47 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.
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
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 47

Job ID: 880-41919-1

Job ID: 880-41919-1 Eurofins Midland

Job Narrative
880-41919-1

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 4/8/2024 9:02 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-22-2'-3' (880-41919-1), SB-22-8'-9' (880-41919-2), SB-22-12'-13' (880-41919-3), SB-23-4'-5' (880-41919-4), SB-23-8'-9' (880-41919-5), SB-23-10'-11' (880-41919-6), SB-24-0-1' (880-41919-7) and SB-24-2'-3' (880-41919-8).

GC VOA
Method 8021B: The following sample was diluted due to the nature of the sample matrix: SB-22-2'-3' (880-41919-1). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-77526 and analytical batch 880-77550 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-22-2'-3' (880-41919-1), SB-22-8'-9' (880-41919-2), (880-41908-A-11-A), (880-41908-A-11-B MS) and (880-41908-A-11-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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 47

Job ID: 880-41919-1
SDG: Lovington, NM

Client Sample ID: SB-22-2'-3'

Lab Sample ID: 880-41919-1
Matrix: Solid

Date Collected: 04/04/24 09:20
Date Received: 04/08/24 09:02
Sample Depth: 2-3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.0107**	**J**	0.0199	0.00383	mg/Kg		04/08/24 09:22	04/08/24 20:09	10
Toluene	<0.00453	U	0.0199	0.00453	mg/Kg		04/08/24 09:22	04/08/24 20:09	10
Ethylbenzene	<0.00562	U	0.0199	0.00562	mg/Kg		04/08/24 09:22	04/08/24 20:09	10
m-Xylene & p-Xylene	<0.0100	U	0.0398	0.0100	mg/Kg		04/08/24 09:22	04/08/24 20:09	10
o-Xylene	<0.00342	U	0.0199	0.00342	mg/Kg		04/08/24 09:22	04/08/24 20:09	10
Xylenes, Total	<0.0100	U	0.0398	0.0100	mg/Kg		04/08/24 09:22	04/08/24 20:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*04/08/24 09:22*	*04/08/24 20:09*	*10*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*04/08/24 09:22*	*04/08/24 20:09*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0107**	**J**	0.0398	0.0100	mg/Kg			04/08/24 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**46.5**	**J**	49.9	15.0	mg/Kg			04/08/24 21:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**46.5**	**J**	49.9	15.0	mg/Kg		04/08/24 10:40	04/08/24 21:15	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.9	15.0	mg/Kg		04/08/24 10:40	04/08/24 21:15	1
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		04/08/24 10:40	04/08/24 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*183*	*S1+*	*70 - 130*	*04/08/24 10:40*	*04/08/24 21:15*	*1*
o-Terphenyl	*145*	*S1+*	*70 - 130*	*04/08/24 10:40*	*04/08/24 21:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**637**		5.04	0.398	mg/Kg			04/10/24 19:11	1

Client Sample ID: SB-22-8'-9'

Lab Sample ID: 880-41919-2
Matrix: Solid

Date Collected: 04/04/24 10:00
Date Received: 04/08/24 09:02
Sample Depth: 8-9

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		04/08/24 09:22	04/08/24 19:08	1
Toluene	<0.000451	U	0.00198	0.000451	mg/Kg		04/08/24 09:22	04/08/24 19:08	1
Ethylbenzene	<0.000559	U	0.00198	0.000559	mg/Kg		04/08/24 09:22	04/08/24 19:08	1
m-Xylene & p-Xylene	<0.00100	U	0.00396	0.00100	mg/Kg		04/08/24 09:22	04/08/24 19:08	1
o-Xylene	<0.000341	U	0.00198	0.000341	mg/Kg		04/08/24 09:22	04/08/24 19:08	1
Xylenes, Total	<0.00100	U	0.00396	0.00100	mg/Kg		04/08/24 09:22	04/08/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*04/08/24 09:22*	*04/08/24 19:08*	*1*

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Client Sample ID: SB-22-8'-9'

Lab Sample ID: 880-41919-2
Matrix: Solid
Date Collected: 04/04/24 10:00
Date Received: 04/08/24 09:02
Sample Depth: 8-9

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	91		70 - 130	04/08/24 09:22	04/08/24 19:08	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			04/08/24 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	32.2	J	49.8	14.9	mg/Kg			04/08/24 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	32.2	J	49.8	14.9	mg/Kg		04/08/24 10:40	04/08/24 21:36	1
Diesel Range Organics (Over C10-C28)	<14.9	U	49.8	14.9	mg/Kg		04/08/24 10:40	04/08/24 21:36	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		04/08/24 10:40	04/08/24 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	173	S1+	70 - 130	04/08/24 10:40	04/08/24 21:36	1
o-Terphenyl	135	S1+	70 - 130	04/08/24 10:40	04/08/24 21:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1380		25.3	1.99	mg/Kg			04/11/24 12:41	5

Client Sample ID: SB-22-12'-13'

Lab Sample ID: 880-41919-3
Matrix: Solid
Date Collected: 04/04/24 10:45
Date Received: 04/08/24 09:02
Sample Depth: 12-13

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1090		5.05	0.399	mg/Kg			04/11/24 12:46	1

Client Sample ID: SB-23-4'-5'

Lab Sample ID: 880-41919-4
Matrix: Solid
Date Collected: 04/04/24 12:30
Date Received: 04/08/24 09:02
Sample Depth: 4-5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	178		5.05	0.399	mg/Kg			04/10/24 19:45	1

Client Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Client Sample ID: SB-23-8'-9'

Lab Sample ID: 880-41919-5
Matrix: Solid
Date Collected: 04/04/24 13:25
Date Received: 04/08/24 09:02
Sample Depth: 8-9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	292		5.03	0.397	mg/Kg			04/10/24 19:49	1

Client Sample ID: SB-23-10'-11'

Lab Sample ID: 880-41919-6
Matrix: Solid
Date Collected: 04/04/24 13:50
Date Received: 04/08/24 09:02
Sample Depth: 10-11

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.8		5.04	0.398	mg/Kg			04/10/24 19:54	1

Client Sample ID: SB-24-0-1'

Lab Sample ID: 880-41919-7
Matrix: Solid
Date Collected: 04/04/24 14:45
Date Received: 04/08/24 09:02
Sample Depth: 0-1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.1		5.02	0.397	mg/Kg			04/10/24 19:59	1

Client Sample ID: SB-24-2'-3'

Lab Sample ID: 880-41919-8
Matrix: Solid
Date Collected: 04/04/24 14:50
Date Received: 04/08/24 09:02
Sample Depth: 2-3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.53		5.01	0.396	mg/Kg			04/10/24 20:04	1

Surrogate Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, 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)
880-41919-1	SB-22-2'-3'	82	115
880-41919-2	SB-22-8'-9'	88	91
LCS 880-77564/1-A	Lab Control Sample	101	117
LCSD 880-77564/2-A	Lab Control Sample Dup	117	101
MB 880-77564/5-A	Method Blank	71	105

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)
880-41919-1	SB-22-2'-3'	183 S1+	145 S1+
880-41919-2	SB-22-8'-9'	173 S1+	135 S1+
LCS 880-77526/2-A	Lab Control Sample	98	95
LCSD 880-77526/3-A	Lab Control Sample Dup	83	73
MB 880-77526/1-A	Method Blank	245 S1+	197 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-77564/5-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		04/08/24 09:22	04/08/24 12:36	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		04/08/24 09:22	04/08/24 12:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:36*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*04/08/24 09:22*	*04/08/24 12:36*	*1*

Lab Sample ID: LCS 880-77564/1-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77564

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09146		mg/Kg		91	70 - 130		
Toluene			0.100	0.09023		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.09523		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1934		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09499		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*117*		*70 - 130*

Lab Sample ID: LCSD 880-77564/2-A
Matrix: Solid
Analysis Batch: 77568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77564

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09181		mg/Kg		92	70 - 130	0	35
Toluene			0.100	0.09962		mg/Kg		100	70 - 130	10	35
Ethylbenzene			0.100	0.1108		mg/Kg		111	70 - 130	15	35
m-Xylene & p-Xylene			0.200	0.2274		mg/Kg		114	70 - 130	16	35
o-Xylene			0.100	0.1118		mg/Kg		112	70 - 130	16	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

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

Lab Sample ID: MB 880-77526/1-A
Matrix: Solid
Analysis Batch: 77550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 77526

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		04/06/24 08:45	04/08/24 09:11	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		04/06/24 08:45	04/08/24 09:11	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		04/06/24 08:45	04/08/24 09:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*245*	*S1+*	*70 - 130*	*04/06/24 08:45*	*04/08/24 09:11*	*1*
o-Terphenyl	*197*	*S1+*	*70 - 130*	*04/06/24 08:45*	*04/08/24 09:11*	*1*

Lab Sample ID: LCS 880-77526/2-A
Matrix: Solid
Analysis Batch: 77550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 77526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	905.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	900.1		mg/Kg		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-77526/3-A
Matrix: Solid
Analysis Batch: 77550

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 77526

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	941.7		mg/Kg		94	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	891.8		mg/Kg		89	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*83*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-77719/1-A
Matrix: Solid
Analysis Batch: 77819

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			04/10/24 17:48	1

QC Sample Results

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-77719/2-A
Matrix: Solid
Analysis Batch: 77819

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	272.8		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-77719/3-A
Matrix: Solid
Analysis Batch: 77819

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	273.3		mg/Kg		109	90 - 110	0	20

Lab Sample ID: 880-41919-1 MS
Matrix: Solid
Analysis Batch: 77819

Client Sample ID: SB-22-2'-3'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	637		252	888.4		mg/Kg		100	90 - 110		

Lab Sample ID: 880-41919-1 MSD
Matrix: Solid
Analysis Batch: 77819

Client Sample ID: SB-22-2'-3'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	637		252	885.1		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

GC VOA

Prep Batch: 77564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	5030B	
880-41919-2	SB-22-8'-9'	Total/NA	Solid	5030B	
MB 880-77564/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-77564/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-77564/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 77568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	8021B	77564
880-41919-2	SB-22-8'-9'	Total/NA	Solid	8021B	77564
MB 880-77564/5-A	Method Blank	Total/NA	Solid	8021B	77564
LCS 880-77564/1-A	Lab Control Sample	Total/NA	Solid	8021B	77564
LCSD 880-77564/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	77564

Analysis Batch: 77724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	Total BTEX	
880-41919-2	SB-22-8'-9'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 77526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	8015NM Prep	
880-41919-2	SB-22-8'-9'	Total/NA	Solid	8015NM Prep	
MB 880-77526/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-77526/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-77526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 77550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	8015B NM	77526
880-41919-2	SB-22-8'-9'	Total/NA	Solid	8015B NM	77526
MB 880-77526/1-A	Method Blank	Total/NA	Solid	8015B NM	77526
LCS 880-77526/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	77526
LCSD 880-77526/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	77526

Analysis Batch: 77754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Total/NA	Solid	8015 NM	
880-41919-2	SB-22-8'-9'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 77719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Soluble	Solid	DI Leach	
880-41919-2	SB-22-8'-9'	Soluble	Solid	DI Leach	
880-41919-3	SB-22-12'-13'	Soluble	Solid	DI Leach	
880-41919-4	SB-23-4'-5'	Soluble	Solid	DI Leach	
880-41919-5	SB-23-8'-9'	Soluble	Solid	DI Leach	
880-41919-6	SB-23-10'-11'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

HPLC/IC (Continued)

Leach Batch: 77719 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-7	SB-24-0-1'	Soluble	Solid	DI Leach	
880-41919-8	SB-24-2'-3'	Soluble	Solid	DI Leach	
MB 880-77719/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-77719/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-77719/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-41919-1 MS	SB-22-2'-3'	Soluble	Solid	DI Leach	
880-41919-1 MSD	SB-22-2'-3'	Soluble	Solid	DI Leach	

Analysis Batch: 77819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-41919-1	SB-22-2'-3'	Soluble	Solid	300.0	77719
880-41919-2	SB-22-8'-9'	Soluble	Solid	300.0	77719
880-41919-3	SB-22-12'-13'	Soluble	Solid	300.0	77719
880-41919-4	SB-23-4'-5'	Soluble	Solid	300.0	77719
880-41919-5	SB-23-8'-9'	Soluble	Solid	300.0	77719
880-41919-6	SB-23-10'-11'	Soluble	Solid	300.0	77719
880-41919-7	SB-24-0-1'	Soluble	Solid	300.0	77719
880-41919-8	SB-24-2'-3'	Soluble	Solid	300.0	77719
MB 880-77719/1-A	Method Blank	Soluble	Solid	300.0	77719
LCS 880-77719/2-A	Lab Control Sample	Soluble	Solid	300.0	77719
LCSD 880-77719/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	77719
880-41919-1 MS	SB-22-2'-3'	Soluble	Solid	300.0	77719
880-41919-1 MSD	SB-22-2'-3'	Soluble	Solid	300.0	77719

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Client Sample ID: SB-22-2'-3'

Lab Sample ID: 880-41919-1
Matrix: Solid
Date Collected: 04/04/24 09:20
Date Received: 04/08/24 09:02

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	77564	04/08/24 09:22	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	77568	04/08/24 20:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			77724	04/08/24 20:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			77754	04/08/24 21:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	77526	04/08/24 10:40	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	77550	04/08/24 21:15	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 19:11	SMC	EET MID

Client Sample ID: SB-22-8'-9'

Lab Sample ID: 880-41919-2
Matrix: Solid
Date Collected: 04/04/24 10:00
Date Received: 04/08/24 09:02

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	77564	04/08/24 09:22	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	77568	04/08/24 19:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			77724	04/08/24 19:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			77754	04/08/24 21:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	77526	04/08/24 10:40	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	77550	04/08/24 21:36	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	77819	04/11/24 12:41	SMC	EET MID

Client Sample ID: SB-22-12'-13'

Lab Sample ID: 880-41919-3
Matrix: Solid
Date Collected: 04/04/24 10:45
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/11/24 12:46	SMC	EET MID

Client Sample ID: SB-23-4'-5'

Lab Sample ID: 880-41919-4
Matrix: Solid
Date Collected: 04/04/24 12:30
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 19:45	SMC	EET MID

Lab Chronicle

Client: Arcadis U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Client Sample ID: SB-23-8'-9'

Lab Sample ID: 880-41919-5
Matrix: Solid
Date Collected: 04/04/24 13:25
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 19:49	SMC	EET MID

Client Sample ID: SB-23-10'-11'

Lab Sample ID: 880-41919-6
Matrix: Solid
Date Collected: 04/04/24 13:50
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 19:54	SMC	EET MID

Client Sample ID: SB-24-0-1'

Lab Sample ID: 880-41919-7
Matrix: Solid
Date Collected: 04/04/24 14:45
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 19:59	SMC	EET MID

Client Sample ID: SB-24-2'-3'

Lab Sample ID: 880-41919-8
Matrix: Solid
Date Collected: 04/04/24 14:50
Date Received: 04/08/24 09:02

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	77719	04/09/24 10:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	77819	04/10/24 20:04	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 47

Job ID: 880-41919-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
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 U.S., Inc.
Project/Site: WLU 47

Job ID: 880-41919-1
SDG: Lovington, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-41919-1	SB-22-2'-3'	Solid	04/04/24 09:20	04/08/24 09:02	2-3
880-41919-2	SB-22-8'-9'	Solid	04/04/24 10:00	04/08/24 09:02	8-9
880-41919-3	SB-22-12'-13'	Solid	04/04/24 10:45	04/08/24 09:02	12-13
880-41919-4	SB-23-4'-5'	Solid	04/04/24 12:30	04/08/24 09:02	4-5
880-41919-5	SB-23-8'-9'	Solid	04/04/24 13:25	04/08/24 09:02	8-9
880-41919-6	SB-23-10'-11'	Solid	04/04/24 13:50	04/08/24 09:02	10-11
880-41919-7	SB-24-0-1'	Solid	04/04/24 14:45	04/08/24 09:02	0-1
880-41919-8	SB-24-2'-3'	Solid	04/04/24 14:50	04/08/24 09:02	2-3

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

eurofins | Environment Testing

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
Little Rock, AR (501) 224-5060

Wo

880-41919 Chain of Custody

Project Manager:	Morgan Linden	Bill to (if different)	
Company Name:	Ar. adig	Company Name	
Address	1004 N Big Spring Suite 300	Address	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone	281-644-1487 Email	Email	Doug.Boyd@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.	Linam SWD	Turn Around	☑ Routine ☐ Rush
Project Number:	30204001	Due Date:	
Project Location.	Lovington, NM	TAT starts the day received by the lab, if received by 4 30pm	
Sampler's Name	Heath Boyd		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice	Yes (No)	
Samples Received Intact:	(Yes) No	Thermometer ID	INE	
Cooler Custody Seals	Yes No (N/A)	Correction Factor	-.10	
Sample Custody Seals	Yes No (N/A)	Temperature Reading	30	
Total Containers		Corrected Temperature	25	

ANALYSIS REQUEST

Pres. Code / Parameters: 8021B | 300.0 Chl | 8015 GRO DRO ORO (28d)

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3
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	Sample Comments
SB-22-2'-3'	S	4/4/24	920	2-3	G	1	
SB-22-8'-9'			1000	8-9		1	
SB-22-12'-13'			1045	12-13		1	
SB-23-4'-5'			1230	4-5		1	
SB-23-8'-9'			1325	8-9		1	
SB-23 10'-11'			1350	10-11		1	
SB 24 0'-1'			1445	0-1		1	
SB-24 2'-3'			1450	2-3		1	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr 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		4/4/24 1200	2		4/8/24
3			4		902
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Arcadis U.S., Inc.

Job Number: 880-41919-1
SDG Number: Lovington, NM

Login Number: 41919
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 C

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

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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.
10205 Westheimer Road Suite 800 | Houston, Texas | 77042 | USA
T +1 713 953 4853
M +1 281 725 7477
www.arcadis.com







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

Appendix B

NMOCD and NMOSE Correspondence

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Monday, November 18, 2024 11:34 AM
To: Foord, Scott
Cc: Brand, Chris M; Jordan, Morgan
Subject: RE: [EXTERNAL] In. No. nPAC0708526071 - Chevron WLU-47 DTW Boring Question

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Good Morning Scott,

My apologies. We were given a phone upgrade and apparently my phone was temporarily shut down during the transition to an Apple phone. I received the phone today, so once it is done being set up, I should be back online.

You can just add the new information to your closure report for submittal. Be sure to update the depth to groundwater on your C-141 when submitting the report.

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/

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 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: Monday, November 18, 2024 10:30 AM
To: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Brand, Chris M <Chrisbrand@chevron.com>; Jordan, Morgan <Douglas.Jordan@arcadis.com>
Subject: [EXTERNAL] In. No. nPAC0708526071 - Chevron WLU-47 DTW Boring Question

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

Ashley,

I've been trying to call the number on your email signature (505-635-5000) and can't get through for some reason. Can you please give me a call when you have a chance regarding this site?

We evaluated the topographic elevations of the site vs the well we initially used as our depth to water and decided to install a boring at the site. We documented water at 52.7 feet bgs at the site and would like to revise our closure

criteria from the most stringent to the 51-100 feet screening levels. We also have vertical delineation now to below 600 for Cl.

Should we revise the Work Plan and resubmit, or can we just add this new info to the closure request report assuming you approve the 10k screening limits for Cl at 4 ft bgs?

nPAC0708526071

Thanks,
Scott

Scott Foord PG, RSO, CPM
RFPS Group Service Leader
Arcadis U.S., Inc.
1330 Post Oak Blvd, Suite 2250 | Houston, Texas | 77056 | USA
T +1 713 953 4853
ARCADIS
M +1 281 725 7477
www.arcadis.com

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Narcisse, Kim

From: Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Sent: Wednesday, October 9, 2024 9:39 AM
To: Foord, Scott; Hall, Brittany, EMNRD
Cc: Smith, Cory, EMNRD; Jordan, Morgan; Brand, Chris M
Subject: RE: [EXTERNAL] nPAC0708526071 Sample Variance Request (Chevron WLU-47)

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Scott,

Your variance request to sample every 400 square feet is approved. Please include this email in all subsequent reports.

Thanks,
Ashley

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: Wednesday, October 9, 2024 8:35 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Brand, Chris M <Chrisbrand@chevron.com>
Subject: RE: [EXTERNAL] nPAC0708526071 Sample Variance Request (Chevron WLU-47)

@Maxwell, Ashley, EMNRD and @Hall, Brittany, EMNRD I hope all is well, Just following up on the sampling variance request below. We are currently excavating and anticipate beginning sampling activities soon.

Thanks,
Scott
Direct 713-953-4853
Cell 281-725-7477

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Monday, October 7, 2024 9:37 AM
To: Foord, Scott <William.Foord@arcadis.com>; Maxwell, Ashley, EMNRD <Ashley.Maxwell@emnrd.nm.gov>
Cc: Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Brand, Chris M

<Chrisbrand@chevron.com>
Subject: RE: [EXTERNAL] nPAC0708526071 Sample Variance Request (Chevron WLU-47)

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Scott,

I am including Ashley Maxwell on this reply. She is the reviewer of nPAC0708526071 and will be the contact for the sample variance request.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/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: Friday, October 4, 2024 9:35 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Jordan, Morgan <Douglas.Jordan@arcadis.com>; Brand, Chris M <Chrisbrand@chevron.com>
Subject: [EXTERNAL] nPAC0708526071 Sample Variance Request (Chevron WLU-47)

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

Brittany,

I hope all is well and happy Friday. We began hydro excavation utility clearance at the WLU-47 site this week and anticipate excavation activities beginning early next week. This is another site we have conducted extensive assessment activities on and has a large footprint of at least approximately 33,500 square feet. We'd like to please request approval for a variance of 400 square feet sampling areas as we feel this frequency would sufficiently verify clean up standards have been met across the excavation area.

Please let me know if you need any additional information or would like to discuss further.

Thanks,
Scott

Scott Foord PG, RSO, CPM
RFPS Group Service Leader
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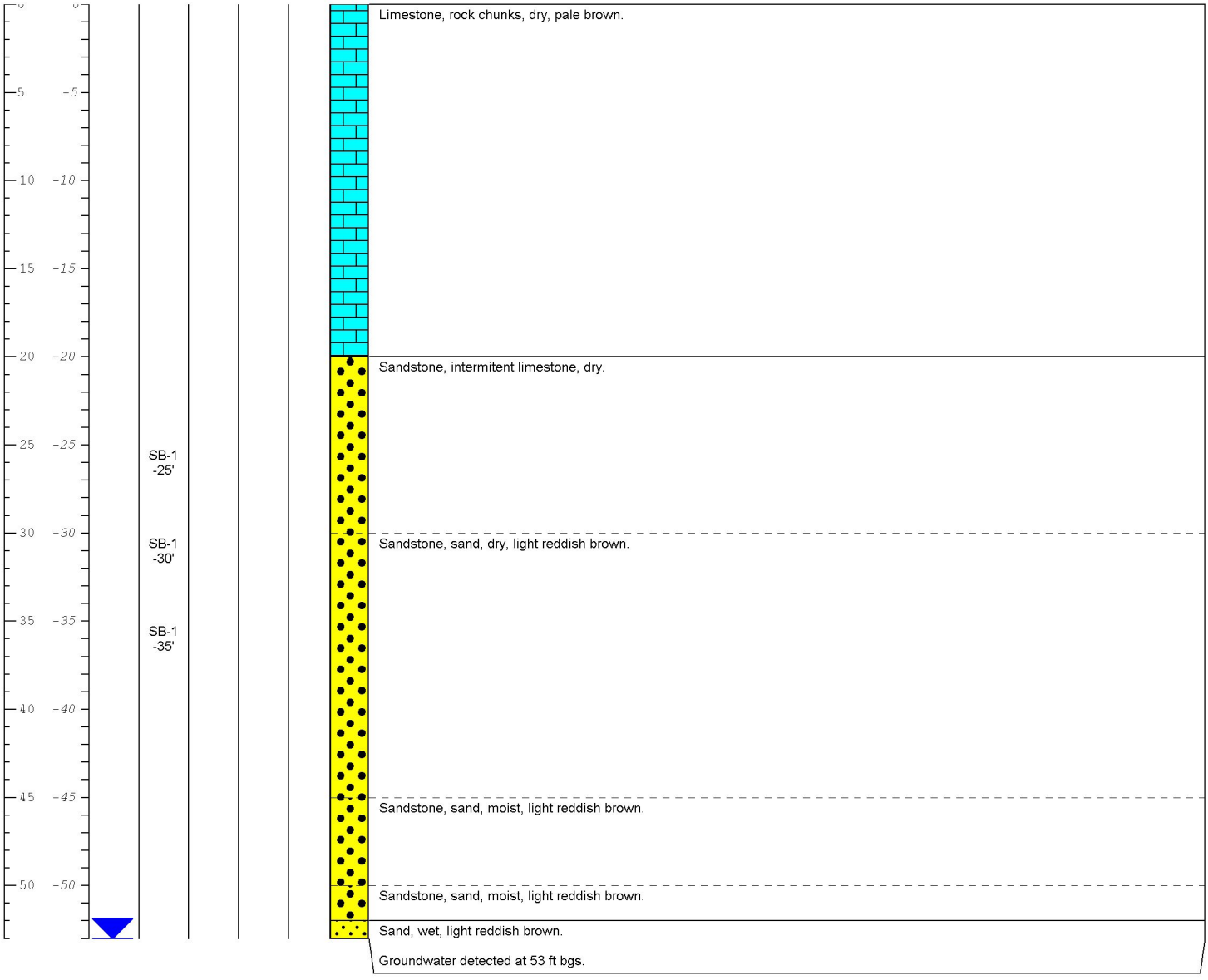
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Appendix C

Boring Logs

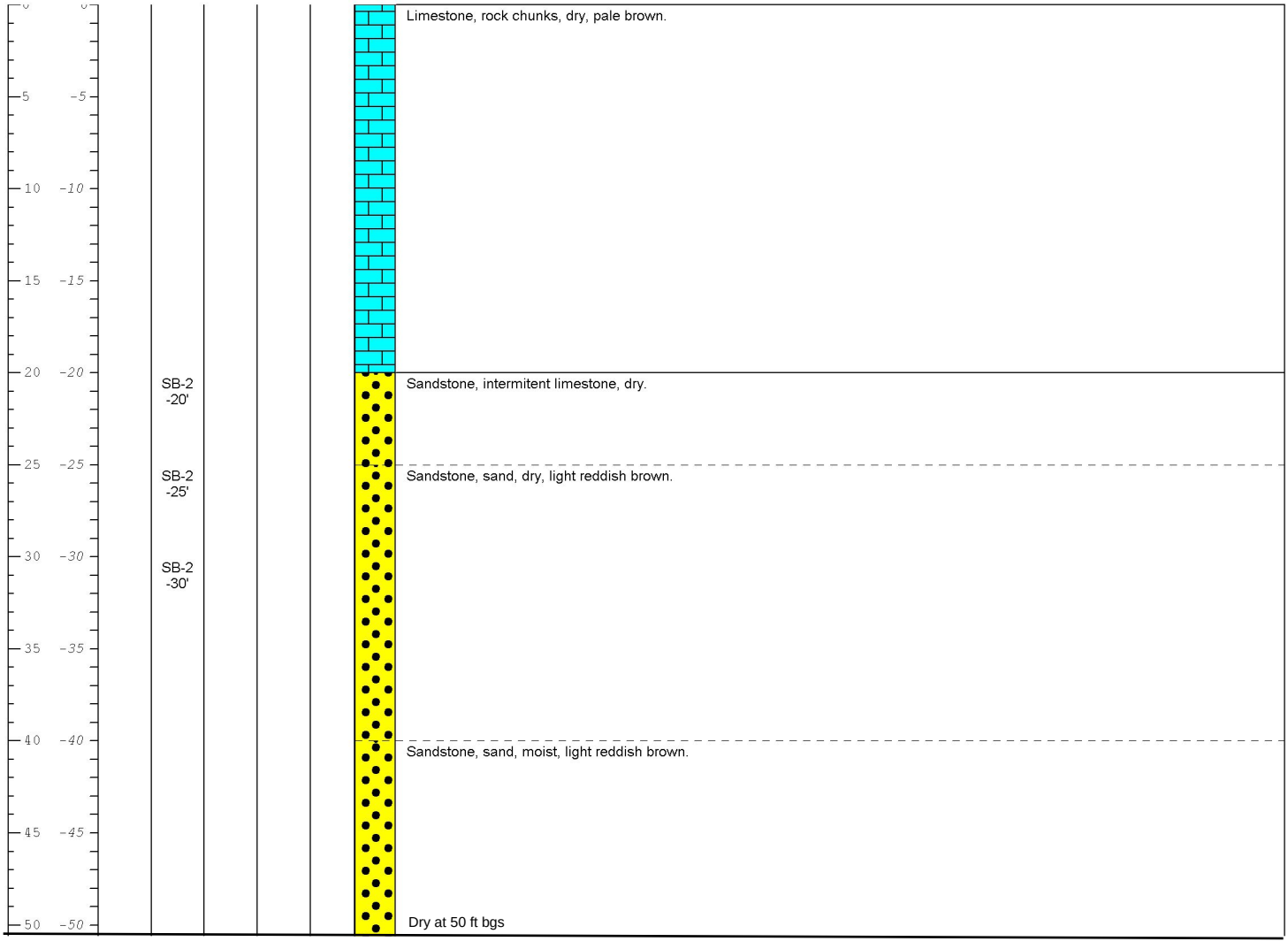
Date Start/Finish: 11-13-2024 **Drilling Company:** HCl **Driller's Name:** Kenny Cooper **Drilling Method:** Air Rotary **Sampling Method:** Grab **Rig Type:** Air Rotary	**Latitude:** 32.856360 **Longitude:** -103.365928 **Casing Elevation:** Not Surveyed **Borehole Depth:** 53' **Surface Elevation:** Not Surveyed **Descriptions By:** Chris Payton	**Well/Boring ID:** SB-1 **Client:** Chevron Mid-Continent Business Unit **Location:** WLU 47 Site, Lea County, NM



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Remarks: 1. Below ground surface (bgs)

Date Start/Finish: 11-13-2024 **Drilling Company:** HCl **Driller's Name:** Kenny Cooper **Drilling Method:** Air Rotary **Sampling Method:** Grab **Rig Type:** Air Rotary	**Latitude:** 32.856033 **Longitude:** -103.366023 **Casing Elevation:** Not Surveyed **Borehole Depth:** 50 ft bgs **Surface Elevation:** Not Surveyed **Descriptions By:** Chris Payton	**Well/Boring ID:** SB-2 **Client:** Chevron Mid-Continent Business Unit **Location:** WLU 47 Site, Lea County, NM



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Remarks: 1. Below ground surface (bgs)

Appendix D

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 8:45:45 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

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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
Matrix: Solid
Analysis Batch: 88304

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	253.6		mg/Kg		101	90 - 110	0	20

Lab Sample ID: MB 880-88303/1-A
Matrix: Solid
Analysis Batch: 88314

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 21:08	1

Lab Sample ID: LCS 880-88303/2-A
Matrix: Solid
Analysis Batch: 88314

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-88303/3-A
Matrix: Solid
Analysis Batch: 88314

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.2		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 880-47195-1 MS
Matrix: Solid
Analysis Batch: 88314

Client Sample ID: SW-3-2'
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 88314

Client Sample ID: SW-3-2'
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 88314

Client Sample ID: B-9-4'
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 88314

Client Sample ID: B-9-4'
Prep Type: Soluble

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

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 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

Work Order No: 880-47195 Chain of Custody

www.xenco.com Page 1 of 5

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

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 8/12/24		8/13/24 1030
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 1/10/2025 8:43:45 AM
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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-ORG-FM-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

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 8/12/24		8/13/24 1030
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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Chain of Custody

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

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 ~~BLEX TAT~~ ☒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	Parameters: 300_ORG_FM-28D	8021 B	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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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	EC	8/12/24 1555	2 8/12/24 EC		8/13/24 1030
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 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

Work Order No: 47195

www.xenco.com Page 4 of 5

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	Pres. Code	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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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 0730
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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Chain of Custody

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

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	Parameters: 300_ORGFM_28D	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

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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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Justin Nixon
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 11/27/2024 11:32:19 AM

JOB DESCRIPTION

WW 47

JOB NUMBER

890-7414-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
11/27/2024 11:32:19 AM

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

Client: Arcadis US Inc.
Project/Site: WW 47

Laboratory Job ID: 890-7414-1

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 890-7414-1
Project/Site: WW 47

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
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: WW 47

Job ID: 890-7414-1

Job ID: 890-7414-1 Eurofins Carlsbad

Job Narrative
890-7414-1

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 11/25/2024 3:15 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 10.8°C.

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

Diesel Range Organics
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW-4-2 (890-7414-1). 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
Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-96613 and analytical batch 880-96616 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

The associated samples are: SW-4-2 (890-7414-1), SW-5-2 (890-7414-2), (880-51534-A-1-A), (880-51534-A-1-B MS) and (880-51534-A-1-C MSD).

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

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

Client Sample ID: SW-4-2

Lab Sample ID: 890-7414-1
Matrix: Solid
Date Collected: 11/25/24 13:30
Date Received: 11/25/24 15:15

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		11/26/24 09:16	11/26/24 12:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 12:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		11/26/24 09:16	11/26/24 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 12:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		11/26/24 09:16	11/26/24 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*11/26/24 09:16*	*11/26/24 12:03*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*11/26/24 09:16*	*11/26/24 12:03*	*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			11/26/24 12:03	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			11/26/24 12:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 12:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 12:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/25/24 08:25*	*11/26/24 12:30*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*11/25/24 08:25*	*11/26/24 12:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**491**		10.1		mg/Kg			11/26/24 10:49	1

Client Sample ID: SW-5-2

Lab Sample ID: 890-7414-2
Matrix: Solid
Date Collected: 11/25/24 13:45
Date Received: 11/25/24 15:15

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		11/26/24 09:16	11/26/24 12:24	1
Toluene	<0.00202	U	0.00202		mg/Kg		11/26/24 09:16	11/26/24 12:24	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		11/26/24 09:16	11/26/24 12:24	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		11/26/24 09:16	11/26/24 12:24	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		11/26/24 09:16	11/26/24 12:24	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		11/26/24 09:16	11/26/24 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*11/26/24 09:16*	*11/26/24 12:24*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*11/26/24 09:16*	*11/26/24 12:24*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

Client Sample ID: SW-5-2

Date Collected: 11/25/24 13:45
Date Received: 11/25/24 15:15

Lab Sample ID: 890-7414-2

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			11/26/24 12:24	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			11/26/24 12:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		11/25/24 08:25	11/26/24 12:46	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/25/24 08:25	11/26/24 12:46	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/25/24 08:25	11/26/24 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*11/25/24 08:25*	*11/26/24 12:46*	*1*
o-Terphenyl	*71*		*70 - 130*	*11/25/24 08:25*	*11/26/24 12:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**494**		10.1		mg/Kg			11/26/24 11:09	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-7414-1	SW-4-2	112	108										
890-7414-1 MS	SW-4-2	106	103										
890-7414-1 MSD	SW-4-2	105	103										
890-7414-2	SW-5-2	112	106										
LCS 880-96628/1-A	Lab Control Sample	107	104										
LCSD 880-96628/2-A	Lab Control Sample Dup	109	104										
MB 880-96628/5-A	Method Blank	110	101										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-7414-1	SW-4-2	89	69 S1-										
890-7414-2	SW-5-2	92	71										
LCS 880-96467/2-A	Lab Control Sample	90	82										
LCSD 880-96467/3-A	Lab Control Sample Dup	92	82										
MB 880-96467/1-A	Method Blank	113	91										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96628/5-A
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96628

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/26/24 09:16	11/26/24 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/26/24 09:16	11/26/24 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/26/24 09:16	11/26/24 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*11/26/24 09:16*	*11/26/24 11:41*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/26/24 09:16*	*11/26/24 11:41*	*1*

Lab Sample ID: LCS 880-96628/1-A
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96628

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1122		mg/Kg		112	70 - 130
Toluene	0.100	0.1111		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1107		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2250		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1155		mg/Kg		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-96628/2-A
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96628

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1115		mg/Kg		112	70 - 130	1	35
Toluene	0.100	0.1110		mg/Kg		111	70 - 130	0	35
Ethylbenzene	0.100	0.1106		mg/Kg		111	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2236		mg/Kg		112	70 - 130	1	35
o-Xylene	0.100	0.1146		mg/Kg		115	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-7414-1 MS
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: SW-4-2
Prep Type: Total/NA
Prep Batch: 96628

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1135		mg/Kg		113	70 - 130
Toluene	<0.00200	U	0.100	0.1120		mg/Kg		112	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

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

Lab Sample ID: 890-7414-1 MS
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: SW-4-2
Prep Type: Total/NA
Prep Batch: 96628

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1111		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2255		mg/Kg		113	70 - 130
o-Xylene	<0.00200	U	0.100	0.1157		mg/Kg		115	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-7414-1 MSD
Matrix: Solid
Analysis Batch: 96618

Client Sample ID: SW-4-2
Prep Type: Total/NA
Prep Batch: 96628

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.1133		mg/Kg		114	70 - 130	0	35
Toluene	<0.00200	U	0.0994	0.1124		mg/Kg		113	70 - 130	0	35
Ethylbenzene	<0.00200	U	0.0994	0.1121		mg/Kg		113	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2270		mg/Kg		114	70 - 130	1	35
o-Xylene	<0.00200	U	0.0994	0.1163		mg/Kg		117	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 880-96467/1-A
Matrix: Solid
Analysis Batch: 96624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96467

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 08:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 08:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/25/24 08:25	11/26/24 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*11/25/24 08:25*	*11/26/24 08:02*	*1*
o-Terphenyl	*91*		*70 - 130*	*11/25/24 08:25*	*11/26/24 08:02*	*1*

Lab Sample ID: LCS 880-96467/2-A
Matrix: Solid
Analysis Batch: 96624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	993.9		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	835.4		mg/Kg		84	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

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

Lab Sample ID: LCS 880-96467/2-A
Matrix: Solid
Analysis Batch: 96624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96467

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: LCSD 880-96467/3-A
Matrix: Solid
Analysis Batch: 96624

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96467

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1036		mg/Kg		104	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	827.1		mg/Kg		83	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	82		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96613/1-A
Matrix: Solid
Analysis Batch: 96616

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			11/26/24 09:49	1

Lab Sample ID: LCS 880-96613/2-A
Matrix: Solid
Analysis Batch: 96616

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	251.3		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-96613/3-A
Matrix: Solid
Analysis Batch: 96616

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	247.9		mg/Kg		99	90 - 110	1	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

GC VOA

Analysis Batch: 96618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	8021B	96628
890-7414-2	SW-5-2	Total/NA	Solid	8021B	96628
MB 880-96628/5-A	Method Blank	Total/NA	Solid	8021B	96628
LCS 880-96628/1-A	Lab Control Sample	Total/NA	Solid	8021B	96628
LCSD 880-96628/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96628
890-7414-1 MS	SW-4-2	Total/NA	Solid	8021B	96628
890-7414-1 MSD	SW-4-2	Total/NA	Solid	8021B	96628

Prep Batch: 96628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	5035	
890-7414-2	SW-5-2	Total/NA	Solid	5035	
MB 880-96628/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96628/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96628/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7414-1 MS	SW-4-2	Total/NA	Solid	5035	
890-7414-1 MSD	SW-4-2	Total/NA	Solid	5035	

Analysis Batch: 96723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	Total BTEX	
890-7414-2	SW-5-2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	8015NM Prep	
890-7414-2	SW-5-2	Total/NA	Solid	8015NM Prep	
MB 880-96467/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96467/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	8015B NM	96467
890-7414-2	SW-5-2	Total/NA	Solid	8015B NM	96467
MB 880-96467/1-A	Method Blank	Total/NA	Solid	8015B NM	96467
LCS 880-96467/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96467
LCSD 880-96467/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96467

Analysis Batch: 96759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Total/NA	Solid	8015 NM	
890-7414-2	SW-5-2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 96613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Soluble	Solid	DI Leach	
890-7414-2	SW-5-2	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

HPLC/IC (Continued)

Leach Batch: 96613 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-96613/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96613/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96613/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 96616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7414-1	SW-4-2	Soluble	Solid	300.0	96613
890-7414-2	SW-5-2	Soluble	Solid	300.0	96613
MB 880-96613/1-A	Method Blank	Soluble	Solid	300.0	96613
LCS 880-96613/2-A	Lab Control Sample	Soluble	Solid	300.0	96613
LCSD 880-96613/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96613

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WW 47

Job ID: 890-7414-1

Client Sample ID: SW-4-2

Date Collected: 11/25/24 13:30
Date Received: 11/25/24 15:15

Lab Sample ID: 890-7414-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	96628	11/26/24 09:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96618	11/26/24 12:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96723	11/26/24 12:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			96759	11/26/24 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96467	11/25/24 08:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96624	11/26/24 12:30	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96613	11/26/24 07:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96616	11/26/24 10:49	SMC	EET MID

Client Sample ID: SW-5-2

Date Collected: 11/25/24 13:45
Date Received: 11/25/24 15:15

Lab Sample ID: 890-7414-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	96628	11/26/24 09:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96618	11/26/24 12:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96723	11/26/24 12:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			96759	11/26/24 12:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96467	11/25/24 08:25	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96624	11/26/24 12:46	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96613	11/26/24 07:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96616	11/26/24 11:09	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: WW 47

Job ID: 890-7414-1

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: WW 47

Job ID: 890-7414-1

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: WW 47

Job ID: 890-7414-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7414-1	SW-4-2	Solid	11/25/24 13:30	11/25/24 15:15
890-7414-2	SW-5-2	Solid	11/25/24 13:45	11/25/24 15:15

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 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: WW 47	Project #: 30246600.00004			
Site: Lea County, NM	SSOW#:			

Analysis Requested

Preservation Codes: N - None

890-7414 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:					X	X	N	N	N	X	
SW-4-2'	11/25/24	1330	G	Solid	N	N	X	X	X	1	
SW-5-2'	11/25/24	1345	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	

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
				15:15 11/25	
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: -0.2 11.0 10.8

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:03:14 PM
11/27/2024
Page 18 of 20
Released to Imaging: 1/10/2025 8:43:45 AM

Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 890-7414-1

Login Number: 7414 **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: 890-7414-1

Login Number: 7414 **List Source: Eurofins Midland**
List Number: 2 **List Creation: 11/26/24 07:52 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	

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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 12/6/2024 11:37:00 AM

JOB DESCRIPTION

WLU 47

JOB NUMBER

890-7424-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Client: Arcadis US Inc.
Project/Site: WLU 47

Laboratory Job ID: 890-7424-1

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Definitions/Glossary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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 47

Job ID: 890-7424-1

Job ID: 890-7424-1 Eurofins Carlsbad

Job Narrative
890-7424-1

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 11/27/2024 10:52 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.6°C.

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SB-5-4 (890-7424-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-96841 recovered above the upper control limit for o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-96841/20).

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 880-96830 and analytical batch 880-96860 was outside the control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-96830 and analytical batch 880-96860 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 samples were outside control limits: (LCS 880-96831/2-A) and (LCSD 880-96831/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-96860 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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 880-96899 and analytical batch 880-96958 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: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-1-4

Date Collected: 11/26/24 13:00
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-1
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		12/02/24 08:33	12/02/24 12:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 12:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 12:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 12:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 12:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*12/02/24 08:33*	*12/02/24 12:21*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/02/24 08:33*	*12/02/24 12:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/02/24 12:21	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			12/02/24 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 14:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 14:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/02/24 07:51*	*12/02/24 14:41*	*1*
o-Terphenyl	*84*		*70 - 130*	*12/02/24 07:51*	*12/02/24 14:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**665**		9.92		mg/Kg			12/03/24 19:08	1

Client Sample ID: SB-2-4

Date Collected: 11/26/24 13:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-2
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		12/02/24 08:33	12/02/24 12:41	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 12:41	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 12:41	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/02/24 08:33	12/02/24 12:41	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 12:41	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/02/24 08:33	12/02/24 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/02/24 08:33*	*12/02/24 12:41*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/02/24 08:33*	*12/02/24 12:41*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-2-4
Date Collected: 11/26/24 13:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			12/02/24 12:41	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			12/02/24 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 15:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 15:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:11*	*1*
o-Terphenyl	*92*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**799**		9.92		mg/Kg			12/03/24 19:24	1

Client Sample ID: SB-3-4
Date Collected: 11/26/24 13:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-3
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		12/02/24 08:33	12/02/24 13:02	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:02	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/02/24 08:33	12/02/24 13:02	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:02	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/02/24 08:33	12/02/24 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*12/02/24 08:33*	*12/02/24 13:02*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 13:02*	*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			12/02/24 13:02	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			12/02/24 15:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 15:25	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-3-4

Lab Sample ID: 890-7424-3
Matrix: Solid
Date Collected: 11/26/24 13:20
Date Received: 11/27/24 10:52

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		12/02/24 07:51	12/02/24 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:25*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1730**		50.5		mg/Kg			12/03/24 19:29	5

Client Sample ID: SB-4-4

Lab Sample ID: 890-7424-4
Matrix: Solid
Date Collected: 11/26/24 13:30
Date Received: 11/27/24 10:52

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		12/02/24 08:33	12/02/24 13:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 13:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 13:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*12/02/24 08:33*	*12/02/24 13:22*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/02/24 08:33*	*12/02/24 13:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			12/02/24 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/02/24 15:41	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		12/02/24 07:51	12/02/24 15:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 15:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:41*	*1*
o-Terphenyl	*83*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1190**		9.96		mg/Kg			12/03/24 19:35	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-5-4

Date Collected: 11/26/24 13:40
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-5
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		12/02/24 08:33	12/02/24 13:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 13:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 13:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 13:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 13:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*12/02/24 08:33*	*12/02/24 13:43*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/02/24 08:33*	*12/02/24 13:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/02/24 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/02/24 15:55	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		12/02/24 07:51	12/02/24 15:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 15:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:55*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/02/24 07:51*	*12/02/24 15:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**675**		10.0		mg/Kg			12/03/24 19:40	1

Client Sample ID: SB-6-4

Date Collected: 11/26/24 13:50
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-6
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		12/02/24 08:33	12/02/24 14:03	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 14:03	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 14:03	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 14:03	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 14:03	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:03*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:03*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-6-4
Date Collected: 11/26/24 13:50
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/02/24 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/02/24 16:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/02/24 07:51	12/02/24 16:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/02/24 07:51	12/02/24 16:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/02/24 07:51	12/02/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:10*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**671**		10.0		mg/Kg			12/03/24 19:56	1

Client Sample ID: SB-7-4
Date Collected: 11/26/24 14:05
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-7
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		12/02/24 08:33	12/02/24 14:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 14:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 14:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 14:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 14:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:24*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/02/24 14:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/02/24 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 16:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 16:25	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-7-4
Date Collected: 11/26/24 14:05
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-7
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		12/02/24 07:51	12/02/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:25*	*1*
o-Terphenyl	*74*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**326**		9.94		mg/Kg			12/03/24 20:01	1

Client Sample ID: SB-8-4
Date Collected: 11/26/24 14:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-8
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		12/02/24 08:33	12/02/24 14:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 14:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 14:44	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 14:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 14:44	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 14:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:44*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 14:44*	*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			12/02/24 14:44	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			12/02/24 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 16:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 16:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:40*	*1*
o-Terphenyl	*77*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**289**		9.96		mg/Kg			12/03/24 20:07	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-9-4

Date Collected: 11/26/24 14:25
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-9
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		12/02/24 08:33	12/02/24 15:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 15:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 15:05	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/02/24 08:33	12/02/24 15:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 15:05	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/02/24 08:33	12/02/24 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*12/02/24 08:33*	*12/02/24 15:05*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 15:05*	*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			12/02/24 15:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/02/24 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 16:54	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 16:54	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/02/24 07:51	12/02/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:54*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/02/24 07:51*	*12/02/24 16:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**345**		10.1		mg/Kg			12/03/24 20:12	1

Client Sample ID: SB-10-4

Date Collected: 11/26/24 14:40
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-10
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		12/02/24 08:33	12/02/24 15:25	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 15:25	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 15:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 15:25	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 15:25	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*12/02/24 08:33*	*12/02/24 15:25*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 15:25*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-10-4
Date Collected: 11/26/24 14:40
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/02/24 15:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/02/24 17:10	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		12/02/24 07:51	12/02/24 17:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 17:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/02/24 07:51	12/02/24 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*12/02/24 07:51*	*12/02/24 17:10*	*1*
o-Terphenyl	*81*		*70 - 130*	*12/02/24 07:51*	*12/02/24 17:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**935**		10.0		mg/Kg			12/03/24 20:17	1

Client Sample ID: SB-11-4
Date Collected: 11/26/24 14:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-11
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		12/02/24 08:33	12/02/24 16:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 16:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 16:49	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 16:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 16:49	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*12/02/24 08:33*	*12/02/24 16:49*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 16:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/02/24 16:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/02/24 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 17:25	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-11-4
Date Collected: 11/26/24 14:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-11
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		12/02/24 07:51	12/02/24 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/02/24 07:51*	*12/02/24 17:25*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/02/24 07:51*	*12/02/24 17:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**573**		10.0		mg/Kg			12/03/24 20:22	1

Client Sample ID: SB-12-4
Date Collected: 11/26/24 14:55
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-12
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		12/02/24 08:33	12/02/24 17:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 17:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/02/24 08:33	12/02/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:09*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/02/24 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			12/02/24 14:41	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		12/02/24 07:54	12/02/24 14:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 14:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/02/24 07:54*	*12/02/24 14:41*	*1*
o-Terphenyl	*96*		*70 - 130*	*12/02/24 07:54*	*12/02/24 14:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**501**		10.1		mg/Kg			12/03/24 20:38	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-13-4

Date Collected: 11/26/24 15:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-13
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		12/02/24 08:33	12/02/24 17:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 17:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 17:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:30*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:30*	*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			12/02/24 17:30	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			12/02/24 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 15:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 15:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**293**		9.96		mg/Kg			12/03/24 20:44	1

Client Sample ID: SB-14-4

Date Collected: 11/26/24 15:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		12/02/24 08:33	12/02/24 17:50	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/02/24 08:33	12/02/24 17:50	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/02/24 08:33	12/02/24 17:50	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/02/24 08:33	12/02/24 17:50	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/02/24 08:33	12/02/24 17:50	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/02/24 08:33	12/02/24 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:50*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/02/24 08:33*	*12/02/24 17:50*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-14-4
Date Collected: 11/26/24 15:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			12/02/24 17:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/02/24 15:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 15:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 15:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:25*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**394**		9.92		mg/Kg			12/03/24 21:00	1

Client Sample ID: SB-15-4
Date Collected: 11/26/24 15:30
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-15
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		12/02/24 08:33	12/02/24 18:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 18:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 18:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 18:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 18:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:11*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:11*	*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			12/02/24 18:11	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			12/02/24 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 15:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 15:41	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-15-4

Lab Sample ID: 890-7424-15
Matrix: Solid
Date Collected: 11/26/24 15:30
Date Received: 11/27/24 10:52

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		12/02/24 07:54	12/02/24 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:41*	*1*
o-Terphenyl	*97*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**460**		10.1		mg/Kg			12/03/24 21:05	1

Client Sample ID: SB-16-4

Lab Sample ID: 890-7424-16
Matrix: Solid
Date Collected: 11/26/24 15:45
Date Received: 11/27/24 10:52

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		12/02/24 08:33	12/02/24 18:31	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 18:31	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 18:31	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 18:31	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/02/24 08:33	12/02/24 18:31	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/02/24 08:33	12/02/24 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:31*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:31*	*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			12/02/24 18:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/02/24 15:55	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		12/02/24 07:54	12/02/24 15:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 15:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:55*	*1*
o-Terphenyl	*91*		*70 - 130*	*12/02/24 07:54*	*12/02/24 15:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**357**		9.94		mg/Kg			12/03/24 21:10	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-17-4

Date Collected: 11/26/24 15:55
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-17
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		12/02/24 08:33	12/02/24 18:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 18:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 18:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 18:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 18:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:52*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/02/24 08:33*	*12/02/24 18:52*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/02/24 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/02/24 16:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/02/24 07:54	12/02/24 16:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/02/24 07:54	12/02/24 16:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/02/24 07:54	12/02/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:10*	*1*
o-Terphenyl	*98*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**283**		9.98		mg/Kg			12/03/24 21:15	1

Client Sample ID: SB-18-4

Date Collected: 11/26/24 16:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-18
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		12/02/24 08:33	12/02/24 19:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 19:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 19:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 19:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/02/24 08:33	12/02/24 19:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/02/24 08:33	12/02/24 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:12*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:12*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-18-4
Date Collected: 11/26/24 16:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/02/24 19:12	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			12/02/24 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 16:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 16:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:25*	*1*
o-Terphenyl	*90*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**588**		9.96		mg/Kg			12/03/24 21:21	1

Client Sample ID: SB-19-4
Date Collected: 11/26/24 16:15
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-19
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		12/02/24 08:33	12/02/24 19:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 19:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 19:33	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/02/24 08:33	12/02/24 19:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 19:33	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/02/24 08:33	12/02/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:33*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:33*	*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			12/02/24 19:33	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			12/02/24 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 16:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 16:40	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-19-4

Lab Sample ID: 890-7424-19
Matrix: Solid
Date Collected: 11/26/24 16:15
Date Received: 11/27/24 10:52

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		12/02/24 07:54	12/02/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:40*	*1*
o-Terphenyl	*88*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**608**		9.98		mg/Kg			12/03/24 21:26	1

Client Sample ID: SB-20-4

Lab Sample ID: 890-7424-20
Matrix: Solid
Date Collected: 11/26/24 16:30
Date Received: 11/27/24 10:52

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		12/02/24 08:33	12/02/24 19:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 19:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 19:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 19:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/02/24 08:33	12/02/24 19:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/02/24 08:33	12/02/24 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:53*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/02/24 08:33*	*12/02/24 19:53*	*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			12/02/24 19:53	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			12/02/24 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 16:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 16:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/02/24 07:54	12/02/24 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:54*	*1*
o-Terphenyl	*92*		*70 - 130*	*12/02/24 07:54*	*12/02/24 16:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**439**		10.0		mg/Kg			12/03/24 21:31	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-21-4
Date Collected: 11/26/24 16:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-21
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		12/02/24 08:36	12/02/24 18:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 18:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		12/02/24 08:36	12/02/24 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 18:10	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		12/02/24 08:36	12/02/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/02/24 08:36*	*12/02/24 18:10*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/02/24 08:36*	*12/02/24 18:10*	*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			12/02/24 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/02/24 17:10	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	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 17:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 17:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/02/24 07:54	12/02/24 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/02/24 07:54*	*12/02/24 17:10*	*1*
o-Terphenyl	*93*		*70 - 130*	*12/02/24 07:54*	*12/02/24 17:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**500**	**F1**	10.1		mg/Kg			12/06/24 03:52	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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)
890-7424-1	SB-1-4	123	94
890-7424-1 MS	SB-1-4	105	99
890-7424-1 MSD	SB-1-4	100	99
890-7424-2	SB-2-4	120	93
890-7424-3	SB-3-4	124	95
890-7424-4	SB-4-4	122	94
890-7424-5	SB-5-4	137 S1+	92
890-7424-6	SB-6-4	127	95
890-7424-7	SB-7-4	120	95
890-7424-8	SB-8-4	126	95
890-7424-9	SB-9-4	124	95
890-7424-10	SB-10-4	127	95
890-7424-11	SB-11-4	124	95
890-7424-12	SB-12-4	118	94
890-7424-13	SB-13-4	125	95
890-7424-14	SB-14-4	126	96
890-7424-15	SB-15-4	122	94
890-7424-16	SB-16-4	125	96
890-7424-17	SB-17-4	127	93
890-7424-18	SB-18-4	127	95
890-7424-19	SB-19-4	127	97
890-7424-20	SB-20-4	126	96
890-7424-21	SB-21-4	105	101
LCS 880-96834/1-A	Lab Control Sample	101	100
LCS 880-96835/1-A	Lab Control Sample	107	99
LCSD 880-96834/2-A	Lab Control Sample Dup	100	98
LCSD 880-96835/2-A	Lab Control Sample Dup	105	100
MB 880-96834/5-A	Method Blank	116	86
MB 880-96835/5-A	Method Blank	97	95

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)
890-7424-1	SB-1-4	97	84
890-7424-2	SB-2-4	107	92
890-7424-3	SB-3-4	89	79
890-7424-4	SB-4-4	95	83
890-7424-5	SB-5-4	88	76
890-7424-6	SB-6-4	86	73
890-7424-7	SB-7-4	86	74
890-7424-8	SB-8-4	88	77
890-7424-9	SB-9-4	91	79
890-7424-10	SB-10-4	94	81

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-7424-11	SB-11-4	87	75								
890-7424-12	SB-12-4	91	96								
890-7424-13	SB-13-4	91	95								
890-7424-14	SB-14-4	90	95								
890-7424-15	SB-15-4	91	97								
890-7424-16	SB-16-4	86	91								
890-7424-17	SB-17-4	93	98								
890-7424-18	SB-18-4	87	90								
890-7424-19	SB-19-4	83	88								
890-7424-20	SB-20-4	89	92								
890-7424-21	SB-21-4	90	93								
LCS 880-96830/2-A	Lab Control Sample	116	93								
LCS 880-96831/2-A	Lab Control Sample	147 S1+	135 S1+								
LCSD 880-96830/3-A	Lab Control Sample Dup	123	99								
LCSD 880-96831/3-A	Lab Control Sample Dup	147 S1+	135 S1+								
MB 880-96830/1-A	Method Blank	77	69 S1-								
MB 880-96831/1-A	Method Blank	78	82								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96834/5-A
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96834

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 11:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 11:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 11:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 11:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:33	12/02/24 11:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/02/24 08:33	12/02/24 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/02/24 08:33*	*12/02/24 11:59*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*12/02/24 08:33*	*12/02/24 11:59*	*1*

Lab Sample ID: LCS 880-96834/1-A
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96834

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1219		mg/Kg		122	70 - 130
Toluene	0.100	0.1127		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.1155		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	0.200	0.2312		mg/Kg		116	70 - 130
o-Xylene	0.100	0.1183		mg/Kg		118	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-96834/2-A
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96834

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1216		mg/Kg		122	70 - 130	0	35
Toluene	0.100	0.1144		mg/Kg		114	70 - 130	1	35
Ethylbenzene	0.100	0.1175		mg/Kg		117	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2351		mg/Kg		118	70 - 130	2	35
o-Xylene	0.100	0.1190		mg/Kg		119	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-7424-1 MS
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: SB-1-4
Prep Type: Total/NA
Prep Batch: 96834

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1149		mg/Kg		115	70 - 130
Toluene	<0.00200	U	0.100	0.1065		mg/Kg		106	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

Lab Sample ID: 890-7424-1 MS
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: SB-1-4
Prep Type: Total/NA
Prep Batch: 96834

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1097		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2202		mg/Kg		110	70 - 130
o-Xylene	<0.00200	U	0.100	0.1119		mg/Kg		112	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-7424-1 MSD
Matrix: Solid
Analysis Batch: 96839

Client Sample ID: SB-1-4
Prep Type: Total/NA
Prep Batch: 96834

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.1176		mg/Kg		118	70 - 130	2	35
Toluene	<0.00200	U	0.0994	0.1101		mg/Kg		111	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.0994	0.1134		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2267		mg/Kg		114	70 - 130	3	35
o-Xylene	<0.00200	U	0.0994	0.1155		mg/Kg		116	70 - 130	3	35

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

Lab Sample ID: MB 880-96835/5-A
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 12:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 12:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 12:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/02/24 08:36	12/02/24 12:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/02/24 08:36	12/02/24 12:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/02/24 08:36	12/02/24 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*12/02/24 08:36*	*12/02/24 12:08*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/02/24 08:36*	*12/02/24 12:08*	*1*

Lab Sample ID: LCS 880-96835/1-A
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1083		mg/Kg		108	70 - 130
Toluene	0.100	0.1066		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1158		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2290		mg/Kg		114	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

Lab Sample ID: LCS 880-96835/1-A
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96835

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1280		mg/Kg		128	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-96835/2-A
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96835

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1103		mg/Kg		110	70 - 130	2	35
Toluene			0.100	0.1079		mg/Kg		108	70 - 130	1	35
Ethylbenzene			0.100	0.1154		mg/Kg		115	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2285		mg/Kg		114	70 - 130	0	35
o-Xylene			0.100	0.1275		mg/Kg		127	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-96830/1-A
Matrix: Solid
Analysis Batch: 96860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96830

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		12/02/24 07:51	12/02/24 10:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 10:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:51	12/02/24 10:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*12/02/24 07:51*	*12/02/24 10:08*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/02/24 07:51*	*12/02/24 10:08*	*1*

Lab Sample ID: LCS 880-96830/2-A
Matrix: Solid
Analysis Batch: 96860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96830

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1158		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	889.6		mg/Kg		89	70 - 130		

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

Lab Sample ID: LCS 880-96830/2-A
Matrix: Solid
Analysis Batch: 96860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96830

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-96830/3-A
Matrix: Solid
Analysis Batch: 96860

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96830

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1209		mg/Kg		121	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	933.6		mg/Kg		93	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: MB 880-96831/1-A
Matrix: Solid
Analysis Batch: 96862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96831

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		12/02/24 07:54	12/02/24 10:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 10:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/02/24 07:54	12/02/24 10:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	12/02/24 07:54	12/02/24 10:08	1
o-Terphenyl	82		70 - 130	12/02/24 07:54	12/02/24 10:08	1

Lab Sample ID: LCS 880-96831/2-A
Matrix: Solid
Analysis Batch: 96862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96831

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1214		mg/Kg		121	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1187		mg/Kg		119	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

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

Lab Sample ID: LCSD 880-96831/3-A
Matrix: Solid
Analysis Batch: 96862

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96831

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1231		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1196		mg/Kg		120	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*147*	*S1+*	*70 - 130*
o-Terphenyl	*135*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96898/1-A
Matrix: Solid
Analysis Batch: 96933

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			12/03/24 18:53	1

Lab Sample ID: LCS 880-96898/2-A
Matrix: Solid
Analysis Batch: 96933

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	249.5		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-96898/3-A
Matrix: Solid
Analysis Batch: 96933

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	250.3		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-7424-1 MS
Matrix: Solid
Analysis Batch: 96933

Client Sample ID: SB-1-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	665		248	891.5		mg/Kg		91	90 - 110		

Lab Sample ID: 890-7424-1 MSD
Matrix: Solid
Analysis Batch: 96933

Client Sample ID: SB-1-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	665		248	893.9		mg/Kg		92	90 - 110	0	20

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-7424-11 MS
Matrix: Solid
Analysis Batch: 96933

Client Sample ID: SB-11-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	573		251	846.7		mg/Kg		109	90 - 110

Lab Sample ID: 890-7424-11 MSD
Matrix: Solid
Analysis Batch: 96933

Client Sample ID: SB-11-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	573		251	846.3		mg/Kg		109	90 - 110	0	20

Lab Sample ID: MB 880-96899/1-A
Matrix: Solid
Analysis Batch: 96958

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			12/06/24 03:32	1

Lab Sample ID: LCS 880-96899/2-A
Matrix: Solid
Analysis Batch: 96958

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	251.2		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-96899/3-A
Matrix: Solid
Analysis Batch: 96958

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	270.6		mg/Kg		108	90 - 110	7	20

Lab Sample ID: 890-7424-21 MS
Matrix: Solid
Analysis Batch: 96958

Client Sample ID: SB-21-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	500	F1	252	878.3	F1	mg/Kg		150	90 - 110

Lab Sample ID: 890-7424-21 MSD
Matrix: Solid
Analysis Batch: 96958

Client Sample ID: SB-21-4
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	500	F1	252	811.3	F1	mg/Kg		123	90 - 110	8	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

GC VOA

Prep Batch: 96834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	5035	
890-7424-2	SB-2-4	Total/NA	Solid	5035	
890-7424-3	SB-3-4	Total/NA	Solid	5035	
890-7424-4	SB-4-4	Total/NA	Solid	5035	
890-7424-5	SB-5-4	Total/NA	Solid	5035	
890-7424-6	SB-6-4	Total/NA	Solid	5035	
890-7424-7	SB-7-4	Total/NA	Solid	5035	
890-7424-8	SB-8-4	Total/NA	Solid	5035	
890-7424-9	SB-9-4	Total/NA	Solid	5035	
890-7424-10	SB-10-4	Total/NA	Solid	5035	
890-7424-11	SB-11-4	Total/NA	Solid	5035	
890-7424-12	SB-12-4	Total/NA	Solid	5035	
890-7424-13	SB-13-4	Total/NA	Solid	5035	
890-7424-14	SB-14-4	Total/NA	Solid	5035	
890-7424-15	SB-15-4	Total/NA	Solid	5035	
890-7424-16	SB-16-4	Total/NA	Solid	5035	
890-7424-17	SB-17-4	Total/NA	Solid	5035	
890-7424-18	SB-18-4	Total/NA	Solid	5035	
890-7424-19	SB-19-4	Total/NA	Solid	5035	
890-7424-20	SB-20-4	Total/NA	Solid	5035	
MB 880-96834/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96834/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96834/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7424-1 MS	SB-1-4	Total/NA	Solid	5035	
890-7424-1 MSD	SB-1-4	Total/NA	Solid	5035	

Prep Batch: 96835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-21	SB-21-4	Total/NA	Solid	5035	
MB 880-96835/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96835/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96835/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 96839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	8021B	96834
890-7424-2	SB-2-4	Total/NA	Solid	8021B	96834
890-7424-3	SB-3-4	Total/NA	Solid	8021B	96834
890-7424-4	SB-4-4	Total/NA	Solid	8021B	96834
890-7424-5	SB-5-4	Total/NA	Solid	8021B	96834
890-7424-6	SB-6-4	Total/NA	Solid	8021B	96834
890-7424-7	SB-7-4	Total/NA	Solid	8021B	96834
890-7424-8	SB-8-4	Total/NA	Solid	8021B	96834
890-7424-9	SB-9-4	Total/NA	Solid	8021B	96834
890-7424-10	SB-10-4	Total/NA	Solid	8021B	96834
890-7424-11	SB-11-4	Total/NA	Solid	8021B	96834
890-7424-12	SB-12-4	Total/NA	Solid	8021B	96834
890-7424-13	SB-13-4	Total/NA	Solid	8021B	96834
890-7424-14	SB-14-4	Total/NA	Solid	8021B	96834
890-7424-15	SB-15-4	Total/NA	Solid	8021B	96834
890-7424-16	SB-16-4	Total/NA	Solid	8021B	96834

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

GC VOA (Continued)

Analysis Batch: 96839 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-17	SB-17-4	Total/NA	Solid	8021B	96834
890-7424-18	SB-18-4	Total/NA	Solid	8021B	96834
890-7424-19	SB-19-4	Total/NA	Solid	8021B	96834
890-7424-20	SB-20-4	Total/NA	Solid	8021B	96834
MB 880-96834/5-A	Method Blank	Total/NA	Solid	8021B	96834
LCS 880-96834/1-A	Lab Control Sample	Total/NA	Solid	8021B	96834
LCSD 880-96834/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96834
890-7424-1 MS	SB-1-4	Total/NA	Solid	8021B	96834
890-7424-1 MSD	SB-1-4	Total/NA	Solid	8021B	96834

Analysis Batch: 96841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-21	SB-21-4	Total/NA	Solid	8021B	96835
MB 880-96835/5-A	Method Blank	Total/NA	Solid	8021B	96835
LCS 880-96835/1-A	Lab Control Sample	Total/NA	Solid	8021B	96835
LCSD 880-96835/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96835

Analysis Batch: 96977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	Total BTEX	
890-7424-2	SB-2-4	Total/NA	Solid	Total BTEX	
890-7424-3	SB-3-4	Total/NA	Solid	Total BTEX	
890-7424-4	SB-4-4	Total/NA	Solid	Total BTEX	
890-7424-5	SB-5-4	Total/NA	Solid	Total BTEX	
890-7424-6	SB-6-4	Total/NA	Solid	Total BTEX	
890-7424-7	SB-7-4	Total/NA	Solid	Total BTEX	
890-7424-8	SB-8-4	Total/NA	Solid	Total BTEX	
890-7424-9	SB-9-4	Total/NA	Solid	Total BTEX	
890-7424-10	SB-10-4	Total/NA	Solid	Total BTEX	
890-7424-11	SB-11-4	Total/NA	Solid	Total BTEX	
890-7424-12	SB-12-4	Total/NA	Solid	Total BTEX	
890-7424-13	SB-13-4	Total/NA	Solid	Total BTEX	
890-7424-14	SB-14-4	Total/NA	Solid	Total BTEX	
890-7424-15	SB-15-4	Total/NA	Solid	Total BTEX	
890-7424-16	SB-16-4	Total/NA	Solid	Total BTEX	
890-7424-17	SB-17-4	Total/NA	Solid	Total BTEX	
890-7424-18	SB-18-4	Total/NA	Solid	Total BTEX	
890-7424-19	SB-19-4	Total/NA	Solid	Total BTEX	
890-7424-20	SB-20-4	Total/NA	Solid	Total BTEX	
890-7424-21	SB-21-4	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	8015NM Prep	
890-7424-2	SB-2-4	Total/NA	Solid	8015NM Prep	
890-7424-3	SB-3-4	Total/NA	Solid	8015NM Prep	
890-7424-4	SB-4-4	Total/NA	Solid	8015NM Prep	
890-7424-5	SB-5-4	Total/NA	Solid	8015NM Prep	
890-7424-6	SB-6-4	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

GC Semi VOA (Continued)

Prep Batch: 96830 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-7	SB-7-4	Total/NA	Solid	8015NM Prep	
890-7424-8	SB-8-4	Total/NA	Solid	8015NM Prep	
890-7424-9	SB-9-4	Total/NA	Solid	8015NM Prep	
890-7424-10	SB-10-4	Total/NA	Solid	8015NM Prep	
890-7424-11	SB-11-4	Total/NA	Solid	8015NM Prep	
MB 880-96830/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96830/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96830/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 96831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-12	SB-12-4	Total/NA	Solid	8015NM Prep	
890-7424-13	SB-13-4	Total/NA	Solid	8015NM Prep	
890-7424-14	SB-14-4	Total/NA	Solid	8015NM Prep	
890-7424-15	SB-15-4	Total/NA	Solid	8015NM Prep	
890-7424-16	SB-16-4	Total/NA	Solid	8015NM Prep	
890-7424-17	SB-17-4	Total/NA	Solid	8015NM Prep	
890-7424-18	SB-18-4	Total/NA	Solid	8015NM Prep	
890-7424-19	SB-19-4	Total/NA	Solid	8015NM Prep	
890-7424-20	SB-20-4	Total/NA	Solid	8015NM Prep	
890-7424-21	SB-21-4	Total/NA	Solid	8015NM Prep	
MB 880-96831/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96831/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	8015B NM	96830
890-7424-2	SB-2-4	Total/NA	Solid	8015B NM	96830
890-7424-3	SB-3-4	Total/NA	Solid	8015B NM	96830
890-7424-4	SB-4-4	Total/NA	Solid	8015B NM	96830
890-7424-5	SB-5-4	Total/NA	Solid	8015B NM	96830
890-7424-6	SB-6-4	Total/NA	Solid	8015B NM	96830
890-7424-7	SB-7-4	Total/NA	Solid	8015B NM	96830
890-7424-8	SB-8-4	Total/NA	Solid	8015B NM	96830
890-7424-9	SB-9-4	Total/NA	Solid	8015B NM	96830
890-7424-10	SB-10-4	Total/NA	Solid	8015B NM	96830
890-7424-11	SB-11-4	Total/NA	Solid	8015B NM	96830
MB 880-96830/1-A	Method Blank	Total/NA	Solid	8015B NM	96830
LCS 880-96830/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96830
LCSD 880-96830/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96830

Analysis Batch: 96862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-12	SB-12-4	Total/NA	Solid	8015B NM	96831
890-7424-13	SB-13-4	Total/NA	Solid	8015B NM	96831
890-7424-14	SB-14-4	Total/NA	Solid	8015B NM	96831
890-7424-15	SB-15-4	Total/NA	Solid	8015B NM	96831
890-7424-16	SB-16-4	Total/NA	Solid	8015B NM	96831
890-7424-17	SB-17-4	Total/NA	Solid	8015B NM	96831
890-7424-18	SB-18-4	Total/NA	Solid	8015B NM	96831

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

GC Semi VOA (Continued)

Analysis Batch: 96862 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-19	SB-19-4	Total/NA	Solid	8015B NM	96831
890-7424-20	SB-20-4	Total/NA	Solid	8015B NM	96831
890-7424-21	SB-21-4	Total/NA	Solid	8015B NM	96831
MB 880-96831/1-A	Method Blank	Total/NA	Solid	8015B NM	96831
LCS 880-96831/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96831
LCSD 880-96831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96831

Analysis Batch: 96892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Total/NA	Solid	8015 NM	
890-7424-2	SB-2-4	Total/NA	Solid	8015 NM	
890-7424-3	SB-3-4	Total/NA	Solid	8015 NM	
890-7424-4	SB-4-4	Total/NA	Solid	8015 NM	
890-7424-5	SB-5-4	Total/NA	Solid	8015 NM	
890-7424-6	SB-6-4	Total/NA	Solid	8015 NM	
890-7424-7	SB-7-4	Total/NA	Solid	8015 NM	
890-7424-8	SB-8-4	Total/NA	Solid	8015 NM	
890-7424-9	SB-9-4	Total/NA	Solid	8015 NM	
890-7424-10	SB-10-4	Total/NA	Solid	8015 NM	
890-7424-11	SB-11-4	Total/NA	Solid	8015 NM	
890-7424-12	SB-12-4	Total/NA	Solid	8015 NM	
890-7424-13	SB-13-4	Total/NA	Solid	8015 NM	
890-7424-14	SB-14-4	Total/NA	Solid	8015 NM	
890-7424-15	SB-15-4	Total/NA	Solid	8015 NM	
890-7424-16	SB-16-4	Total/NA	Solid	8015 NM	
890-7424-17	SB-17-4	Total/NA	Solid	8015 NM	
890-7424-18	SB-18-4	Total/NA	Solid	8015 NM	
890-7424-19	SB-19-4	Total/NA	Solid	8015 NM	
890-7424-20	SB-20-4	Total/NA	Solid	8015 NM	
890-7424-21	SB-21-4	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 96898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Soluble	Solid	DI Leach	
890-7424-2	SB-2-4	Soluble	Solid	DI Leach	
890-7424-3	SB-3-4	Soluble	Solid	DI Leach	
890-7424-4	SB-4-4	Soluble	Solid	DI Leach	
890-7424-5	SB-5-4	Soluble	Solid	DI Leach	
890-7424-6	SB-6-4	Soluble	Solid	DI Leach	
890-7424-7	SB-7-4	Soluble	Solid	DI Leach	
890-7424-8	SB-8-4	Soluble	Solid	DI Leach	
890-7424-9	SB-9-4	Soluble	Solid	DI Leach	
890-7424-10	SB-10-4	Soluble	Solid	DI Leach	
890-7424-11	SB-11-4	Soluble	Solid	DI Leach	
890-7424-12	SB-12-4	Soluble	Solid	DI Leach	
890-7424-13	SB-13-4	Soluble	Solid	DI Leach	
890-7424-14	SB-14-4	Soluble	Solid	DI Leach	
890-7424-15	SB-15-4	Soluble	Solid	DI Leach	
890-7424-16	SB-16-4	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

HPLC/IC (Continued)

Leach Batch: 96898 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-17	SB-17-4	Soluble	Solid	DI Leach	
890-7424-18	SB-18-4	Soluble	Solid	DI Leach	
890-7424-19	SB-19-4	Soluble	Solid	DI Leach	
890-7424-20	SB-20-4	Soluble	Solid	DI Leach	
MB 880-96898/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96898/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96898/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7424-1 MS	SB-1-4	Soluble	Solid	DI Leach	
890-7424-1 MSD	SB-1-4	Soluble	Solid	DI Leach	
890-7424-11 MS	SB-11-4	Soluble	Solid	DI Leach	
890-7424-11 MSD	SB-11-4	Soluble	Solid	DI Leach	

Leach Batch: 96899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-21	SB-21-4	Soluble	Solid	DI Leach	
MB 880-96899/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96899/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96899/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7424-21 MS	SB-21-4	Soluble	Solid	DI Leach	
890-7424-21 MSD	SB-21-4	Soluble	Solid	DI Leach	

Analysis Batch: 96933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-1	SB-1-4	Soluble	Solid	300.0	96898
890-7424-2	SB-2-4	Soluble	Solid	300.0	96898
890-7424-3	SB-3-4	Soluble	Solid	300.0	96898
890-7424-4	SB-4-4	Soluble	Solid	300.0	96898
890-7424-5	SB-5-4	Soluble	Solid	300.0	96898
890-7424-6	SB-6-4	Soluble	Solid	300.0	96898
890-7424-7	SB-7-4	Soluble	Solid	300.0	96898
890-7424-8	SB-8-4	Soluble	Solid	300.0	96898
890-7424-9	SB-9-4	Soluble	Solid	300.0	96898
890-7424-10	SB-10-4	Soluble	Solid	300.0	96898
890-7424-11	SB-11-4	Soluble	Solid	300.0	96898
890-7424-12	SB-12-4	Soluble	Solid	300.0	96898
890-7424-13	SB-13-4	Soluble	Solid	300.0	96898
890-7424-14	SB-14-4	Soluble	Solid	300.0	96898
890-7424-15	SB-15-4	Soluble	Solid	300.0	96898
890-7424-16	SB-16-4	Soluble	Solid	300.0	96898
890-7424-17	SB-17-4	Soluble	Solid	300.0	96898
890-7424-18	SB-18-4	Soluble	Solid	300.0	96898
890-7424-19	SB-19-4	Soluble	Solid	300.0	96898
890-7424-20	SB-20-4	Soluble	Solid	300.0	96898
MB 880-96898/1-A	Method Blank	Soluble	Solid	300.0	96898
LCS 880-96898/2-A	Lab Control Sample	Soluble	Solid	300.0	96898
LCSD 880-96898/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96898
890-7424-1 MS	SB-1-4	Soluble	Solid	300.0	96898
890-7424-1 MSD	SB-1-4	Soluble	Solid	300.0	96898
890-7424-11 MS	SB-11-4	Soluble	Solid	300.0	96898
890-7424-11 MSD	SB-11-4	Soluble	Solid	300.0	96898

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

HPLC/IC

Analysis Batch: 96958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-21	SB-21-4	Soluble	Solid	300.0	96899
MB 880-96899/1-A	Method Blank	Soluble	Solid	300.0	96899
LCS 880-96899/2-A	Lab Control Sample	Soluble	Solid	300.0	96899
LCSD 880-96899/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96899
890-7424-21 MS	SB-21-4	Soluble	Solid	300.0	96899
890-7424-21 MSD	SB-21-4	Soluble	Solid	300.0	96899

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-1-4
Date Collected: 11/26/24 13:00
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 12:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 12:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 14:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 14:41	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 19:08	CH	EET MID

Client Sample ID: SB-2-4
Date Collected: 11/26/24 13:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 12:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 12:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 15:11	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 19:24	CH	EET MID

Client Sample ID: SB-3-4
Date Collected: 11/26/24 13:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 13:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 13:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 15:25	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	96933	12/03/24 19:29	CH	EET MID

Client Sample ID: SB-4-4
Date Collected: 11/26/24 13:30
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 13:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 13:22	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-4-4
Date Collected: 11/26/24 13:30
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-4
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			96892	12/02/24 15:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 15:41	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 19:35	CH	EET MID

Client Sample ID: SB-5-4
Date Collected: 11/26/24 13:40
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 13:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 13:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 15:55	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 19:40	CH	EET MID

Client Sample ID: SB-6-4
Date Collected: 11/26/24 13:50
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 14:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 14:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 16:10	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 19:56	CH	EET MID

Client Sample ID: SB-7-4
Date Collected: 11/26/24 14:05
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 14:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 14:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 16:25	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-7-4
Date Collected: 11/26/24 14:05
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:01	CH	EET MID

Client Sample ID: SB-8-4
Date Collected: 11/26/24 14:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 14:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 16:40	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:07	CH	EET MID

Client Sample ID: SB-9-4
Date Collected: 11/26/24 14:25
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 15:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 15:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 16:54	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:12	CH	EET MID

Client Sample ID: SB-10-4
Date Collected: 11/26/24 14:40
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 15:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 15:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 17:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 17:10	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:17	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-11-4
Date Collected: 11/26/24 14:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 16:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 16:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 17:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96830	12/02/24 07:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96860	12/02/24 17:25	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:22	CH	EET MID

Client Sample ID: SB-12-4
Date Collected: 11/26/24 14:55
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 17:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 17:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 14:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 14:41	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:38	CH	EET MID

Client Sample ID: SB-13-4
Date Collected: 11/26/24 15:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 17:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 17:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 15:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 20:44	CH	EET MID

Client Sample ID: SB-14-4
Date Collected: 11/26/24 15:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 17:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 17:50	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-14-4
Date Collected: 11/26/24 15:20
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-14
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			96892	12/02/24 15:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 15:25	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:00	CH	EET MID

Client Sample ID: SB-15-4
Date Collected: 11/26/24 15:30
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 18:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 18:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 15:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:05	CH	EET MID

Client Sample ID: SB-16-4
Date Collected: 11/26/24 15:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 18:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 18:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 15:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 15:55	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:10	CH	EET MID

Client Sample ID: SB-17-4
Date Collected: 11/26/24 15:55
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 18:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 16:10	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-17-4
Date Collected: 11/26/24 15:55
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:15	CH	EET MID

Client Sample ID: SB-18-4
Date Collected: 11/26/24 16:10
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 19:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 19:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 16:25	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:21	CH	EET MID

Client Sample ID: SB-19-4
Date Collected: 11/26/24 16:15
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 19:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 16:40	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:26	CH	EET MID

Client Sample ID: SB-20-4
Date Collected: 11/26/24 16:30
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	96834	12/02/24 08:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96839	12/02/24 19:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 19:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 16:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 16:54	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96898	12/02/24 16:11	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96933	12/03/24 21:31	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7424-1

Client Sample ID: SB-21-4

Date Collected: 11/26/24 16:45
Date Received: 11/27/24 10:52

Lab Sample ID: 890-7424-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	96835	12/02/24 08:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96841	12/02/24 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96977	12/02/24 18:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			96892	12/02/24 17:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 17:10	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96899	12/02/24 16:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96958	12/06/24 03:52	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 47

Job ID: 890-7424-1

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: WLU 47

Job ID: 890-7424-1

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: WLU 47

Job ID: 890-7424-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7424-1	SB-1-4	Solid	11/26/24 13:00	11/27/24 10:52
890-7424-2	SB-2-4	Solid	11/26/24 13:10	11/27/24 10:52
890-7424-3	SB-3-4	Solid	11/26/24 13:20	11/27/24 10:52
890-7424-4	SB-4-4	Solid	11/26/24 13:30	11/27/24 10:52
890-7424-5	SB-5-4	Solid	11/26/24 13:40	11/27/24 10:52
890-7424-6	SB-6-4	Solid	11/26/24 13:50	11/27/24 10:52
890-7424-7	SB-7-4	Solid	11/26/24 14:05	11/27/24 10:52
890-7424-8	SB-8-4	Solid	11/26/24 14:10	11/27/24 10:52
890-7424-9	SB-9-4	Solid	11/26/24 14:25	11/27/24 10:52
890-7424-10	SB-10-4	Solid	11/26/24 14:40	11/27/24 10:52
890-7424-11	SB-11-4	Solid	11/26/24 14:45	11/27/24 10:52
890-7424-12	SB-12-4	Solid	11/26/24 14:55	11/27/24 10:52
890-7424-13	SB-13-4	Solid	11/26/24 15:10	11/27/24 10:52
890-7424-14	SB-14-4	Solid	11/26/24 15:20	11/27/24 10:52
890-7424-15	SB-15-4	Solid	11/26/24 15:30	11/27/24 10:52
890-7424-16	SB-16-4	Solid	11/26/24 15:45	11/27/24 10:52
890-7424-17	SB-17-4	Solid	11/26/24 15:55	11/27/24 10:52
890-7424-18	SB-18-4	Solid	11/26/24 16:10	11/27/24 10:52
890-7424-19	SB-19-4	Solid	11/26/24 16:15	11/27/24 10:52
890-7424-20	SB-20-4	Solid	11/26/24 16:30	11/27/24 10:52
890-7424-21	SB-21-4	Solid	11/26/24 16:45	11/27/24 10:52

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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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12/6/2024

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		
Company: Arcadis U.S., Inc.	PWSID:			
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 5 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: WLU 47	Project #: 30246600.0004			
Site: Lea County, NM	SSOW#:			

890-7424 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 containers	Special Instructions/Note:
		Preservation Code:					N	N	N		
SB-1-4'	11/26/24	1300	G	Solid			X	X	X	1	
SB-2-4'		1310		Solid			X	X	X	1	
SB-3-4'		1320		Solid			X	X	X	1	
SB-4-4'		1330		Solid			X	X	X	1	
SB-5-4'		1340		Solid			X	X	X	1	
SB-6-4'		1350		Solid			X	X	X	1	
SB-7-4'		1405		Solid			X	X	X	1	
SB-8-4'		1410		Solid			X	X	X	1	
SB-9-4'		1415		Solid			X	X	X	1	
SB-10-4'		1440		Solid			X	X	X	1	
SB-11-4'	X	1445	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#007 -0.2 -1.8 -1.6

Ver: 05/06/2024

Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 AM

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 2 of 2
Company: Arcadis U.S., Inc.	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 5 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: WLU 47	Project #: 30246600.0004			
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		
SB-12-4'	11/26/24	1455	G	Solid			X	X	X	1	
SB-13-4'		1510		Solid			X	X	X	1	
SB-14-4'		1520		Solid			X	X	X	1	
SB-15-4'		1530		Solid			X	X	X	1	
SB-16-4'		1545		Solid			X	X	X	1	
SB-17-4'		1555		Solid			X	X	X	1	
SB-18-4'		1610		Solid			X	X	X	1	
SB-19-4'		1615		Solid			X	X	X	1	
SB-20-4'		1630		Solid			X	X	X	1	
SB-21-4'	X	1645	X	Solid			X	X	X	1	
	X		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: Tmmed 0.2 -1.8 -1.6

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:03:14 PM
12/6/2024
Page 47 of 49
Released to Imaging: 1/10/2025 8:43:45 AM

Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 890-7424-1

Login Number: 7424 **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: 890-7424-1

Login Number: 7424
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 12/02/24 08:24 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 12/6/2024 1:51:46 PM

JOB DESCRIPTION

WLU 47

JOB NUMBER

890-7438-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
12/6/2024 1:51:46 PM

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

Client: Arcadis US Inc.
Project/Site: WLU 47

Laboratory Job ID: 890-7438-1

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Definitions/Glossary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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
*1	LCS/LCSD RPD exceeds control limits.
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: WLU 47

Job ID: 890-7438-1

Job ID: 890-7438-1 Eurofins Carlsbad

Job Narrative
890-7438-1

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 12/4/2024 3:42 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C.

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-97133 and analytical batch 880-97120 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: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-97106 and analytical batch 880-97128 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-92-4 (890-7438-1), B-93-4 (890-7438-2), B-96-4 (890-7438-5), B-97-4 (890-7438-6), B-98-4' (890-7438-7), B-99-4' (890-7438-8), B-100-4' (890-7438-9), B-101-4' (890-7438-10), B-105-4' (890-7438-14), B-106-4' (890-7438-15) and (890-7433-A-1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97116 and analytical batch 880-97125 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: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-92-4
Date Collected: 12/04/24 09:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 12:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 12:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 12:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 12:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 12:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/05/24 09:37*	*12/05/24 12:40*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 12:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/05/24 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	<50.0	U	50.0		mg/Kg			12/05/24 12:06	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	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:06*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 12:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2170**		49.6		mg/Kg			12/05/24 10:58	5

Client Sample ID: B-93-4
Date Collected: 12/04/24 09:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-2
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		12/05/24 09:37	12/05/24 13:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 13:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 13:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 13:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 13:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 13:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:00*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:00*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-93-4
Date Collected: 12/04/24 09:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/05/24 13:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/05/24 12:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 12:23	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 12:23	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:23*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 12:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**957**		9.96		mg/Kg			12/05/24 11:16	1

Client Sample ID: B-94-4
Date Collected: 12/04/24 09:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-3
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		12/05/24 09:37	12/05/24 13:21	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 13:21	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 13:21	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 13:21	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 13:21	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:21*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/05/24 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	<49.8	U	49.8		mg/Kg			12/05/24 12:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 12:39	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 12:39	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-94-4
Date Collected: 12/04/24 09:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-3
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)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:39*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**867**		10.0		mg/Kg			12/05/24 11:22	1

Client Sample ID: B-95-4
Date Collected: 12/04/24 10:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-4
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		12/05/24 09:37	12/05/24 13:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 13:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 13:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 13:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 13:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:41*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 13:41*	*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			12/05/24 13:41	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			12/05/24 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:57*	*1*
o-Terphenyl	*70*		*70 - 130*	*12/04/24 21:12*	*12/05/24 12:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**632**		9.92		mg/Kg			12/05/24 11:28	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-96-4
Date Collected: 12/04/24 10:15
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-5
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		12/05/24 09:37	12/05/24 14:02	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 14:02	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 14:02	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 14:02	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 14:02	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:02*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			12/05/24 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	<49.8	U	49.8		mg/Kg			12/05/24 13:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 13:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 13:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/04/24 21:12*	*12/05/24 13:13*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 13:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1120**		10.1		mg/Kg			12/05/24 11:34	1

Client Sample ID: B-97-4
Date Collected: 12/04/24 10:25
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-6
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		12/05/24 09:37	12/05/24 14:22	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 14:22	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 14:22	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/05/24 09:37	12/05/24 14:22	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 14:22	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/05/24 09:37	12/05/24 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:22*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:22*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-97-4
Date Collected: 12/04/24 10:25
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/05/24 14:22	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			12/05/24 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:30	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/04/24 21:12*	*12/05/24 13:30*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 13:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1240**		9.94		mg/Kg			12/05/24 11:39	1

Client Sample ID: B-98-4'
Date Collected: 12/04/24 10:35
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-7
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		12/05/24 09:37	12/05/24 14:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 14:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 14:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 14:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 14:43	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:43*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 14:43*	*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			12/05/24 14:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/05/24 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:45	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-98-4'
Date Collected: 12/04/24 10:35
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-7
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)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*12/04/24 21:12*	*12/05/24 13:45*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 13:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**972**	**F1**	9.96		mg/Kg			12/05/24 11:45	1

Client Sample ID: B-99-4'
Date Collected: 12/04/24 10:45
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-8
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		12/05/24 09:37	12/05/24 15:03	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 15:03	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 15:03	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 15:03	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 15:03	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 15:03*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 15:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/05/24 15:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/05/24 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 16:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 16:23	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*12/04/24 21:12*	*12/05/24 16:23*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 16:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1140**		9.98		mg/Kg			12/05/24 12:03	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-100-4'

Date Collected: 12/04/24 10:55
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-9

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		12/05/24 09:37	12/05/24 16:37	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 16:37	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 16:37	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/05/24 09:37	12/05/24 16:37	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 16:37	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/05/24 09:37	12/05/24 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/05/24 09:37*	*12/05/24 16:37*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 16:37*	*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			12/05/24 16:37	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			12/05/24 16:38	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	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 16:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 16:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*12/04/24 21:12*	*12/05/24 16:38*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 16:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2130**		49.6		mg/Kg			12/05/24 12:09	5

Client Sample ID: B-101-4'

Date Collected: 12/04/24 11:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-10

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		12/05/24 09:37	12/05/24 16:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 16:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 16:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 16:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 16:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/05/24 09:37*	*12/05/24 16:58*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 16:58*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-101-4'
Date Collected: 12/04/24 11:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-10
Matrix: Solid

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			12/05/24 16:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			12/05/24 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 16:55	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 16:55	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		12/04/24 21:12	12/05/24 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*12/04/24 21:12*	*12/05/24 16:55*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 16:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**735**		10.0		mg/Kg			12/05/24 12:27	1

Client Sample ID: B-102-4'
Date Collected: 12/04/24 11:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:37	12/05/24 17:18	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:37	12/05/24 17:18	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:37	12/05/24 17:18	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/05/24 09:37	12/05/24 17:18	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:37	12/05/24 17:18	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/05/24 09:37	12/05/24 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:18*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:18*	*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			12/05/24 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/05/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 17:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 17:11	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-102-4'
Date Collected: 12/04/24 11:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-11
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)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:11*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**894**		49.7		mg/Kg			12/05/24 12:32	5

Client Sample ID: B-103-4'
Date Collected: 12/04/24 11:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 17:39	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 17:39	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 17:39	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 17:39	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 17:39	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:39*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:39*	*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			12/05/24 17:39	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			12/05/24 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 17:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 17:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:27*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**604**		10.0		mg/Kg			12/05/24 12:38	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-104-4'
Date Collected: 12/04/24 11:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-13
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		12/05/24 09:37	12/05/24 17:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 17:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 17:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 17:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 17:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:59*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 17:59*	*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			12/05/24 17:59	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			12/05/24 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 17:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 17:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:43*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/04/24 21:12*	*12/05/24 17:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**778**		10.0		mg/Kg			12/05/24 12:44	1

Client Sample ID: B-105-4'
Date Collected: 12/04/24 11:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-14
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		12/05/24 09:37	12/05/24 18:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 18:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 18:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 18:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:37	12/05/24 18:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/05/24 09:37	12/05/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:37*	*12/05/24 18:19*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 18:19*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-105-4'
Date Collected: 12/04/24 11:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			12/05/24 18:19	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			12/05/24 18:00	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		12/04/24 21:12	12/05/24 18:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 18:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:00*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 18:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**		49.6		mg/Kg			12/05/24 12:50	5

Client Sample ID: B-106-4'
Date Collected: 12/04/24 12:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-15
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		12/05/24 09:37	12/05/24 18:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 18:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 18:40	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		12/05/24 09:37	12/05/24 18:40	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 18:40	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		12/05/24 09:37	12/05/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:37*	*12/05/24 18:40*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*12/05/24 09:37*	*12/05/24 18:40*	*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			12/05/24 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/05/24 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:16	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-106-4'
Date Collected: 12/04/24 12:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-15
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)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:16*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/04/24 21:12*	*12/05/24 18:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**591**		10.0		mg/Kg			12/05/24 12:56	1

Client Sample ID: B-107-4'
Date Collected: 12/04/24 12:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-16
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		12/05/24 09:37	12/05/24 19:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 19:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 19:00	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 19:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:37	12/05/24 19:00	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:37	12/05/24 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:00*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:00*	*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			12/05/24 19:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/05/24 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 18:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 18:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/04/24 21:12	12/05/24 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:32*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**828**		9.94		mg/Kg			12/05/24 13:02	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-108-4'
Date Collected: 12/04/24 12:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-17
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		12/05/24 09:37	12/05/24 19:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 19:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 19:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 19:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 19:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/05/24 09:37	12/05/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:21*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:21*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/05/24 19:21	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			12/05/24 18:47	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	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/04/24 21:12	12/05/24 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:47*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/04/24 21:12*	*12/05/24 18:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1640**		49.7		mg/Kg			12/05/24 13:03	5

Client Sample ID: B-109-4'
Date Collected: 12/04/24 12:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-18
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		12/05/24 09:37	12/05/24 19:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 19:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 19:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/05/24 09:37	12/05/24 19:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/05/24 09:37	12/05/24 19:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/05/24 09:37	12/05/24 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:41*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:37*	*12/05/24 19:41*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-109-4'
Date Collected: 12/04/24 12:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-18
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/05/24 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/05/24 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:23*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1320**		49.6		mg/Kg			12/05/24 13:08	5

Client Sample ID: B-110-4'
Date Collected: 12/04/24 12:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-19
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:40	12/05/24 11:58	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:40	12/05/24 11:58	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/05/24 09:40	12/05/24 11:58	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		12/05/24 09:40	12/05/24 11:58	1
o-Xylene	<0.00198	U *+	0.00198		mg/Kg		12/05/24 09:40	12/05/24 11:58	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		12/05/24 09:40	12/05/24 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:40*	*12/05/24 11:58*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/05/24 09:40*	*12/05/24 11:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			12/05/24 11:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/05/24 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 16:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 16:38	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-110-4'
Date Collected: 12/04/24 12:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-19
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)	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:38*	*1*
o-Terphenyl	*89*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**901**		9.96		mg/Kg			12/05/24 13:13	1

Client Sample ID: B-111-4'
Date Collected: 12/04/24 12:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-20
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		12/05/24 09:40	12/05/24 13:40	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:40	12/05/24 13:40	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/05/24 09:40	12/05/24 13:40	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/05/24 09:40	12/05/24 13:40	1
o-Xylene	<0.00202	U *+	0.00202		mg/Kg		12/05/24 09:40	12/05/24 13:40	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/05/24 09:40	12/05/24 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/05/24 09:40*	*12/05/24 13:40*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*12/05/24 09:40*	*12/05/24 13:40*	*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			12/05/24 13:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/05/24 16:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:55	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/04/24 21:15	12/05/24 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:55*	*1*
o-Terphenyl	*91*		*70 - 130*	*12/04/24 21:15*	*12/05/24 16:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1920**		50.0		mg/Kg			12/05/24 16:23	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-112-4'
Date Collected: 12/04/24 13:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-21
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		12/05/24 09:40	12/05/24 14:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:40	12/05/24 14:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		12/05/24 09:40	12/05/24 14:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		12/05/24 09:40	12/05/24 14:01	1
o-Xylene	<0.00199	U *+	0.00199		mg/Kg		12/05/24 09:40	12/05/24 14:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		12/05/24 09:40	12/05/24 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/05/24 09:40*	*12/05/24 14:01*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/05/24 09:40*	*12/05/24 14:01*	*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			12/05/24 14:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			12/05/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 17:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 17:11	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/04/24 21:15	12/05/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*12/04/24 21:15*	*12/05/24 17:11*	*1*
o-Terphenyl	*103*		*70 - 130*	*12/04/24 21:15*	*12/05/24 17:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**320**		10.0		mg/Kg			12/05/24 16:39	1

Client Sample ID: B-113-4'
Date Collected: 12/04/24 13:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-22
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		12/05/24 09:40	12/05/24 14:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 14:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 14:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/05/24 09:40	12/05/24 14:21	1
o-Xylene	<0.00200	U *+	0.00200		mg/Kg		12/05/24 09:40	12/05/24 14:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/05/24 09:40	12/05/24 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/05/24 09:40*	*12/05/24 14:21*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/05/24 09:40*	*12/05/24 14:21*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-113-4'

Date Collected: 12/04/24 13:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-22

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/05/24 14:21	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			12/05/24 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/04/24 21:15	12/05/24 17:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:15	12/05/24 17:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:15	12/05/24 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/04/24 21:15*	*12/05/24 17:27*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/04/24 21:15*	*12/05/24 17:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**675**		9.96		mg/Kg			12/05/24 16:44	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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)
890-7438-1	B-92-4	113	108
890-7438-2	B-93-4	109	107
890-7438-3	B-94-4	112	107
890-7438-4	B-95-4	117	108
890-7438-5	B-96-4	107	107
890-7438-6	B-97-4	111	108
890-7438-7	B-98-4'	116	108
890-7438-8	B-99-4'	108	107
890-7438-9	B-100-4'	113	108
890-7438-10	B-101-4'	117	108
890-7438-11	B-102-4'	112	108
890-7438-12	B-103-4'	112	107
890-7438-13	B-104-4'	109	107
890-7438-14	B-105-4'	112	107
890-7438-15	B-106-4'	112	108
890-7438-16	B-107-4'	110	106
890-7438-17	B-108-4'	110	107
890-7438-18	B-109-4'	109	107
890-7438-19	B-110-4'	112	99
890-7438-19 MS	B-110-4'	108	104
890-7438-19 MSD	B-110-4'	109	104
890-7438-20	B-111-4'	106	104
890-7438-21	B-112-4'	107	103
890-7438-22	B-113-4'	112	101
LCS 880-97132/1-A	Lab Control Sample	106	104
LCS 880-97133/1-A	Lab Control Sample	111	102
LCSD 880-97132/2-A	Lab Control Sample Dup	106	104
LCSD 880-97133/2-A	Lab Control Sample Dup	106	102
MB 880-97132/5-A	Method Blank	111	100
MB 880-97133/5-A	Method Blank	100	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-7438-1	B-92-4	86	68 S1-
890-7438-2	B-93-4	88	69 S1-
890-7438-3	B-94-4	97	76
890-7438-4	B-95-4	87	70
890-7438-5	B-96-4	80	66 S1-
890-7438-6	B-97-4	87	68 S1-
890-7438-7	B-98-4'	84	65 S1-
890-7438-8	B-99-4'	88	68 S1-
890-7438-9	B-100-4'	89	69 S1-

Surrogate Summary

Client: Arcadis US Inc. Job ID: 890-7438-1
Project/Site: WLU 47

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-7438-10	B-101-4'	84	64 S1-								
890-7438-11	B-102-4'	95	73								
890-7438-12	B-103-4'	92	71								
890-7438-13	B-104-4'	92	72								
890-7438-14	B-105-4'	86	67 S1-								
890-7438-15	B-106-4'	91	69 S1-								
890-7438-16	B-107-4'	96	75								
890-7438-17	B-108-4'	92	71								
890-7438-18	B-109-4'	105	95								
890-7438-19	B-110-4'	99	89								
890-7438-20	B-111-4'	100	91								
890-7438-21	B-112-4'	114	103								
890-7438-22	B-113-4'	106	95								
LCS 880-97105/2-A	Lab Control Sample	103	88								
LCS 880-97106/2-A	Lab Control Sample	94	94								
LCSD 880-97105/3-A	Lab Control Sample Dup	102	90								
LCSD 880-97106/3-A	Lab Control Sample Dup	109	108								
MB 880-97105/1-A	Method Blank	100	82								
MB 880-97106/1-A	Method Blank	100	94								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-97132/5-A
Matrix: Solid
Analysis Batch: 97121

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 11:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 11:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 11:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 11:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:37	12/05/24 11:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/05/24 09:37	12/05/24 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/05/24 09:37*	*12/05/24 11:38*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/05/24 09:37*	*12/05/24 11:38*	*1*

Lab Sample ID: LCS 880-97132/1-A
Matrix: Solid
Analysis Batch: 97121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1107		mg/Kg		111	70 - 130
Toluene	0.100	0.1099		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1079		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2203		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1129		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-97132/2-A
Matrix: Solid
Analysis Batch: 97121

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97132

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1148		mg/Kg		115	70 - 130	4	35
Toluene	0.100	0.1135		mg/Kg		114	70 - 130	3	35
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2284		mg/Kg		114	70 - 130	4	35
o-Xylene	0.100	0.1171		mg/Kg		117	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: MB 880-97133/5-A
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 11:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 11:36	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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

Lab Sample ID: MB 880-97133/5-A
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 11:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/05/24 09:40	12/05/24 11:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/05/24 09:40	12/05/24 11:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/05/24 09:40	12/05/24 11:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*12/05/24 09:40*	*12/05/24 11:36*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/05/24 09:40*	*12/05/24 11:36*	*1*

Lab Sample ID: LCS 880-97133/1-A
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1113		mg/Kg		111	70 - 130
Toluene	0.100	0.1098		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1189		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	0.200	0.2357		mg/Kg		118	70 - 130
o-Xylene	0.100	0.1327	*+	mg/Kg		133	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-97133/2-A
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97133

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1092		mg/Kg		109	70 - 130	2	35
Toluene	0.100	0.1078		mg/Kg		108	70 - 130	2	35
Ethylbenzene	0.100	0.1157		mg/Kg		116	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2287		mg/Kg		114	70 - 130	3	35
o-Xylene	0.100	0.1287		mg/Kg		129	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-7438-19 MS
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: B-110-4'
Prep Type: Total/NA
Prep Batch: 97133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.09919		mg/Kg		99	70 - 130
Toluene	<0.00198	U	0.0998	0.09635		mg/Kg		97	70 - 130
Ethylbenzene	<0.00198	U	0.0998	0.09966		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00397	U	0.200	0.1983		mg/Kg		99	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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

Lab Sample ID: 890-7438-19 MS
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: B-110-4'
Prep Type: Total/NA
Prep Batch: 97133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00198	U *+	0.0998	0.1084		mg/Kg		109	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-7438-19 MSD
Matrix: Solid
Analysis Batch: 97120

Client Sample ID: B-110-4'
Prep Type: Total/NA
Prep Batch: 97133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.101	0.09805		mg/Kg		97	70 - 130	1	35
Toluene	<0.00198	U	0.101	0.09551		mg/Kg		95	70 - 130	1	35
Ethylbenzene	<0.00198	U	0.101	0.09837		mg/Kg		98	70 - 130	1	35
m-Xylene & p-Xylene	<0.00397	U	0.202	0.1948		mg/Kg		97	70 - 130	2	35
o-Xylene	<0.00198	U *+	0.101	0.1066		mg/Kg		106	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-97105/1-A
Matrix: Solid
Analysis Batch: 97126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97105

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		12/04/24 21:12	12/05/24 09:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 09:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:12	12/05/24 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/04/24 21:12*	*12/05/24 09:10*	*1*
o-Terphenyl	*82*		*70 - 130*	*12/04/24 21:12*	*12/05/24 09:10*	*1*

Lab Sample ID: LCS 880-97105/2-A
Matrix: Solid
Analysis Batch: 97126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1137		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	911.4		mg/Kg		91	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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

Lab Sample ID: LCS 880-97105/2-A
Matrix: Solid
Analysis Batch: 97126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97105

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	88		70 - 130

Lab Sample ID: LCSD 880-97105/3-A
Matrix: Solid
Analysis Batch: 97126

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97105

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1115		mg/Kg		111	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	915.7		mg/Kg		92	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: MB 880-97106/1-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97106

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		12/04/24 21:15	12/05/24 09:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/04/24 21:15	12/05/24 09:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/04/24 21:15	12/05/24 09:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	12/04/24 21:15	12/05/24 09:10	1
o-Terphenyl	94		70 - 130	12/04/24 21:15	12/05/24 09:10	1

Lab Sample ID: LCS 880-97106/2-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97106

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	904.3		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)			1000	856.6		mg/Kg		86	70 - 130

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

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

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

Lab Sample ID: LCSD 880-97106/3-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97106

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1121	*1	mg/Kg		112	70 - 130	21	20
Diesel Range Organics (Over C10-C28)			1000	1024		mg/Kg		102	70 - 130	18	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-97116/1-A
Matrix: Solid
Analysis Batch: 97125

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			12/05/24 09:54	1

Lab Sample ID: LCS 880-97116/2-A
Matrix: Solid
Analysis Batch: 97125

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	265.5		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-97116/3-A
Matrix: Solid
Analysis Batch: 97125

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	266.1		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-7438-7 MS
Matrix: Solid
Analysis Batch: 97125

Client Sample ID: B-98-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	972	F1	249	1095	F1	mg/Kg		49	90 - 110		

Lab Sample ID: 890-7438-7 MSD
Matrix: Solid
Analysis Batch: 97125

Client Sample ID: B-98-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	972	F1	249	1096	F1	mg/Kg		50	90 - 110	0	20

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-97123/1-A
Matrix: Solid
Analysis Batch: 97131

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			12/05/24 12:31	1

Lab Sample ID: LCS 880-97123/2-A
Matrix: Solid
Analysis Batch: 97131

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	240.8		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-97123/3-A
Matrix: Solid
Analysis Batch: 97131

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	241.5		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

GC VOA

Analysis Batch: 97120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-19	B-110-4'	Total/NA	Solid	8021B	97133
890-7438-20	B-111-4'	Total/NA	Solid	8021B	97133
890-7438-21	B-112-4'	Total/NA	Solid	8021B	97133
890-7438-22	B-113-4'	Total/NA	Solid	8021B	97133
MB 880-97133/5-A	Method Blank	Total/NA	Solid	8021B	97133
LCS 880-97133/1-A	Lab Control Sample	Total/NA	Solid	8021B	97133
LCSD 880-97133/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97133
890-7438-19 MS	B-110-4'	Total/NA	Solid	8021B	97133
890-7438-19 MSD	B-110-4'	Total/NA	Solid	8021B	97133

Analysis Batch: 97121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	8021B	97132
890-7438-2	B-93-4	Total/NA	Solid	8021B	97132
890-7438-3	B-94-4	Total/NA	Solid	8021B	97132
890-7438-4	B-95-4	Total/NA	Solid	8021B	97132
890-7438-5	B-96-4	Total/NA	Solid	8021B	97132
890-7438-6	B-97-4	Total/NA	Solid	8021B	97132
890-7438-7	B-98-4'	Total/NA	Solid	8021B	97132
890-7438-8	B-99-4'	Total/NA	Solid	8021B	97132
890-7438-9	B-100-4'	Total/NA	Solid	8021B	97132
890-7438-10	B-101-4'	Total/NA	Solid	8021B	97132
890-7438-11	B-102-4'	Total/NA	Solid	8021B	97132
890-7438-12	B-103-4'	Total/NA	Solid	8021B	97132
890-7438-13	B-104-4'	Total/NA	Solid	8021B	97132
890-7438-14	B-105-4'	Total/NA	Solid	8021B	97132
890-7438-15	B-106-4'	Total/NA	Solid	8021B	97132
890-7438-16	B-107-4'	Total/NA	Solid	8021B	97132
890-7438-17	B-108-4'	Total/NA	Solid	8021B	97132
890-7438-18	B-109-4'	Total/NA	Solid	8021B	97132
MB 880-97132/5-A	Method Blank	Total/NA	Solid	8021B	97132
LCS 880-97132/1-A	Lab Control Sample	Total/NA	Solid	8021B	97132
LCSD 880-97132/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97132

Prep Batch: 97132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	5035	
890-7438-2	B-93-4	Total/NA	Solid	5035	
890-7438-3	B-94-4	Total/NA	Solid	5035	
890-7438-4	B-95-4	Total/NA	Solid	5035	
890-7438-5	B-96-4	Total/NA	Solid	5035	
890-7438-6	B-97-4	Total/NA	Solid	5035	
890-7438-7	B-98-4'	Total/NA	Solid	5035	
890-7438-8	B-99-4'	Total/NA	Solid	5035	
890-7438-9	B-100-4'	Total/NA	Solid	5035	
890-7438-10	B-101-4'	Total/NA	Solid	5035	
890-7438-11	B-102-4'	Total/NA	Solid	5035	
890-7438-12	B-103-4'	Total/NA	Solid	5035	
890-7438-13	B-104-4'	Total/NA	Solid	5035	
890-7438-14	B-105-4'	Total/NA	Solid	5035	
890-7438-15	B-106-4'	Total/NA	Solid	5035	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

GC VOA (Continued)

Prep Batch: 97132 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-16	B-107-4'	Total/NA	Solid	5035	
890-7438-17	B-108-4'	Total/NA	Solid	5035	
890-7438-18	B-109-4'	Total/NA	Solid	5035	
MB 880-97132/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97132/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97132/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 97133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-19	B-110-4'	Total/NA	Solid	5035	
890-7438-20	B-111-4'	Total/NA	Solid	5035	
890-7438-21	B-112-4'	Total/NA	Solid	5035	
890-7438-22	B-113-4'	Total/NA	Solid	5035	
MB 880-97133/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-97133/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-97133/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7438-19 MS	B-110-4'	Total/NA	Solid	5035	
890-7438-19 MSD	B-110-4'	Total/NA	Solid	5035	

Analysis Batch: 97195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	Total BTEX	
890-7438-2	B-93-4	Total/NA	Solid	Total BTEX	
890-7438-3	B-94-4	Total/NA	Solid	Total BTEX	
890-7438-4	B-95-4	Total/NA	Solid	Total BTEX	
890-7438-5	B-96-4	Total/NA	Solid	Total BTEX	
890-7438-6	B-97-4	Total/NA	Solid	Total BTEX	
890-7438-7	B-98-4'	Total/NA	Solid	Total BTEX	
890-7438-8	B-99-4'	Total/NA	Solid	Total BTEX	
890-7438-9	B-100-4'	Total/NA	Solid	Total BTEX	
890-7438-10	B-101-4'	Total/NA	Solid	Total BTEX	
890-7438-11	B-102-4'	Total/NA	Solid	Total BTEX	
890-7438-12	B-103-4'	Total/NA	Solid	Total BTEX	
890-7438-13	B-104-4'	Total/NA	Solid	Total BTEX	
890-7438-14	B-105-4'	Total/NA	Solid	Total BTEX	
890-7438-15	B-106-4'	Total/NA	Solid	Total BTEX	
890-7438-16	B-107-4'	Total/NA	Solid	Total BTEX	
890-7438-17	B-108-4'	Total/NA	Solid	Total BTEX	
890-7438-18	B-109-4'	Total/NA	Solid	Total BTEX	
890-7438-19	B-110-4'	Total/NA	Solid	Total BTEX	
890-7438-20	B-111-4'	Total/NA	Solid	Total BTEX	
890-7438-21	B-112-4'	Total/NA	Solid	Total BTEX	
890-7438-22	B-113-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 97105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	8015NM Prep	
890-7438-2	B-93-4	Total/NA	Solid	8015NM Prep	
890-7438-3	B-94-4	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

GC Semi VOA (Continued)

Prep Batch: 97105 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-4	B-95-4	Total/NA	Solid	8015NM Prep	
890-7438-5	B-96-4	Total/NA	Solid	8015NM Prep	
890-7438-6	B-97-4	Total/NA	Solid	8015NM Prep	
890-7438-7	B-98-4'	Total/NA	Solid	8015NM Prep	
890-7438-8	B-99-4'	Total/NA	Solid	8015NM Prep	
890-7438-9	B-100-4'	Total/NA	Solid	8015NM Prep	
890-7438-10	B-101-4'	Total/NA	Solid	8015NM Prep	
890-7438-11	B-102-4'	Total/NA	Solid	8015NM Prep	
890-7438-12	B-103-4'	Total/NA	Solid	8015NM Prep	
890-7438-13	B-104-4'	Total/NA	Solid	8015NM Prep	
890-7438-14	B-105-4'	Total/NA	Solid	8015NM Prep	
890-7438-15	B-106-4'	Total/NA	Solid	8015NM Prep	
890-7438-16	B-107-4'	Total/NA	Solid	8015NM Prep	
890-7438-17	B-108-4'	Total/NA	Solid	8015NM Prep	
MB 880-97105/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97105/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97105/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 97106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-18	B-109-4'	Total/NA	Solid	8015NM Prep	
890-7438-19	B-110-4'	Total/NA	Solid	8015NM Prep	
890-7438-20	B-111-4'	Total/NA	Solid	8015NM Prep	
890-7438-21	B-112-4'	Total/NA	Solid	8015NM Prep	
890-7438-22	B-113-4'	Total/NA	Solid	8015NM Prep	
MB 880-97106/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97106/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97106/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	8015B NM	97105
890-7438-2	B-93-4	Total/NA	Solid	8015B NM	97105
890-7438-3	B-94-4	Total/NA	Solid	8015B NM	97105
890-7438-4	B-95-4	Total/NA	Solid	8015B NM	97105
890-7438-5	B-96-4	Total/NA	Solid	8015B NM	97105
890-7438-6	B-97-4	Total/NA	Solid	8015B NM	97105
890-7438-7	B-98-4'	Total/NA	Solid	8015B NM	97105
890-7438-8	B-99-4'	Total/NA	Solid	8015B NM	97105
890-7438-9	B-100-4'	Total/NA	Solid	8015B NM	97105
890-7438-10	B-101-4'	Total/NA	Solid	8015B NM	97105
890-7438-11	B-102-4'	Total/NA	Solid	8015B NM	97105
890-7438-12	B-103-4'	Total/NA	Solid	8015B NM	97105
890-7438-13	B-104-4'	Total/NA	Solid	8015B NM	97105
890-7438-14	B-105-4'	Total/NA	Solid	8015B NM	97105
890-7438-15	B-106-4'	Total/NA	Solid	8015B NM	97105
890-7438-16	B-107-4'	Total/NA	Solid	8015B NM	97105
890-7438-17	B-108-4'	Total/NA	Solid	8015B NM	97105
MB 880-97105/1-A	Method Blank	Total/NA	Solid	8015B NM	97105
LCS 880-97105/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97105
LCSD 880-97105/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97105

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

GC Semi VOA

Analysis Batch: 97128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-18	B-109-4'	Total/NA	Solid	8015B NM	97106
890-7438-19	B-110-4'	Total/NA	Solid	8015B NM	97106
890-7438-20	B-111-4'	Total/NA	Solid	8015B NM	97106
890-7438-21	B-112-4'	Total/NA	Solid	8015B NM	97106
890-7438-22	B-113-4'	Total/NA	Solid	8015B NM	97106
MB 880-97106/1-A	Method Blank	Total/NA	Solid	8015B NM	97106
LCS 880-97106/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97106
LCSD 880-97106/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97106

Analysis Batch: 97247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Total/NA	Solid	8015 NM	
890-7438-2	B-93-4	Total/NA	Solid	8015 NM	
890-7438-3	B-94-4	Total/NA	Solid	8015 NM	
890-7438-4	B-95-4	Total/NA	Solid	8015 NM	
890-7438-5	B-96-4	Total/NA	Solid	8015 NM	
890-7438-6	B-97-4	Total/NA	Solid	8015 NM	
890-7438-7	B-98-4'	Total/NA	Solid	8015 NM	
890-7438-8	B-99-4'	Total/NA	Solid	8015 NM	
890-7438-9	B-100-4'	Total/NA	Solid	8015 NM	
890-7438-10	B-101-4'	Total/NA	Solid	8015 NM	
890-7438-11	B-102-4'	Total/NA	Solid	8015 NM	
890-7438-12	B-103-4'	Total/NA	Solid	8015 NM	
890-7438-13	B-104-4'	Total/NA	Solid	8015 NM	
890-7438-14	B-105-4'	Total/NA	Solid	8015 NM	
890-7438-15	B-106-4'	Total/NA	Solid	8015 NM	
890-7438-16	B-107-4'	Total/NA	Solid	8015 NM	
890-7438-17	B-108-4'	Total/NA	Solid	8015 NM	
890-7438-18	B-109-4'	Total/NA	Solid	8015 NM	
890-7438-19	B-110-4'	Total/NA	Solid	8015 NM	
890-7438-20	B-111-4'	Total/NA	Solid	8015 NM	
890-7438-21	B-112-4'	Total/NA	Solid	8015 NM	
890-7438-22	B-113-4'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 97116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Soluble	Solid	DI Leach	
890-7438-2	B-93-4	Soluble	Solid	DI Leach	
890-7438-3	B-94-4	Soluble	Solid	DI Leach	
890-7438-4	B-95-4	Soluble	Solid	DI Leach	
890-7438-5	B-96-4	Soluble	Solid	DI Leach	
890-7438-6	B-97-4	Soluble	Solid	DI Leach	
890-7438-7	B-98-4'	Soluble	Solid	DI Leach	
890-7438-8	B-99-4'	Soluble	Solid	DI Leach	
890-7438-9	B-100-4'	Soluble	Solid	DI Leach	
890-7438-10	B-101-4'	Soluble	Solid	DI Leach	
890-7438-11	B-102-4'	Soluble	Solid	DI Leach	
890-7438-12	B-103-4'	Soluble	Solid	DI Leach	
890-7438-13	B-104-4'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

HPLC/IC (Continued)

Leach Batch: 97116 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-14	B-105-4'	Soluble	Solid	DI Leach	
890-7438-15	B-106-4'	Soluble	Solid	DI Leach	
890-7438-16	B-107-4'	Soluble	Solid	DI Leach	
MB 880-97116/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97116/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97116/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7438-7 MS	B-98-4'	Soluble	Solid	DI Leach	
890-7438-7 MSD	B-98-4'	Soluble	Solid	DI Leach	

Leach Batch: 97123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-17	B-108-4'	Soluble	Solid	DI Leach	
890-7438-18	B-109-4'	Soluble	Solid	DI Leach	
890-7438-19	B-110-4'	Soluble	Solid	DI Leach	
890-7438-20	B-111-4'	Soluble	Solid	DI Leach	
890-7438-21	B-112-4'	Soluble	Solid	DI Leach	
890-7438-22	B-113-4'	Soluble	Solid	DI Leach	
MB 880-97123/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97123/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97123/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 97125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-1	B-92-4	Soluble	Solid	300.0	97116
890-7438-2	B-93-4	Soluble	Solid	300.0	97116
890-7438-3	B-94-4	Soluble	Solid	300.0	97116
890-7438-4	B-95-4	Soluble	Solid	300.0	97116
890-7438-5	B-96-4	Soluble	Solid	300.0	97116
890-7438-6	B-97-4	Soluble	Solid	300.0	97116
890-7438-7	B-98-4'	Soluble	Solid	300.0	97116
890-7438-8	B-99-4'	Soluble	Solid	300.0	97116
890-7438-9	B-100-4'	Soluble	Solid	300.0	97116
890-7438-10	B-101-4'	Soluble	Solid	300.0	97116
890-7438-11	B-102-4'	Soluble	Solid	300.0	97116
890-7438-12	B-103-4'	Soluble	Solid	300.0	97116
890-7438-13	B-104-4'	Soluble	Solid	300.0	97116
890-7438-14	B-105-4'	Soluble	Solid	300.0	97116
890-7438-15	B-106-4'	Soluble	Solid	300.0	97116
890-7438-16	B-107-4'	Soluble	Solid	300.0	97116
MB 880-97116/1-A	Method Blank	Soluble	Solid	300.0	97116
LCS 880-97116/2-A	Lab Control Sample	Soluble	Solid	300.0	97116
LCSD 880-97116/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97116
890-7438-7 MS	B-98-4'	Soluble	Solid	300.0	97116
890-7438-7 MSD	B-98-4'	Soluble	Solid	300.0	97116

Analysis Batch: 97131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-17	B-108-4'	Soluble	Solid	300.0	97123
890-7438-18	B-109-4'	Soluble	Solid	300.0	97123
890-7438-19	B-110-4'	Soluble	Solid	300.0	97123
890-7438-20	B-111-4'	Soluble	Solid	300.0	97123

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

HPLC/IC (Continued)

Analysis Batch: 97131 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7438-21	B-112-4'	Soluble	Solid	300.0	97123
890-7438-22	B-113-4'	Soluble	Solid	300.0	97123
MB 880-97123/1-A	Method Blank	Soluble	Solid	300.0	97123
LCS 880-97123/2-A	Lab Control Sample	Soluble	Solid	300.0	97123
LCSD 880-97123/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97123

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-92-4
Date Collected: 12/04/24 09:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 12:40	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 12:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 12:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 12:06	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97125	12/05/24 10:58	CH	EET MID

Client Sample ID: B-93-4
Date Collected: 12/04/24 09:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 13:00	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 13:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 12:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 12:23	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:16	CH	EET MID

Client Sample ID: B-94-4
Date Collected: 12/04/24 09:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 13:21	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 13:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 12:39	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:22	CH	EET MID

Client Sample ID: B-95-4
Date Collected: 12/04/24 10:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 13:41	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 13:41	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-95-4
Date Collected: 12/04/24 10:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-4
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			97247	12/05/24 12:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 12:57	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:28	CH	EET MID

Client Sample ID: B-96-4
Date Collected: 12/04/24 10:15
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 14:02	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 14:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 13:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 13:13	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:34	CH	EET MID

Client Sample ID: B-97-4
Date Collected: 12/04/24 10:25
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 14:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 14:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 13:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 13:30	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:39	CH	EET MID

Client Sample ID: B-98-4'
Date Collected: 12/04/24 10:35
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 14:43	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 14:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 13:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 13:45	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-98-4'
Date Collected: 12/04/24 10:35
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 11:45	CH	EET MID

Client Sample ID: B-99-4'
Date Collected: 12/04/24 10:45
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 15:03	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 15:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 16:23	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 12:03	CH	EET MID

Client Sample ID: B-100-4'
Date Collected: 12/04/24 10:55
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 16:37	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 16:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 16:38	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97125	12/05/24 12:09	CH	EET MID

Client Sample ID: B-101-4'
Date Collected: 12/04/24 11:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 16:58	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 16:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 16:55	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 12:27	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-102-4'
Date Collected: 12/04/24 11:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 17:18	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 17:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 17:11	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97125	12/05/24 12:32	CH	EET MID

Client Sample ID: B-103-4'
Date Collected: 12/04/24 11:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 17:39	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 17:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 17:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 17:27	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 12:38	CH	EET MID

Client Sample ID: B-104-4'
Date Collected: 12/04/24 11:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 17:59	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 17:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 17:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 17:43	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 12:44	CH	EET MID

Client Sample ID: B-105-4'
Date Collected: 12/04/24 11:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 18:19	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 18:19	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-105-4'
Date Collected: 12/04/24 11:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-14
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			97247	12/05/24 18:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 18:00	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97125	12/05/24 12:50	CH	EET MID

Client Sample ID: B-106-4'
Date Collected: 12/04/24 12:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 18:40	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 18:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 18:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 18:16	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 12:56	CH	EET MID

Client Sample ID: B-107-4'
Date Collected: 12/04/24 12:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 19:00	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 18:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 18:32	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97116	12/05/24 07:59	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97125	12/05/24 13:02	CH	EET MID

Client Sample ID: B-108-4'
Date Collected: 12/04/24 12:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 19:21	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 19:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 18:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97105	12/04/24 21:12	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97126	12/05/24 18:47	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-108-4'
Date Collected: 12/04/24 12:20
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97131	12/05/24 13:03	CH	EET MID

Client Sample ID: B-109-4'
Date Collected: 12/04/24 12:30
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	97132	12/05/24 09:37	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97121	12/05/24 19:41	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 19:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97106	12/04/24 21:15	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 16:23	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97131	12/05/24 13:08	CH	EET MID

Client Sample ID: B-110-4'
Date Collected: 12/04/24 12:40
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	97133	12/05/24 09:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97120	12/05/24 11:58	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 11:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97106	12/04/24 21:15	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 16:38	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97131	12/05/24 13:13	CH	EET MID

Client Sample ID: B-111-4'
Date Collected: 12/04/24 12:50
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	97133	12/05/24 09:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97120	12/05/24 13:40	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 13:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 16:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97106	12/04/24 21:15	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 16:55	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97131	12/05/24 16:23	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 890-7438-1

Client Sample ID: B-112-4'
Date Collected: 12/04/24 13:00
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	97133	12/05/24 09:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97120	12/05/24 14:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 14:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97106	12/04/24 21:15	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 17:11	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97131	12/05/24 16:39	CH	EET MID

Client Sample ID: B-113-4'
Date Collected: 12/04/24 13:10
Date Received: 12/04/24 15:42

Lab Sample ID: 890-7438-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	97133	12/05/24 09:40	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97120	12/05/24 14:21	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97195	12/05/24 14:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97247	12/05/24 17:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97106	12/04/24 21:15	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 17:27	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97123	12/05/24 08:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97131	12/05/24 16:44	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 47

Job ID: 890-7438-1

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: WLU 47

Job ID: 890-7438-1

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: WLU 47

Job ID: 890-7438-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7438-1	B-92-4	Solid	12/04/24 09:30	12/04/24 15:42
890-7438-2	B-93-4	Solid	12/04/24 09:40	12/04/24 15:42
890-7438-3	B-94-4	Solid	12/04/24 09:50	12/04/24 15:42
890-7438-4	B-95-4	Solid	12/04/24 10:00	12/04/24 15:42
890-7438-5	B-96-4	Solid	12/04/24 10:15	12/04/24 15:42
890-7438-6	B-97-4	Solid	12/04/24 10:25	12/04/24 15:42
890-7438-7	B-98-4'	Solid	12/04/24 10:35	12/04/24 15:42
890-7438-8	B-99-4'	Solid	12/04/24 10:45	12/04/24 15:42
890-7438-9	B-100-4'	Solid	12/04/24 10:55	12/04/24 15:42
890-7438-10	B-101-4'	Solid	12/04/24 11:10	12/04/24 15:42
890-7438-11	B-102-4'	Solid	12/04/24 11:20	12/04/24 15:42
890-7438-12	B-103-4'	Solid	12/04/24 11:30	12/04/24 15:42
890-7438-13	B-104-4'	Solid	12/04/24 11:40	12/04/24 15:42
890-7438-14	B-105-4'	Solid	12/04/24 11:50	12/04/24 15:42
890-7438-15	B-106-4'	Solid	12/04/24 12:00	12/04/24 15:42
890-7438-16	B-107-4'	Solid	12/04/24 12:10	12/04/24 15:42
890-7438-17	B-108-4'	Solid	12/04/24 12:20	12/04/24 15:42
890-7438-18	B-109-4'	Solid	12/04/24 12:30	12/04/24 15:42
890-7438-19	B-110-4'	Solid	12/04/24 12:40	12/04/24 15:42
890-7438-20	B-111-4'	Solid	12/04/24 12:50	12/04/24 15:42
890-7438-21	B-112-4'	Solid	12/04/24 13:00	12/04/24 15:42
890-7438-22	B-113-4'	Solid	12/04/24 13:10	12/04/24 15:42

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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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12/6/2024

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: Page 1 of 2
Company: Arcadis U.S., Inc.	PWSID:	Analysis Requested		Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			Preservation Codes:
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: WLU 47	Project #: 30246600.00004			
Site: Lea County, NM	SSOW#:			Other:

890-7438 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 containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-92-4'	12/04/24	0930	G	Solid			X	X	X	1	
B-93-4'		0940		Solid			X	X	X	1	
B-94-4'		0950		Solid			X	X	X	1	
B-95-4'		1000		Solid			X	X	X	1	
B-96-4'		1015		Solid			X	X	X	1	
B-97-4'		1025		Solid			X	X	X	1	
B-98-4'		1035		Solid			X	X	X	1	
B-99-4'		1045		Solid			X	X	X	1	
B-100-4'		1055		Solid			X	X	X	1	
B-101-4'		1110		Solid			X	X	X	1	
B-102-4'	X	1120	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
	12/4 15:42				
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: -0.2 4.6 4.8

Ver: 05/06/2024

Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 AM

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 2 of 3
Company: Arcadis U.S., Inc.	PWSID:			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: WLU 47	Project #: 30246600.00004			
Site: Lea County, NM	SSOW#:			Other:

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:		X	X	N	N	N	X	
B-103-4'	12/04/24	1130	G	Solid			X	X	X	1	
B-104-4'		1140		Solid			X	X	X	1	
B-105-4'		1150		Solid			X	X	X	1	
B-106-4'		1200		Solid			X	X	X	1	
B-107-4'		1210		Solid			X	X	X	1	
B-108-4'		1220		Solid			X	X	X	1	
B-109-4'		1230		Solid			X	X	X	1	
B-110-4'		1240		Solid			X	X	X	1	
B-111-4'		1250		Solid			X	X	X	1	
B-112-4'		1300		Solid			X	X	X	1	
B-113-4'	X	1310	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:

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:03:14 PM
12/6/2024
Page 48 of 50
Released to Imaging: 1/10/2025 8:43:45 AM

Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 890-7438-1

Login Number: 7438 **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: 890-7438-1

Login Number: 7438 **List Source: Eurofins Midland**
List Number: 2 **List Creation: 12/04/24 09:10 PM**
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	

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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 8:08:28 AM

JOB DESCRIPTION

WLU1-47
Lea County, NM

JOB NUMBER

880-51084-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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 8:08:28 AM

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

Client: Arcadis US Inc.
Project/Site: WLU1-47

Laboratory Job ID: 880-51084-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51084-1
Project/Site: WLU1-47 SDG: Lea County, NM

Qualifiers

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: WLU1-47

Job ID: 880-51084-1

Job ID: 880-51084-1 Eurofins Midland

Job Narrative
880-51084-1

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.

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. Job ID: 880-51084-1
Project/Site: WLU1-47 SDG: Lea County, NM

Client Sample ID: SB-2-20' Lab Sample ID: 880-51084-1

Date Collected: 11/13/24 10:31 **Matrix: Solid**
Date Received: 11/14/24 08:45

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	299		10.0	0.395	mg/Kg			11/14/24 18:03	1

Client Sample ID: SB-2-25' Lab Sample ID: 880-51084-2

Date Collected: 11/13/24 10:42 **Matrix: Solid**
Date Received: 11/14/24 08:45

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.3		10.0	0.396	mg/Kg			11/14/24 18:19	1

Client Sample ID: SB-2-30' Lab Sample ID: 880-51084-3

Date Collected: 11/13/24 10:49 **Matrix: Solid**
Date Received: 11/14/24 08:45

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.3		9.90	0.391	mg/Kg			11/14/24 18:25	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-95725/1-A
Matrix: Solid
Analysis Batch: 95731

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 16:34	1

Lab Sample ID: LCS 880-95725/2-A
Matrix: Solid
Analysis Batch: 95731

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.9		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-95725/3-A
Matrix: Solid
Analysis Batch: 95731

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	256.8		mg/Kg		103	90 - 110	3	20

Lab Sample ID: 880-51084-1 MS
Matrix: Solid
Analysis Batch: 95731

Client Sample ID: SB-2-20'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	299		250	568.5		mg/Kg		108	90 - 110		

Lab Sample ID: 880-51084-1 MSD
Matrix: Solid
Analysis Batch: 95731

Client Sample ID: SB-2-20'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	299		250	556.0		mg/Kg		103	90 - 110	2	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 95725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51084-1	SB-2-20'	Soluble	Solid	DI Leach	
880-51084-2	SB-2-25'	Soluble	Solid	DI Leach	
880-51084-3	SB-2-30'	Soluble	Solid	DI Leach	
MB 880-95725/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-95725/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-95725/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51084-1 MS	SB-2-20'	Soluble	Solid	DI Leach	
880-51084-1 MSD	SB-2-20'	Soluble	Solid	DI Leach	

Analysis Batch: 95731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51084-1	SB-2-20'	Soluble	Solid	300.0	95725
880-51084-2	SB-2-25'	Soluble	Solid	300.0	95725
880-51084-3	SB-2-30'	Soluble	Solid	300.0	95725
MB 880-95725/1-A	Method Blank	Soluble	Solid	300.0	95725
LCS 880-95725/2-A	Lab Control Sample	Soluble	Solid	300.0	95725
LCSD 880-95725/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	95725
880-51084-1 MS	SB-2-20'	Soluble	Solid	300.0	95725
880-51084-1 MSD	SB-2-20'	Soluble	Solid	300.0	95725

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, NM

Client Sample ID: SB-2-20'

Lab Sample ID: 880-51084-1
Matrix: Solid
Date Collected: 11/13/24 10:31
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
Soluble	Leach	DI Leach			5.00 g	50 mL	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:03	CH	EET MID

Client Sample ID: SB-2-25'

Lab Sample ID: 880-51084-2
Matrix: Solid
Date Collected: 11/13/24 10:42
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
Soluble	Leach	DI Leach			4.99 g	50 mL	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:19	CH	EET MID

Client Sample ID: SB-2-30'

Lab Sample ID: 880-51084-3
Matrix: Solid
Date Collected: 11/13/24 10:49
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
Soluble	Leach	DI Leach			5.05 g	50 mL	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:25	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: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

Method Summary

Client: Arcadis US Inc.
Project/Site: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, 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 US Inc.
Project/Site: WLU1-47

Job ID: 880-51084-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51084-1	SB-2-20'	Solid	11/13/24 10:31	11/14/24 08:45
880-51084-2	SB-2-25'	Solid	11/13/24 10:42	11/14/24 08:45
880-51084-3	SB-2-30'	Solid	11/13/24 10:49	11/14/24 08:45

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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

Chain of Custody Record

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880-51084 Chain of Custody

Client Information	Sampler: Chris Park	Lab PM: Builes, John	Carrier Tracking
Client Contact: Mr. Morgan Jordan	Phone: 325-450-1661	E-Mail: John.Builes@et.eurofinsus.com	State of Origin:
Company: Arcadis U.S., Inc.	PWSID:		
Address: 1004 North Big Spring Suite 300	Due Date Requested:		
City: Midland	TAT Requested (days): 24 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: WLU-47	Project #: 30237098 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		
SB-2-20'	11-13-24	1031	G	Solid				X		1	
SB-2-25'		1042		Solid						1	
SB-2-30'		1049		Solid						1	
SB-2-35'		1054		Solid						1	Hold
SB-2-40'		1101		Solid						1	Hold
SB-2-45'		1111		Solid						1	Hold
SB-2-50'		1120		Solid						1	Hold
				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 Park	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: 4.4/4.5

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51084-1
SDG Number: Lea County, NM

Login Number: 51084
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 11/15/2024 8:08:30 AM

JOB DESCRIPTION

WLU-47
Lea County, NM

JOB NUMBER

880-51085-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
11/15/2024 8:08:30 AM

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

Client: Arcadis US Inc.
Project/Site: WLU-47

Laboratory Job ID: 880-51085-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51085-1
Project/Site: WLU-47 SDG: Lea County, NM

Qualifiers

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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-47

Job ID: 880-51085-1

Job ID: 880-51085-1 Eurofins Midland

Job Narrative
880-51085-1

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 10:31 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.

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. Job ID: 880-51085-1
Project/Site: WLU-47 SDG: Lea County, NM

Client Sample ID: SB-1-25' Lab Sample ID: 880-51085-2

Date Collected: 11/13/24 09:50 **Matrix: Solid**
Date Received: 11/14/24 10:31

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	826		9.90	0.391	mg/Kg			11/14/24 18:40	1

Client Sample ID: SB-1-30' Lab Sample ID: 880-51085-3

Date Collected: 11/13/24 09:58 **Matrix: Solid**
Date Received: 11/14/24 10:31

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	585		10.1	0.398	mg/Kg			11/14/24 18:46	1

Client Sample ID: SB-1-35' Lab Sample ID: 880-51085-4

Date Collected: 11/13/24 10:07 **Matrix: Solid**
Date Received: 11/14/24 10:31

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	306		9.94	0.393	mg/Kg			11/14/24 18:51	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU-47

Job ID: 880-51085-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-95725/1-A
Matrix: Solid
Analysis Batch: 95731

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 16:34	1

Lab Sample ID: LCS 880-95725/2-A
Matrix: Solid
Analysis Batch: 95731

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	264.9		mg/Kg		106	90 - 110

Lab Sample ID: LCSD 880-95725/3-A
Matrix: Solid
Analysis Batch: 95731

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	256.8		mg/Kg		103	90 - 110	3	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU-47

Job ID: 880-51085-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 95725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51085-2	SB-1-25'	Soluble	Solid	DI Leach	
880-51085-3	SB-1-30'	Soluble	Solid	DI Leach	
880-51085-4	SB-1-35'	Soluble	Solid	DI Leach	
MB 880-95725/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-95725/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-95725/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 95731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51085-2	SB-1-25'	Soluble	Solid	300.0	95725
880-51085-3	SB-1-30'	Soluble	Solid	300.0	95725
880-51085-4	SB-1-35'	Soluble	Solid	300.0	95725
MB 880-95725/1-A	Method Blank	Soluble	Solid	300.0	95725
LCS 880-95725/2-A	Lab Control Sample	Soluble	Solid	300.0	95725
LCSD 880-95725/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	95725

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU-47

Job ID: 880-51085-1
SDG: Lea County, NM

Client Sample ID: SB-1-25'

Lab Sample ID: 880-51085-2
Matrix: Solid
Date Collected: 11/13/24 09:50
Date Received: 11/14/24 10:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:40	CH	EET MID

Client Sample ID: SB-1-30'

Lab Sample ID: 880-51085-3
Matrix: Solid
Date Collected: 11/13/24 09:58
Date Received: 11/14/24 10:31

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	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:46	CH	EET MID

Client Sample ID: SB-1-35'

Lab Sample ID: 880-51085-4
Matrix: Solid
Date Collected: 11/13/24 10:07
Date Received: 11/14/24 10:31

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	95725	11/14/24 11:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95731	11/14/24 18:51	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-47

Job ID: 880-51085-1
SDG: Lea County, NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

Method Summary

Client: Arcadis US Inc. Job ID: 880-51085-1
Project/Site: WLU-47 SDG: Lea County, 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 US Inc.
Project/Site: WLU-47

Job ID: 880-51085-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51085-2	SB-1-25'	Solid	11/13/24 09:50	11/14/24 10:31
880-51085-3	SB-1-30'	Solid	11/13/24 09:58	11/14/24 10:31
880-51085-4	SB-1-35'	Solid	11/13/24 10:07	11/14/24 10:31

Released to Imaging: 1/10/2025 8:43:45 AM

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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

Chain of Custody Record

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880-51085 Chain of Custody

Client Information	Sampler: Chris Layton	Lab PM: Builes, John	Carrier Tracking No(s):
Client Contact: Mr. Morgan Jordan	Phone: 325-450-1611	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 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: WLU-47	Project #: 30237098 Task 00004		
Site: 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:		X	X	N	N	N	X	
SB-1-20'	11-13-24	0945	G	Solid				X		1	Hold
SB-1-25'		0950		Solid						1	
SB-1-30'		0958		Solid						1	
SB-1-35'		1007		Solid						1	
SB-1-40'		1012		Solid						1	Hold
SB-1-45'		1019		Solid						1	Hold
SB-1-50'		1026		Solid						1	Hold
				Solid						1	
				Solid						1	
				Solid						1	
				Solid						1	

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
1	Chris Layton	11-14-24	Arcadis		11/14/24 845	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	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: 4.6/4.5

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51085-1
SDG Number: Lea County, NM

Login Number: 51085
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 11/26/2024 9:43:59 AM

JOB DESCRIPTION

WLU 47

JOB NUMBER

880-51462-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
11/26/2024 9:43:59 AM

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

Client: Arcadis US Inc.
Project/Site: WLU 47

Laboratory Job ID: 880-51462-1

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Definitions/Glossary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

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: WLU 47

Job ID: 880-51462-1

Job ID: 880-51462-1 Eurofins Midland

Job Narrative
880-51462-1

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 11/22/2024 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-1-2' (880-51462-1), SW-2-2' (880-51462-2), SW-3-2' (880-51462-3), SW-6-2' (880-51462-4) and (880-51462-A-1-F MSD). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW-7-2' (880-51462-5), SW-8-2' (880-51462-6) and SW-10-2' (880-51462-8). 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 samples were outside control limits: SW-1-2' (880-51462-1), SW-6-2' (880-51462-4), SW-7-2' (880-51462-5), SW-8-2' (880-51462-6), SW-9-2' (880-51462-7) and SW-10-2' (880-51462-8). 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: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-1-2'
Date Collected: 11/22/24 10:00
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		11/23/24 16:48	11/23/24 20:18	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/23/24 16:48	11/23/24 20:18	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/23/24 16:48	11/23/24 20:18	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/23/24 20:18	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/23/24 16:48	11/23/24 20:18	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/23/24 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/23/24 20:18*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*11/23/24 16:48*	*11/23/24 20:18*	*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			11/23/24 20:18	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			11/25/24 14:50	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	49.9	14.5	mg/Kg		11/22/24 15:51	11/25/24 14:50	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 14:50	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*11/22/24 15:51*	*11/25/24 14:50*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 14:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**181**		10.0	0.396	mg/Kg			11/23/24 07:02	1

Client Sample ID: SW-2-2'
Date Collected: 11/22/24 12:45
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		11/23/24 16:48	11/23/24 20:38	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		11/23/24 16:48	11/23/24 20:38	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		11/23/24 16:48	11/23/24 20:38	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		11/23/24 16:48	11/23/24 20:38	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		11/23/24 16:48	11/23/24 20:38	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		11/23/24 16:48	11/23/24 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/23/24 20:38*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*11/23/24 16:48*	*11/23/24 20:38*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-2-2'
Date Collected: 11/22/24 12:45
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00403	0.00230	mg/Kg			11/23/24 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	<15.1	U	49.9	15.1	mg/Kg			11/25/24 15:05	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	<14.5	U	49.9	14.5	mg/Kg		11/22/24 15:51	11/25/24 15:05	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:05	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:05*	*1*
o-Terphenyl	*72*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.0**		10.1	0.398	mg/Kg			11/23/24 07:22	1

Client Sample ID: SW-3-2'
Date Collected: 11/22/24 10:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-3
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		11/23/24 16:48	11/23/24 20:59	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/23/24 16:48	11/23/24 20:59	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/23/24 16:48	11/23/24 20:59	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		11/23/24 16:48	11/23/24 20:59	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/23/24 16:48	11/23/24 20:59	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		11/23/24 16:48	11/23/24 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/23/24 20:59*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*11/23/24 16:48*	*11/23/24 20:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			11/23/24 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	<15.1	U	50.0	15.1	mg/Kg			11/25/24 15:20	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	<14.5	U	50.0	14.5	mg/Kg		11/22/24 15:51	11/25/24 15:20	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:20	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-3-2'
Date Collected: 11/22/24 10:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-3
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)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:20*	*1*
o-Terphenyl	*70*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.0**		9.98	0.394	mg/Kg			11/23/24 07:29	1

Client Sample ID: SW-6-2'
Date Collected: 11/22/24 10:20
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-4
Matrix: Solid

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		11/23/24 16:48	11/23/24 21:19	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		11/23/24 16:48	11/23/24 21:19	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		11/23/24 16:48	11/23/24 21:19	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		11/23/24 16:48	11/23/24 21:19	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		11/23/24 16:48	11/23/24 21:19	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		11/23/24 16:48	11/23/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/23/24 21:19*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*11/23/24 16:48*	*11/23/24 21:19*	*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			11/23/24 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**24.7**	**J**	49.8	15.1	mg/Kg			11/25/24 15:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		11/22/24 15:51	11/25/24 15:34	1
Diesel Range Organics (Over C10-C28)	**24.7**	**J**	49.8	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:34	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:34*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 15:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**282**		9.96	0.393	mg/Kg			11/23/24 07:49	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-7-2'

Date Collected: 11/22/24 12:55
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-5
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		11/23/24 16:48	11/24/24 00:55	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/23/24 16:48	11/24/24 00:55	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/23/24 16:48	11/24/24 00:55	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/24/24 00:55	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/23/24 16:48	11/24/24 00:55	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/24/24 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 00:55*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*11/23/24 16:48*	*11/24/24 00:55*	*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			11/24/24 00:55	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 15:50	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		11/22/24 15:51	11/25/24 15:50	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:50	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*11/22/24 15:51*	*11/25/24 15:50*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 15:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**222**		10.1	0.399	mg/Kg			11/23/24 07:56	1

Client Sample ID: SW-8-2'

Date Collected: 11/22/24 13:30
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		11/23/24 16:48	11/24/24 01:16	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		11/23/24 16:48	11/24/24 01:16	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		11/23/24 16:48	11/24/24 01:16	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		11/23/24 16:48	11/24/24 01:16	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		11/23/24 16:48	11/24/24 01:16	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		11/23/24 16:48	11/24/24 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 01:16*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/23/24 16:48*	*11/24/24 01:16*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-8-2'

Date Collected: 11/22/24 13:30
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00403	0.00230	mg/Kg			11/24/24 01:16	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	49.9	15.1	mg/Kg			11/25/24 16:05	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	<14.5	U	49.9	14.5	mg/Kg		11/22/24 15:51	11/25/24 16:05	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:05	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*11/22/24 15:51*	*11/25/24 16:05*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 16:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**32.1**		10.1	0.398	mg/Kg			11/23/24 08:02	1

Client Sample ID: SW-9-2'

Date Collected: 11/22/24 13:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-7
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		11/23/24 16:48	11/24/24 01:36	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		11/23/24 16:48	11/24/24 01:36	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		11/23/24 16:48	11/24/24 01:36	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		11/23/24 16:48	11/24/24 01:36	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		11/23/24 16:48	11/24/24 01:36	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		11/23/24 16:48	11/24/24 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*11/23/24 16:48*	*11/24/24 01:36*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/23/24 16:48*	*11/24/24 01:36*	*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			11/24/24 01:36	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 16:22	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	50.0	14.5	mg/Kg		11/22/24 15:51	11/25/24 16:22	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:22	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51462-1
Project/Site: WLU 47

Client Sample ID: SW-9-2' Lab Sample ID: 880-51462-7
Date Collected: 11/22/24 13:10 **Matrix: Solid**
Date Received: 11/22/24 16:20

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	50.0	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*72*		*70 - 130*	*11/22/24 15:51*	*11/25/24 16:22*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 16:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**43.7**		9.94	0.393	mg/Kg			11/23/24 08:09	1

Client Sample ID: SW-10-2' Lab Sample ID: 880-51462-8
Date Collected: 11/22/24 13:20 **Matrix: Solid**
Date Received: 11/22/24 16:20

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		11/23/24 16:48	11/24/24 01:57	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		11/23/24 16:48	11/24/24 01:57	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		11/23/24 16:48	11/24/24 01:57	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/24/24 01:57	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		11/23/24 16:48	11/24/24 01:57	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		11/23/24 16:48	11/24/24 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*133*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 01:57*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/23/24 16:48*	*11/24/24 01:57*	*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			11/24/24 01:57	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			11/25/24 16:36	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		11/22/24 15:51	11/25/24 16:36	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:36	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		11/22/24 15:51	11/25/24 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*11/22/24 15:51*	*11/25/24 16:36*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*11/22/24 15:51*	*11/25/24 16:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.0**		9.98	0.394	mg/Kg			11/23/24 08:16	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

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)
880-51462-1	SW-1-2'	136 S1+	94
880-51462-1 MS	SW-1-2'	123	95
880-51462-1 MSD	SW-1-2'	132 S1+	92
880-51462-2	SW-2-2'	135 S1+	102
880-51462-3	SW-3-2'	144 S1+	78
880-51462-4	SW-6-2'	134 S1+	89
880-51462-5	SW-7-2'	135 S1+	98
880-51462-6	SW-8-2'	132 S1+	97
880-51462-7	SW-9-2'	130	96
880-51462-8	SW-10-2'	133 S1+	96
LCS 880-96443/1-A	Lab Control Sample	120	95
LCSD 880-96443/2-A	Lab Control Sample Dup	124	95
MB 880-96443/25-A	Method Blank	128	92

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)
880-51462-1	SW-1-2'	76	65 S1-
880-51462-2	SW-2-2'	82	72
880-51462-3	SW-3-2'	80	70
880-51462-4	SW-6-2'	77	68 S1-
880-51462-5	SW-7-2'	77	68 S1-
880-51462-6	SW-8-2'	75	67 S1-
880-51462-7	SW-9-2'	72	64 S1-
880-51462-8	SW-10-2'	78	68 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: WLU 47

Job ID: 880-51462-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96443/25-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96443

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 16:48	11/23/24 19:56	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		11/23/24 16:48	11/23/24 19:56	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		11/23/24 16:48	11/23/24 19:56	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		11/23/24 16:48	11/23/24 19:56	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		11/23/24 16:48	11/23/24 19:56	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		11/23/24 16:48	11/23/24 19:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*11/23/24 16:48*	*11/23/24 19:56*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*11/23/24 16:48*	*11/23/24 19:56*	*1*

Lab Sample ID: LCS 880-96443/1-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96443

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1181		mg/Kg		118	70 - 130
Toluene	0.100	0.1104		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1117		mg/Kg		112	70 - 130
m-Xylene & p-Xylene	0.200	0.2294		mg/Kg		115	70 - 130
o-Xylene	0.100	0.1125		mg/Kg		112	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-96443/2-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96443

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1265		mg/Kg		127	70 - 130	7	35
Toluene	0.100	0.1175		mg/Kg		117	70 - 130	6	35
Ethylbenzene	0.100	0.1191		mg/Kg		119	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2454		mg/Kg		123	70 - 130	7	35
o-Xylene	0.100	0.1203		mg/Kg		120	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-51462-1 MS
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: SW-1-2'
Prep Type: Total/NA
Prep Batch: 96443

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00139	U	0.101	0.1210		mg/Kg		120	70 - 130
Toluene	<0.00199	U	0.101	0.1136		mg/Kg		113	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

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

Lab Sample ID: 880-51462-1 MS
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: SW-1-2'
Prep Type: Total/NA
Prep Batch: 96443

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00108	U	0.101	0.1155		mg/Kg		115	70 - 130
m-Xylene & p-Xylene	<0.00228	U	0.202	0.2406		mg/Kg		119	70 - 130
o-Xylene	<0.00158	U	0.101	0.1170		mg/Kg		116	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-51462-1 MSD
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: SW-1-2'
Prep Type: Total/NA
Prep Batch: 96443

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00139	U	0.0998	0.1132		mg/Kg		113	70 - 130	7	35
Toluene	<0.00199	U	0.0998	0.1111		mg/Kg		111	70 - 130	2	35
Ethylbenzene	<0.00108	U	0.0998	0.1166		mg/Kg		117	70 - 130	1	35
m-Xylene & p-Xylene	<0.00228	U	0.200	0.2453		mg/Kg		123	70 - 130	2	35
o-Xylene	<0.00158	U	0.0998	0.1193		mg/Kg		120	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

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QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

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

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

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 880-96423/1-A
Matrix: Solid
Analysis Batch: 96432

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			11/23/24 05:09	1

Lab Sample ID: LCS 880-96423/2-A
Matrix: Solid
Analysis Batch: 96432

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.8		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-96423/3-A
Matrix: Solid
Analysis Batch: 96432

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	250.2		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 880-51462-1 MS
Matrix: Solid
Analysis Batch: 96432

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	181		251	432.9		mg/Kg		101	90 - 110		

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-51462-1 MSD
Matrix: Solid
Analysis Batch: 96432

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	181		251	432.9		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

GC VOA

Analysis Batch: 96439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Total/NA	Solid	8021B	96443
880-51462-2	SW-2-2'	Total/NA	Solid	8021B	96443
880-51462-3	SW-3-2'	Total/NA	Solid	8021B	96443
880-51462-4	SW-6-2'	Total/NA	Solid	8021B	96443
880-51462-5	SW-7-2'	Total/NA	Solid	8021B	96443
880-51462-6	SW-8-2'	Total/NA	Solid	8021B	96443
880-51462-7	SW-9-2'	Total/NA	Solid	8021B	96443
880-51462-8	SW-10-2'	Total/NA	Solid	8021B	96443
MB 880-96443/25-A	Method Blank	Total/NA	Solid	8021B	96443
LCS 880-96443/1-A	Lab Control Sample	Total/NA	Solid	8021B	96443
LCSD 880-96443/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96443
880-51462-1 MS	SW-1-2'	Total/NA	Solid	8021B	96443
880-51462-1 MSD	SW-1-2'	Total/NA	Solid	8021B	96443

Prep Batch: 96443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Total/NA	Solid	5030B	
880-51462-2	SW-2-2'	Total/NA	Solid	5030B	
880-51462-3	SW-3-2'	Total/NA	Solid	5030B	
880-51462-4	SW-6-2'	Total/NA	Solid	5030B	
880-51462-5	SW-7-2'	Total/NA	Solid	5030B	
880-51462-6	SW-8-2'	Total/NA	Solid	5030B	
880-51462-7	SW-9-2'	Total/NA	Solid	5030B	
880-51462-8	SW-10-2'	Total/NA	Solid	5030B	
MB 880-96443/25-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-96443/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-96443/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51462-1 MS	SW-1-2'	Total/NA	Solid	5030B	
880-51462-1 MSD	SW-1-2'	Total/NA	Solid	5030B	

Analysis Batch: 96536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Total/NA	Solid	Total BTEX	
880-51462-2	SW-2-2'	Total/NA	Solid	Total BTEX	
880-51462-3	SW-3-2'	Total/NA	Solid	Total BTEX	
880-51462-4	SW-6-2'	Total/NA	Solid	Total BTEX	
880-51462-5	SW-7-2'	Total/NA	Solid	Total BTEX	
880-51462-6	SW-8-2'	Total/NA	Solid	Total BTEX	
880-51462-7	SW-9-2'	Total/NA	Solid	Total BTEX	
880-51462-8	SW-10-2'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Total/NA	Solid	8015NM Prep	
880-51462-2	SW-2-2'	Total/NA	Solid	8015NM Prep	
880-51462-3	SW-3-2'	Total/NA	Solid	8015NM Prep	
880-51462-4	SW-6-2'	Total/NA	Solid	8015NM Prep	
880-51462-5	SW-7-2'	Total/NA	Solid	8015NM Prep	
880-51462-6	SW-8-2'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

GC Semi VOA (Continued)

Prep Batch: 96407 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-7	SW-9-2'	Total/NA	Solid	8015NM Prep	
880-51462-8	SW-10-2'	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
880-51462-1	SW-1-2'	Total/NA	Solid	8015B NM	96407
880-51462-2	SW-2-2'	Total/NA	Solid	8015B NM	96407
880-51462-3	SW-3-2'	Total/NA	Solid	8015B NM	96407
880-51462-4	SW-6-2'	Total/NA	Solid	8015B NM	96407
880-51462-5	SW-7-2'	Total/NA	Solid	8015B NM	96407
880-51462-6	SW-8-2'	Total/NA	Solid	8015B NM	96407
880-51462-7	SW-9-2'	Total/NA	Solid	8015B NM	96407
880-51462-8	SW-10-2'	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: 96571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Total/NA	Solid	8015 NM	
880-51462-2	SW-2-2'	Total/NA	Solid	8015 NM	
880-51462-3	SW-3-2'	Total/NA	Solid	8015 NM	
880-51462-4	SW-6-2'	Total/NA	Solid	8015 NM	
880-51462-5	SW-7-2'	Total/NA	Solid	8015 NM	
880-51462-6	SW-8-2'	Total/NA	Solid	8015 NM	
880-51462-7	SW-9-2'	Total/NA	Solid	8015 NM	
880-51462-8	SW-10-2'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 96423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Soluble	Solid	DI Leach	
880-51462-2	SW-2-2'	Soluble	Solid	DI Leach	
880-51462-3	SW-3-2'	Soluble	Solid	DI Leach	
880-51462-4	SW-6-2'	Soluble	Solid	DI Leach	
880-51462-5	SW-7-2'	Soluble	Solid	DI Leach	
880-51462-6	SW-8-2'	Soluble	Solid	DI Leach	
880-51462-7	SW-9-2'	Soluble	Solid	DI Leach	
880-51462-8	SW-10-2'	Soluble	Solid	DI Leach	
MB 880-96423/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96423/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96423/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51462-1 MS	SW-1-2'	Soluble	Solid	DI Leach	
880-51462-1 MSD	SW-1-2'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

HPLC/IC

Analysis Batch: 96432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51462-1	SW-1-2'	Soluble	Solid	300.0	96423
880-51462-2	SW-2-2'	Soluble	Solid	300.0	96423
880-51462-3	SW-3-2'	Soluble	Solid	300.0	96423
880-51462-4	SW-6-2'	Soluble	Solid	300.0	96423
880-51462-5	SW-7-2'	Soluble	Solid	300.0	96423
880-51462-6	SW-8-2'	Soluble	Solid	300.0	96423
880-51462-7	SW-9-2'	Soluble	Solid	300.0	96423
880-51462-8	SW-10-2'	Soluble	Solid	300.0	96423
MB 880-96423/1-A	Method Blank	Soluble	Solid	300.0	96423
LCS 880-96423/2-A	Lab Control Sample	Soluble	Solid	300.0	96423
LCSD 880-96423/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96423
880-51462-1 MS	SW-1-2'	Soluble	Solid	300.0	96423
880-51462-1 MSD	SW-1-2'	Soluble	Solid	300.0	96423

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-1-2'
Date Collected: 11/22/24 10:00
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-1
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			5.02 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/23/24 20:18	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/23/24 20:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 14:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 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 14:50	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 07:02	SMC	EET MID

Client Sample ID: SW-2-2'
Date Collected: 11/22/24 12:45
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/23/24 20:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/23/24 20:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 15:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 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 15:05	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 07:22	SMC	EET MID

Client Sample ID: SW-3-2'
Date Collected: 11/22/24 10:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/23/24 20:59	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/23/24 20:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 15:20	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 15:20	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 07:29	SMC	EET MID

Client Sample ID: SW-6-2'
Date Collected: 11/22/24 10:20
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/23/24 21:19	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/23/24 21:19	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-6-2'
Date Collected: 11/22/24 10:20
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-4
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			96571	11/25/24 15:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 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 15:34	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 07:49	SMC	EET MID

Client Sample ID: SW-7-2'
Date Collected: 11/22/24 12:55
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-5
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	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/24/24 00:55	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/24/24 00:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 15:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 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 15:50	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 07:56	SMC	EET MID

Client Sample ID: SW-8-2'
Date Collected: 11/22/24 13:30
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-6
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			4.96 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/24/24 01:16	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/24/24 01:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 16:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 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 16:05	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 08:02	SMC	EET MID

Client Sample ID: SW-9-2'
Date Collected: 11/22/24 13:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-7
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			4.97 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/24/24 01:36	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/24/24 01:36	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 16:22	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 16:22	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51462-1

Client Sample ID: SW-9-2'

Date Collected: 11/22/24 13:10
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 08:09	SMC	EET MID

Client Sample ID: SW-10-2'

Date Collected: 11/22/24 13:20
Date Received: 11/22/24 16:20

Lab Sample ID: 880-51462-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96439	11/24/24 01:57	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96536	11/24/24 01:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			96571	11/25/24 16:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 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 16:36	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	96423	11/22/24 16:41	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96432	11/23/24 08:16	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: WLU 47

Job ID: 880-51462-1

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: WLU 47

Job ID: 880-51462-1

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
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 47

Job ID: 880-51462-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51462-1	SW-1-2'	Solid	11/22/24 10:00	11/22/24 16:20
880-51462-2	SW-2-2'	Solid	11/22/24 12:45	11/22/24 16:20
880-51462-3	SW-3-2'	Solid	11/22/24 10:10	11/22/24 16:20
880-51462-4	SW-6-2'	Solid	11/22/24 10:20	11/22/24 16:20
880-51462-5	SW-7-2'	Solid	11/22/24 12:55	11/22/24 16:20
880-51462-6	SW-8-2'	Solid	11/22/24 13:30	11/22/24 16:20
880-51462-7	SW-9-2'	Solid	11/22/24 13:10	11/22/24 16:20
880-51462-8	SW-10-2'	Solid	11/22/24 13:20	11/22/24 16:20

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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

Chain of Custody Record

eurofins

880-51462 Chain of Custody

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: WLW 47	Project #: 30246600		
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-1-2'	11/22/24	1000	G	Solid	N	N	X	X	X	1	
SW-2-2'	11/22/24	1245	G	Solid	N	N	X	X	X	1	
SW-3-2'	11/22/24	1010	G	Solid	N	N	X	X	X	1	
SW-6-2'	11/22/24	1020	G	Solid	N	N	X	X	X	1	
SW-7-2'	11/22/24	1255	G	Solid	N	N	X	X	X	1	
SW-8-2'	11/22/24	1330	G	Solid	N	N	X	X	X	1	
SW-9-2'	11/22/24	1310	G	Solid	N	N	X	X	X	1	
SW-10-2'	11/22/24	1320	G	Solid	N	N	X	X	X	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 1630	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	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: 3.0/3.5 -1

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc. Job Number: 880-51462-1

Login Number: 51462 **List Source: Eurofins Midland**
List Number: 1
Creator: Vasquez, Julisa

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Morgan Jordan
Arcadis US Inc.
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 12/6/2024 10:37:16 AM

JOB DESCRIPTION

WLU 47
Lea County, NM

JOB NUMBER

880-51651-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
12/6/2024 10:37:16 AM

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

Client: Arcadis US Inc.
Project/Site: WLU 47

Laboratory Job ID: 880-51651-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
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
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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
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: WLU 47

Job ID: 880-51651-1

Job ID: 880-51651-1 Eurofins Midland

Job Narrative
880-51651-1

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 12/2/2024 4:45 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 5.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-22-4' (880-51651-1), SB-23-4' (880-51651-2), SB-24-4' (880-51651-3), SB-25-4' (880-51651-4), SB-26-4' (880-51651-5), SB-27-4' (880-51651-6), SB-28-4' (880-51651-7), SB-29-4' (880-51651-8), SB-30-4' (880-51651-9), SB-31-4' (880-51651-10), SB-32-4' (880-51651-11), SB-33-4' (880-51651-12), SB-34-4' (880-51651-13), SB-35-4' (880-51651-14), SB-36-4' (880-51651-15), SB-37-4' (880-51651-16), SB-38-4' (880-51651-17), SB-39-4' (880-51651-18), SB-40-4' (880-51651-19), SB-41-4' (880-51651-20), SB-42-4' (880-51651-21) and SB-43-4' (880-51651-22).

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

Diesel Range Organics
Method 8015MOD_NM: The laboratory control sample duplicate (LCSD) for preparation batch 880-96945 and analytical batch 880-97009 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCSD and the associated laboratory control sample (LCS) passes; therefore, the data have been reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-96945 and analytical batch 880-97009 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 continuing calibration verification (CCV) associated with batch 880-97009 exhibited % difference of > 20% for the following analyte(s)o-Terphenyl. These results are within the acceptance limits but exceed the performance criteria.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: SB-40-4' (880-51651-19). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-24-4' (880-51651-3), SB-28-4' (880-51651-7), SB-31-4' (880-51651-10), SB-34-4' (880-51651-13), SB-37-4' (880-51651-16) and SB-38-4' (880-51651-17). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-96909/2-A) and (LCSD 880-96909/3-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-96909 and analytical batch 880-97011 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.

Eurofins Midland

Case Narrative

Client: Arcadis US Inc.
Project: WLU 47

Job ID: 880-51651-1

Job ID: 880-51651-1 (Continued) Eurofins Midland

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97008 and analytical batch 880-97057 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: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-22-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/03/24 09:25	12/03/24 12:20	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 12:20	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 12:20	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/03/24 09:25	12/03/24 12:20	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/03/24 09:25	12/03/24 12:20	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/03/24 09:25	12/03/24 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/03/24 09:25*	*12/03/24 12:20*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 12:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/03/24 12:20	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			12/03/24 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.9	14.5	mg/Kg		12/03/24 09:37	12/03/24 17:46	1
Diesel Range Organics (Over C10-C28)	<15.1	U F1	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 17:46	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/03/24 09:37*	*12/03/24 17:46*	*1*
o-Terphenyl	*70*		*70 - 130*	*12/03/24 09:37*	*12/03/24 17:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**349**		10.1	0.397	mg/Kg			12/05/24 15:29	1

Client Sample ID: SB-23-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-2

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		12/03/24 09:25	12/03/24 12:41	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 12:41	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 12:41	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 12:41	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 09:25	12/03/24 12:41	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/03/24 09:25*	*12/03/24 12:41*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/03/24 09:25*	*12/03/24 12:41*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-23-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			12/03/24 12:41	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			12/03/24 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	50.0	14.5	mg/Kg		12/03/24 09:37	12/03/24 18:32	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 18:32	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*12/03/24 09:37*	*12/03/24 18:32*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/03/24 09:37*	*12/03/24 18:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**236**		10.0	0.396	mg/Kg			12/05/24 15:35	1

Client Sample ID: SB-24-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-3
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		12/03/24 09:25	12/03/24 13:01	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 13:01	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 13:01	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 13:01	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/03/24 09:25	12/03/24 13:01	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:01*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:01*	*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	0.00401	0.00229	mg/Kg			12/03/24 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	49.8	15.1	mg/Kg			12/03/24 18:46	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 *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 18:46	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 18:46	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-24-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-3
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)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*12/03/24 09:37*	*12/03/24 18:46*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 18:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**198**		9.90	0.391	mg/Kg			12/05/24 15:53	1

Client Sample ID: SB-25-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-4
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		12/03/24 09:25	12/03/24 13:22	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 13:22	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 13:22	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 13:22	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/03/24 09:25	12/03/24 13:22	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:22*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:22*	*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			12/03/24 13:22	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	49.6	15.0	mg/Kg			12/03/24 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	<14.4	U *+	49.6	14.4	mg/Kg		12/03/24 09:37	12/03/24 19:02	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg		12/03/24 09:37	12/03/24 19:02	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg		12/03/24 09:37	12/03/24 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:02*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**384**		10.0	0.396	mg/Kg			12/05/24 15:59	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-26-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-5

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		12/03/24 09:25	12/03/24 13:42	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		12/03/24 09:25	12/03/24 13:42	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		12/03/24 09:25	12/03/24 13:42	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		12/03/24 09:25	12/03/24 13:42	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		12/03/24 09:25	12/03/24 13:42	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		12/03/24 09:25	12/03/24 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:42*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 13:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			12/03/24 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	50.0	15.1	mg/Kg			12/03/24 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	<14.5	U *+	50.0	14.5	mg/Kg		12/03/24 09:37	12/03/24 19:17	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:17	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:17*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**512**		9.96	0.393	mg/Kg			12/05/24 16:05	1

Client Sample ID: SB-27-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-6

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		12/03/24 09:25	12/03/24 14:03	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		12/03/24 09:25	12/03/24 14:03	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		12/03/24 09:25	12/03/24 14:03	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		12/03/24 09:25	12/03/24 14:03	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		12/03/24 09:25	12/03/24 14:03	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		12/03/24 09:25	12/03/24 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:03*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:03*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-27-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			12/03/24 14:03	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			12/03/24 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	<14.5	U *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 19:33	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:33	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:33*	*1*
o-Terphenyl	*77*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**528**		9.94	0.393	mg/Kg			12/05/24 16:10	1

Client Sample ID: SB-28-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-7
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		12/03/24 09:25	12/03/24 14:23	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 14:23	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 14:23	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 14:23	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 09:25	12/03/24 14:23	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:23*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:23*	*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			12/03/24 14:23	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			12/03/24 19:47	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	<14.5	U *+	49.9	14.5	mg/Kg		12/03/24 09:37	12/03/24 19:47	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:47	1

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-28-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-7
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)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*12/03/24 09:37*	*12/03/24 19:47*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 19:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**652**		10.1	0.397	mg/Kg			12/05/24 16:16	1

Client Sample ID: SB-29-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-8
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		12/03/24 09:25	12/03/24 14:43	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 14:43	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 14:43	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 14:43	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/03/24 09:25	12/03/24 14:43	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:43*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/03/24 09:25*	*12/03/24 14:43*	*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	0.00401	0.00229	mg/Kg			12/03/24 14:43	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			12/03/24 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U *+	49.7	14.4	mg/Kg		12/03/24 09:37	12/03/24 20:03	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 20:03	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/03/24 09:37*	*12/03/24 20:03*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/03/24 09:37*	*12/03/24 20:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1140**		10.1	0.399	mg/Kg			12/05/24 16:22	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-30-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-9

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		12/03/24 09:25	12/03/24 15:04	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 15:04	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 15:04	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 15:04	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/03/24 09:25	12/03/24 15:04	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/03/24 09:25*	*12/03/24 15:04*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/03/24 09:25*	*12/03/24 15:04*	*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			12/03/24 15:04	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			12/03/24 20:17	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	<14.5	U *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 20:17	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 20:17	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/03/24 09:37*	*12/03/24 20:17*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/03/24 09:37*	*12/03/24 20:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**481**		9.92	0.392	mg/Kg			12/05/24 16:28	1

Client Sample ID: SB-31-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-10

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/03/24 09:25	12/03/24 15:24	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 15:24	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 15:24	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/03/24 09:25	12/03/24 15:24	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/03/24 09:25	12/03/24 15:24	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/03/24 09:25	12/03/24 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/03/24 09:25*	*12/03/24 15:24*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/03/24 09:25*	*12/03/24 15:24*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-31-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-10
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/03/24 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			12/03/24 20:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U *+	49.7	14.4	mg/Kg		12/03/24 09:37	12/03/24 20:32	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 20:32	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/03/24 09:37*	*12/03/24 20:32*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 20:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**229**	**F1**	9.94	0.393	mg/Kg			12/05/24 16:30	1

Client Sample ID: SB-32-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-11
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		12/03/24 09:25	12/03/24 16:58	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 16:58	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 16:58	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 16:58	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 09:25	12/03/24 16:58	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/03/24 09:25*	*12/03/24 16:58*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 16:58*	*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			12/03/24 16:58	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			12/03/24 21:01	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		12/03/24 09:37	12/03/24 21:01	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:01	1

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-32-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-11
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)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:01*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1090**		10.0	0.396	mg/Kg			12/05/24 16:51	1

Client Sample ID: SB-33-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-12
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		12/03/24 09:25	12/03/24 17:18	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/03/24 09:25	12/03/24 17:18	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		12/03/24 09:25	12/03/24 17:18	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 17:18	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/03/24 09:25	12/03/24 17:18	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:18*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:18*	*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			12/03/24 17:18	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			12/03/24 21:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.9	14.5	mg/Kg		12/03/24 09:37	12/03/24 21:16	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:16	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:16*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**941**		9.96	0.393	mg/Kg			12/05/24 16:57	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-34-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-13
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		12/03/24 09:25	12/03/24 17:38	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 17:38	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 17:38	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 17:38	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/03/24 09:25	12/03/24 17:38	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:38*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:38*	*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	0.00401	0.00229	mg/Kg			12/03/24 17:38	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			12/03/24 21:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 21:30	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:30	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:30*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 21:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1980**		49.5	1.96	mg/Kg			12/05/24 17:04	5

Client Sample ID: SB-35-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-14
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		12/03/24 09:25	12/03/24 17:59	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 17:59	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 17:59	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 17:59	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/03/24 09:25	12/03/24 17:59	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:59*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:59*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-35-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			12/03/24 17:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15.2**	**J**	49.7	15.0	mg/Kg			12/03/24 21:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U *+	49.7	14.4	mg/Kg		12/03/24 09:37	12/03/24 21:46	1
Diesel Range Organics (Over C10-C28)	**15.2**	**J**	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 21:46	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:37	12/03/24 21:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:46*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/03/24 09:37*	*12/03/24 21:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**771**		10.0	0.395	mg/Kg			12/05/24 17:11	1

Client Sample ID: SB-36-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-15
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		12/03/24 09:25	12/03/24 18:19	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 18:19	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 18:19	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 18:19	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 09:25	12/03/24 18:19	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/03/24 09:25	12/03/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/03/24 09:25*	*12/03/24 18:19*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/03/24 09:25*	*12/03/24 18:19*	*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			12/03/24 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**195**		49.9	15.1	mg/Kg			12/03/24 22:00	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	<14.5	U *+	49.9	14.5	mg/Kg		12/03/24 09:37	12/03/24 22:00	1
Diesel Range Organics (Over C10-C28)	**195**		49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:00	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-36-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-15
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)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:00*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**900**		10.0	0.397	mg/Kg			12/05/24 17:32	1

Client Sample ID: SB-37-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-16
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		12/03/24 09:25	12/03/24 18:40	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/03/24 09:25	12/03/24 18:40	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		12/03/24 09:25	12/03/24 18:40	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 18:40	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/03/24 09:25	12/03/24 18:40	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/03/24 09:25*	*12/03/24 18:40*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/03/24 09:25*	*12/03/24 18:40*	*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			12/03/24 18:40	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	50.0	15.1	mg/Kg			12/03/24 22:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	50.0	14.5	mg/Kg		12/03/24 09:37	12/03/24 22:16	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:16	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:16*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 22:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**600**		10.0	0.396	mg/Kg			12/05/24 17:39	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-38-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-17
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		12/03/24 09:25	12/03/24 19:00	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 19:00	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 19:00	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 19:00	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/03/24 09:25	12/03/24 19:00	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:00*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:00*	*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			12/03/24 19:00	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			12/03/24 22:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	50.0	14.5	mg/Kg		12/03/24 09:37	12/03/24 22:30	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:30	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:30*	*1*
o-Terphenyl	*68*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 22:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1570**		49.9	1.97	mg/Kg			12/05/24 17:46	5

Client Sample ID: SB-39-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-18
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		12/03/24 09:25	12/03/24 19:21	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/03/24 09:25	12/03/24 19:21	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		12/03/24 09:25	12/03/24 19:21	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		12/03/24 09:25	12/03/24 19:21	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/03/24 09:25	12/03/24 19:21	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		12/03/24 09:25	12/03/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:21*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:21*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-39-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-18
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	0.00402	0.00229	mg/Kg			12/03/24 19:21	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			12/03/24 22:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 22:45	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:45	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:45*	*1*
o-Terphenyl	*71*		*70 - 130*	*12/03/24 09:37*	*12/03/24 22:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1110		9.98	0.394	mg/Kg			12/05/24 17:53	1

Client Sample ID: SB-40-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-19
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		12/03/24 09:25	12/03/24 19:41	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 19:41	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 19:41	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 19:41	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/03/24 09:25	12/03/24 19:41	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:41*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 19:41*	*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	0.00401	0.00229	mg/Kg			12/03/24 19:41	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			12/03/24 23:00	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	<14.5	U *+	50.0	14.5	mg/Kg		12/03/24 09:37	12/03/24 23:00	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 23:00	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-40-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-19
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)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*66*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 23:00*	*1*
o-Terphenyl	*56*	*S1-*	*70 - 130*	*12/03/24 09:37*	*12/03/24 23:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1220**		9.96	0.393	mg/Kg			12/05/24 17:59	1

Client Sample ID: SB-41-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-20
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		12/03/24 09:25	12/03/24 20:01	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/03/24 09:25	12/03/24 20:01	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/03/24 09:25	12/03/24 20:01	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 20:01	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/03/24 09:25	12/03/24 20:01	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/03/24 09:25	12/03/24 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/03/24 09:25*	*12/03/24 20:01*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/03/24 09:25*	*12/03/24 20:01*	*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			12/03/24 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	<15.1	U	49.8	15.1	mg/Kg			12/03/24 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.8	14.5	mg/Kg		12/03/24 09:37	12/03/24 23:14	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 23:14	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:37	12/03/24 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*12/03/24 09:37*	*12/03/24 23:14*	*1*
o-Terphenyl	*72*		*70 - 130*	*12/03/24 09:37*	*12/03/24 23:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2230**	**F1**	49.8	1.97	mg/Kg			12/05/24 18:06	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-42-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-21
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		12/03/24 09:25	12/03/24 17:01	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/03/24 09:25	12/03/24 17:01	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		12/03/24 09:25	12/03/24 17:01	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 17:01	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/03/24 09:25	12/03/24 17:01	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		12/03/24 09:25	12/03/24 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:01*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:01*	*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			12/03/24 17:01	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			12/03/24 23:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U *+	49.9	14.5	mg/Kg		12/02/24 16:32	12/03/24 23:14	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/02/24 16:32	12/03/24 23:14	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/02/24 16:32	12/03/24 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*12/02/24 16:32*	*12/03/24 23:14*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/02/24 16:32*	*12/03/24 23:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		50.1	1.98	mg/Kg			12/05/24 18:27	5

Client Sample ID: SB-43-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-22
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		12/03/24 09:25	12/03/24 17:21	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 17:21	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 17:21	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 17:21	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/03/24 09:25	12/03/24 17:21	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/03/24 09:25	12/03/24 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:21*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/03/24 09:25*	*12/03/24 17:21*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-43-4'

Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-22

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			12/03/24 17:21	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	50.0	15.1	mg/Kg			12/05/24 20:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/03/24 09:41	12/05/24 20:58	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:41	12/05/24 20:58	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:41	12/05/24 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/03/24 09:41*	*12/05/24 20:58*	*1*
o-Terphenyl	*95*		*70 - 130*	*12/03/24 09:41*	*12/05/24 20:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1010**		10.1	0.397	mg/Kg			12/05/24 18:34	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
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)
880-51651-1	SB-22-4'	112	100
880-51651-1 MS	SB-22-4'	102	101
880-51651-1 MSD	SB-22-4'	99	100
880-51651-2	SB-23-4'	107	103
880-51651-3	SB-24-4'	107	101
880-51651-4	SB-25-4'	108	102
880-51651-5	SB-26-4'	107	100
880-51651-6	SB-27-4'	107	101
880-51651-7	SB-28-4'	107	101
880-51651-8	SB-29-4'	112	98
880-51651-9	SB-30-4'	111	102
880-51651-10	SB-31-4'	108	99
880-51651-11	SB-32-4'	109	100
880-51651-12	SB-33-4'	113	97
880-51651-13	SB-34-4'	111	99
880-51651-14	SB-35-4'	111	101
880-51651-15	SB-36-4'	115	98
880-51651-16	SB-37-4'	112	103
880-51651-17	SB-38-4'	109	100
880-51651-18	SB-39-4'	108	98
880-51651-19	SB-40-4'	110	100
880-51651-20	SB-41-4'	110	100
880-51651-21	SB-42-4'	106	90
880-51651-22	SB-43-4'	104	90
LCS 880-96894/1-A	Lab Control Sample	99	94
LCS 880-96944/1-A	Lab Control Sample	101	100
LCSD 880-96894/2-A	Lab Control Sample Dup	101	96
LCSD 880-96944/2-A	Lab Control Sample Dup	98	100
MB 880-96894/5-A	Method Blank	111	85
MB 880-96944/5-A	Method Blank	101	93

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)
880-51651-1	SB-22-4'	80	70
880-51651-1 MS	SB-22-4'	93	74
880-51651-1 MSD	SB-22-4'	93	73
880-51651-2	SB-23-4'	87	75
880-51651-3	SB-24-4'	81	69 S1-
880-51651-4	SB-25-4'	83	71
880-51651-5	SB-26-4'	83	72
880-51651-6	SB-27-4'	85	77
880-51651-7	SB-28-4'	81	69 S1-

Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-51651-1
Project/Site: WLU 47 SDG: Lea County, NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-51651-8	SB-29-4'	83	71
880-51651-9	SB-30-4'	86	76
880-51651-10	SB-31-4'	80	69 S1-
880-51651-11	SB-32-4'	86	73
880-51651-12	SB-33-4'	85	73
880-51651-13	SB-34-4'	79	67 S1-
880-51651-14	SB-35-4'	83	71
880-51651-15	SB-36-4'	85	75
880-51651-16	SB-37-4'	79	68 S1-
880-51651-17	SB-38-4'	80	68 S1-
880-51651-18	SB-39-4'	82	71
880-51651-19	SB-40-4'	66 S1-	56 S1-
880-51651-20	SB-41-4'	85	72
880-51651-21	SB-42-4'	80	79
880-51651-22	SB-43-4'	106	95
880-51651-22 MS	SB-43-4'	107	102
880-51651-22 MSD	SB-43-4'	106	102
LCS 880-96909/2-A	Lab Control Sample	154 S1+	144 S1+
LCS 880-96945/2-A	Lab Control Sample	121	99
LCS 880-96946/2-A	Lab Control Sample	116	117
LCSD 880-96909/3-A	Lab Control Sample Dup	148 S1+	134 S1+
LCSD 880-96945/3-A	Lab Control Sample Dup	127	102
LCSD 880-96946/3-A	Lab Control Sample Dup	116	117
MB 880-96909/1-A	Method Blank	93	99
MB 880-96945/1-A	Method Blank	90	80
MB 880-96946/1-A	Method Blank	97	93

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96894/5-A
Matrix: Solid
Analysis Batch: 96934

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/03/24 08:00	12/03/24 11:51	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 08:00	12/03/24 11:51	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 08:00	12/03/24 11:51	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/03/24 08:00	12/03/24 11:51	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 08:00	12/03/24 11:51	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/03/24 08:00	12/03/24 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/03/24 08:00*	*12/03/24 11:51*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*12/03/24 08:00*	*12/03/24 11:51*	*1*

Lab Sample ID: LCS 880-96894/1-A
Matrix: Solid
Analysis Batch: 96934

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1064		mg/Kg		106	70 - 130
Toluene	0.100	0.1009		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1045		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2096		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1066		mg/Kg		107	70 - 130

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

Lab Sample ID: LCSD 880-96894/2-A
Matrix: Solid
Analysis Batch: 96934

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1109		mg/Kg		111	70 - 130	4	35
Toluene	0.100	0.1063		mg/Kg		106	70 - 130	5	35
Ethylbenzene	0.100	0.1094		mg/Kg		109	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2183		mg/Kg		109	70 - 130	4	35
o-Xylene	0.100	0.1112		mg/Kg		111	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-96944/5-A
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/03/24 09:25	12/03/24 11:59	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/03/24 09:25	12/03/24 11:59	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-96944/5-A
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/03/24 09:25	12/03/24 11:59	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/03/24 09:25	12/03/24 11:59	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/03/24 09:25	12/03/24 11:59	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/03/24 09:25	12/03/24 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/03/24 09:25*	*12/03/24 11:59*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/03/24 09:25*	*12/03/24 11:59*	*1*

Lab Sample ID: LCS 880-96944/1-A
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1018		mg/Kg		102	70 - 130
Toluene	0.100	0.09354		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09859		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1954		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09900		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-96944/2-A
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96944

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1068		mg/Kg		107	70 - 130	5	35
Toluene	0.100	0.09813		mg/Kg		98	70 - 130	5	35
Ethylbenzene	0.100	0.1036		mg/Kg		104	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	4	35
o-Xylene	0.100	0.1031		mg/Kg		103	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 880-51651-1 MS
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: SB-22-4'
Prep Type: Total/NA
Prep Batch: 96944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00138	U	0.100	0.1020		mg/Kg		102	70 - 130
Toluene	<0.00199	U	0.100	0.09258		mg/Kg		92	70 - 130
Ethylbenzene	<0.00108	U	0.100	0.09545		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	<0.00227	U	0.200	0.1868		mg/Kg		93	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: 880-51651-1 MS
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: SB-22-4'
Prep Type: Total/NA
Prep Batch: 96944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00157	U	0.100	0.09447		mg/Kg		94	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 880-51651-1 MSD
Matrix: Solid
Analysis Batch: 96935

Client Sample ID: SB-22-4'
Prep Type: Total/NA
Prep Batch: 96944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00138	U	0.0994	0.09940		mg/Kg		100	70 - 130	3	35
Toluene	<0.00199	U	0.0994	0.09007		mg/Kg		91	70 - 130	3	35
Ethylbenzene	<0.00108	U	0.0994	0.09299		mg/Kg		94	70 - 130	3	35
m-Xylene & p-Xylene	<0.00227	U	0.199	0.1819		mg/Kg		91	70 - 130	3	35
o-Xylene	<0.00157	U	0.0994	0.09177		mg/Kg		92	70 - 130	3	35

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

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

Lab Sample ID: MB 880-96909/1-A
Matrix: Solid
Analysis Batch: 97011

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96909

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		12/02/24 16:32	12/03/24 01:58	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/02/24 16:32	12/03/24 01:58	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/02/24 16:32	12/03/24 01:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*12/02/24 16:32*	*12/03/24 01:58*	*1*
o-Terphenyl	*99*		*70 - 130*	*12/02/24 16:32*	*12/03/24 01:58*	*1*

Lab Sample ID: LCS 880-96909/2-A
Matrix: Solid
Analysis Batch: 97011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96909

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1313	*+	mg/Kg		131	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1261		mg/Kg		126	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-96909/2-A
Matrix: Solid
Analysis Batch: 97011

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96909

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*154*	*S1+*	*70 - 130*
o-Terphenyl	*144*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-96909/3-A
Matrix: Solid
Analysis Batch: 97011

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96909

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1282		mg/Kg		128	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1182		mg/Kg		118	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*148*	*S1+*	*70 - 130*
o-Terphenyl	*134*	*S1+*	*70 - 130*

Lab Sample ID: MB 880-96945/1-A
Matrix: Solid
Analysis Batch: 97009

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96945

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		12/03/24 09:37	12/03/24 01:58	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 01:58	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:37	12/03/24 01:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*12/03/24 09:37*	*12/03/24 01:58*	*1*
o-Terphenyl	*80*		*70 - 130*	*12/03/24 09:37*	*12/03/24 01:58*	*1*

Lab Sample ID: LCS 880-96945/2-A
Matrix: Solid
Analysis Batch: 97009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96945

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1258		mg/Kg		126	70 - 130
Diesel Range Organics (Over C10-C28)			1000	967.3		mg/Kg		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-96945/3-A
Matrix: Solid
Analysis Batch: 97009

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96945

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1307	*+	mg/Kg		131	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	975.0		mg/Kg		97	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: 880-51651-1 MS
Matrix: Solid
Analysis Batch: 97009

Client Sample ID: SB-22-4'
Prep Type: Total/NA
Prep Batch: 96945

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 *+	994	898.7		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	<15.1	U F1	994	662.4	F1	mg/Kg		67	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Lab Sample ID: 880-51651-1 MSD
Matrix: Solid
Analysis Batch: 97009

Client Sample ID: SB-22-4'
Prep Type: Total/NA
Prep Batch: 96945

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 *+	994	892.1		mg/Kg		90	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.1	U F1	994	657.3	F1	mg/Kg		66	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Lab Sample ID: MB 880-96946/1-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96946

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		12/03/24 09:40	12/05/24 20:08	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:40	12/05/24 20:08	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:40	12/05/24 20:08	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-96946/1-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96946

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	12/03/24 09:40	12/05/24 20:08	1
o-Terphenyl	93		70 - 130	12/03/24 09:40	12/05/24 20:08	1

Lab Sample ID: LCS 880-96946/2-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1043		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: LCSD 880-96946/3-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	978.7		mg/Kg		98	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: 880-51651-22 MS
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: SB-43-4'
Prep Type: Total/NA
Prep Batch: 96946

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	997	914.5		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	<15.1	U	997	819.3		mg/Kg		82	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	102		70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

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

Lab Sample ID: 880-51651-22 MSD
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: SB-43-4'
Prep Type: Total/NA
Prep Batch: 96946

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	997	906.5		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.1	U	997	830.7		mg/Kg		83	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96992/1-A
Matrix: Solid
Analysis Batch: 97005

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			12/05/24 13:32	1

Lab Sample ID: LCS 880-96992/2-A
Matrix: Solid
Analysis Batch: 97005

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	263.3		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-96992/3-A
Matrix: Solid
Analysis Batch: 97005

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	264.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: MB 880-97008/1-A
Matrix: Solid
Analysis Batch: 97057

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			12/05/24 16:09	1

Lab Sample ID: LCS 880-97008/2-A
Matrix: Solid
Analysis Batch: 97057

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	267.7		mg/Kg		107	90 - 110

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-97008/3-A
Matrix: Solid
Analysis Batch: 97057

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	268.5		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 880-51651-10 MS
Matrix: Solid
Analysis Batch: 97057

Client Sample ID: SB-31-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	229	F1	249	540.7	F1	mg/Kg		125	90 - 110		

Lab Sample ID: 880-51651-10 MSD
Matrix: Solid
Analysis Batch: 97057

Client Sample ID: SB-31-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	229	F1	249	543.8	F1	mg/Kg		127	90 - 110	1	20

Lab Sample ID: 880-51651-20 MS
Matrix: Solid
Analysis Batch: 97057

Client Sample ID: SB-41-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2230	F1	1250	3846	F1	mg/Kg		130	90 - 110		

Lab Sample ID: 880-51651-20 MSD
Matrix: Solid
Analysis Batch: 97057

Client Sample ID: SB-41-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2230	F1	1250	3843	F1	mg/Kg		129	90 - 110	0	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

GC VOA

Prep Batch: 96894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-21	SB-42-4'	Total/NA	Solid	5030B	
880-51651-22	SB-43-4'	Total/NA	Solid	5030B	
MB 880-96894/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-96894/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-96894/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 96934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-21	SB-42-4'	Total/NA	Solid	8021B	96894
880-51651-22	SB-43-4'	Total/NA	Solid	8021B	96894
MB 880-96894/5-A	Method Blank	Total/NA	Solid	8021B	96894
LCS 880-96894/1-A	Lab Control Sample	Total/NA	Solid	8021B	96894
LCSD 880-96894/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96894

Analysis Batch: 96935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	8021B	96944
880-51651-2	SB-23-4'	Total/NA	Solid	8021B	96944
880-51651-3	SB-24-4'	Total/NA	Solid	8021B	96944
880-51651-4	SB-25-4'	Total/NA	Solid	8021B	96944
880-51651-5	SB-26-4'	Total/NA	Solid	8021B	96944
880-51651-6	SB-27-4'	Total/NA	Solid	8021B	96944
880-51651-7	SB-28-4'	Total/NA	Solid	8021B	96944
880-51651-8	SB-29-4'	Total/NA	Solid	8021B	96944
880-51651-9	SB-30-4'	Total/NA	Solid	8021B	96944
880-51651-10	SB-31-4'	Total/NA	Solid	8021B	96944
880-51651-11	SB-32-4'	Total/NA	Solid	8021B	96944
880-51651-12	SB-33-4'	Total/NA	Solid	8021B	96944
880-51651-13	SB-34-4'	Total/NA	Solid	8021B	96944
880-51651-14	SB-35-4'	Total/NA	Solid	8021B	96944
880-51651-15	SB-36-4'	Total/NA	Solid	8021B	96944
880-51651-16	SB-37-4'	Total/NA	Solid	8021B	96944
880-51651-17	SB-38-4'	Total/NA	Solid	8021B	96944
880-51651-18	SB-39-4'	Total/NA	Solid	8021B	96944
880-51651-19	SB-40-4'	Total/NA	Solid	8021B	96944
880-51651-20	SB-41-4'	Total/NA	Solid	8021B	96944
MB 880-96944/5-A	Method Blank	Total/NA	Solid	8021B	96944
LCS 880-96944/1-A	Lab Control Sample	Total/NA	Solid	8021B	96944
LCSD 880-96944/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96944
880-51651-1 MS	SB-22-4'	Total/NA	Solid	8021B	96944
880-51651-1 MSD	SB-22-4'	Total/NA	Solid	8021B	96944

Prep Batch: 96944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	5030B	
880-51651-2	SB-23-4'	Total/NA	Solid	5030B	
880-51651-3	SB-24-4'	Total/NA	Solid	5030B	
880-51651-4	SB-25-4'	Total/NA	Solid	5030B	
880-51651-5	SB-26-4'	Total/NA	Solid	5030B	
880-51651-6	SB-27-4'	Total/NA	Solid	5030B	
880-51651-7	SB-28-4'	Total/NA	Solid	5030B	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

GC VOA (Continued)

Prep Batch: 96944 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-8	SB-29-4'	Total/NA	Solid	5030B	
880-51651-9	SB-30-4'	Total/NA	Solid	5030B	
880-51651-10	SB-31-4'	Total/NA	Solid	5030B	
880-51651-11	SB-32-4'	Total/NA	Solid	5030B	
880-51651-12	SB-33-4'	Total/NA	Solid	5030B	
880-51651-13	SB-34-4'	Total/NA	Solid	5030B	
880-51651-14	SB-35-4'	Total/NA	Solid	5030B	
880-51651-15	SB-36-4'	Total/NA	Solid	5030B	
880-51651-16	SB-37-4'	Total/NA	Solid	5030B	
880-51651-17	SB-38-4'	Total/NA	Solid	5030B	
880-51651-18	SB-39-4'	Total/NA	Solid	5030B	
880-51651-19	SB-40-4'	Total/NA	Solid	5030B	
880-51651-20	SB-41-4'	Total/NA	Solid	5030B	
MB 880-96944/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-96944/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-96944/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51651-1 MS	SB-22-4'	Total/NA	Solid	5030B	
880-51651-1 MSD	SB-22-4'	Total/NA	Solid	5030B	

Analysis Batch: 97047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	Total BTEX	
880-51651-2	SB-23-4'	Total/NA	Solid	Total BTEX	
880-51651-3	SB-24-4'	Total/NA	Solid	Total BTEX	
880-51651-4	SB-25-4'	Total/NA	Solid	Total BTEX	
880-51651-5	SB-26-4'	Total/NA	Solid	Total BTEX	
880-51651-6	SB-27-4'	Total/NA	Solid	Total BTEX	
880-51651-7	SB-28-4'	Total/NA	Solid	Total BTEX	
880-51651-8	SB-29-4'	Total/NA	Solid	Total BTEX	
880-51651-9	SB-30-4'	Total/NA	Solid	Total BTEX	
880-51651-10	SB-31-4'	Total/NA	Solid	Total BTEX	
880-51651-11	SB-32-4'	Total/NA	Solid	Total BTEX	
880-51651-12	SB-33-4'	Total/NA	Solid	Total BTEX	
880-51651-13	SB-34-4'	Total/NA	Solid	Total BTEX	
880-51651-14	SB-35-4'	Total/NA	Solid	Total BTEX	
880-51651-15	SB-36-4'	Total/NA	Solid	Total BTEX	
880-51651-16	SB-37-4'	Total/NA	Solid	Total BTEX	
880-51651-17	SB-38-4'	Total/NA	Solid	Total BTEX	
880-51651-18	SB-39-4'	Total/NA	Solid	Total BTEX	
880-51651-19	SB-40-4'	Total/NA	Solid	Total BTEX	
880-51651-20	SB-41-4'	Total/NA	Solid	Total BTEX	
880-51651-21	SB-42-4'	Total/NA	Solid	Total BTEX	
880-51651-22	SB-43-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-21	SB-42-4'	Total/NA	Solid	8015NM Prep	
MB 880-96909/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96909/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 96909 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-96909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 96945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	8015NM Prep	
880-51651-2	SB-23-4'	Total/NA	Solid	8015NM Prep	
880-51651-3	SB-24-4'	Total/NA	Solid	8015NM Prep	
880-51651-4	SB-25-4'	Total/NA	Solid	8015NM Prep	
880-51651-5	SB-26-4'	Total/NA	Solid	8015NM Prep	
880-51651-6	SB-27-4'	Total/NA	Solid	8015NM Prep	
880-51651-7	SB-28-4'	Total/NA	Solid	8015NM Prep	
880-51651-8	SB-29-4'	Total/NA	Solid	8015NM Prep	
880-51651-9	SB-30-4'	Total/NA	Solid	8015NM Prep	
880-51651-10	SB-31-4'	Total/NA	Solid	8015NM Prep	
880-51651-11	SB-32-4'	Total/NA	Solid	8015NM Prep	
880-51651-12	SB-33-4'	Total/NA	Solid	8015NM Prep	
880-51651-13	SB-34-4'	Total/NA	Solid	8015NM Prep	
880-51651-14	SB-35-4'	Total/NA	Solid	8015NM Prep	
880-51651-15	SB-36-4'	Total/NA	Solid	8015NM Prep	
880-51651-16	SB-37-4'	Total/NA	Solid	8015NM Prep	
880-51651-17	SB-38-4'	Total/NA	Solid	8015NM Prep	
880-51651-18	SB-39-4'	Total/NA	Solid	8015NM Prep	
880-51651-19	SB-40-4'	Total/NA	Solid	8015NM Prep	
880-51651-20	SB-41-4'	Total/NA	Solid	8015NM Prep	
MB 880-96945/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96945/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-51651-1 MS	SB-22-4'	Total/NA	Solid	8015NM Prep	
880-51651-1 MSD	SB-22-4'	Total/NA	Solid	8015NM Prep	

Prep Batch: 96946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-22	SB-43-4'	Total/NA	Solid	8015NM Prep	
MB 880-96946/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96946/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-51651-22 MS	SB-43-4'	Total/NA	Solid	8015NM Prep	
880-51651-22 MSD	SB-43-4'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	8015B NM	96945
880-51651-2	SB-23-4'	Total/NA	Solid	8015B NM	96945
880-51651-3	SB-24-4'	Total/NA	Solid	8015B NM	96945
880-51651-4	SB-25-4'	Total/NA	Solid	8015B NM	96945
880-51651-5	SB-26-4'	Total/NA	Solid	8015B NM	96945
880-51651-6	SB-27-4'	Total/NA	Solid	8015B NM	96945
880-51651-7	SB-28-4'	Total/NA	Solid	8015B NM	96945
880-51651-8	SB-29-4'	Total/NA	Solid	8015B NM	96945
880-51651-9	SB-30-4'	Total/NA	Solid	8015B NM	96945
880-51651-10	SB-31-4'	Total/NA	Solid	8015B NM	96945

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 97009 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-11	SB-32-4'	Total/NA	Solid	8015B NM	96945
880-51651-12	SB-33-4'	Total/NA	Solid	8015B NM	96945
880-51651-13	SB-34-4'	Total/NA	Solid	8015B NM	96945
880-51651-14	SB-35-4'	Total/NA	Solid	8015B NM	96945
880-51651-15	SB-36-4'	Total/NA	Solid	8015B NM	96945
880-51651-16	SB-37-4'	Total/NA	Solid	8015B NM	96945
880-51651-17	SB-38-4'	Total/NA	Solid	8015B NM	96945
880-51651-18	SB-39-4'	Total/NA	Solid	8015B NM	96945
880-51651-19	SB-40-4'	Total/NA	Solid	8015B NM	96945
880-51651-20	SB-41-4'	Total/NA	Solid	8015B NM	96945
MB 880-96945/1-A	Method Blank	Total/NA	Solid	8015B NM	96945
LCS 880-96945/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96945
LCSD 880-96945/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96945
880-51651-1 MS	SB-22-4'	Total/NA	Solid	8015B NM	96945
880-51651-1 MSD	SB-22-4'	Total/NA	Solid	8015B NM	96945

Analysis Batch: 97011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-21	SB-42-4'	Total/NA	Solid	8015B NM	96909
MB 880-96909/1-A	Method Blank	Total/NA	Solid	8015B NM	96909
LCS 880-96909/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96909
LCSD 880-96909/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96909

Analysis Batch: 97066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Total/NA	Solid	8015 NM	
880-51651-2	SB-23-4'	Total/NA	Solid	8015 NM	
880-51651-3	SB-24-4'	Total/NA	Solid	8015 NM	
880-51651-4	SB-25-4'	Total/NA	Solid	8015 NM	
880-51651-5	SB-26-4'	Total/NA	Solid	8015 NM	
880-51651-6	SB-27-4'	Total/NA	Solid	8015 NM	
880-51651-7	SB-28-4'	Total/NA	Solid	8015 NM	
880-51651-8	SB-29-4'	Total/NA	Solid	8015 NM	
880-51651-9	SB-30-4'	Total/NA	Solid	8015 NM	
880-51651-10	SB-31-4'	Total/NA	Solid	8015 NM	
880-51651-11	SB-32-4'	Total/NA	Solid	8015 NM	
880-51651-12	SB-33-4'	Total/NA	Solid	8015 NM	
880-51651-13	SB-34-4'	Total/NA	Solid	8015 NM	
880-51651-14	SB-35-4'	Total/NA	Solid	8015 NM	
880-51651-15	SB-36-4'	Total/NA	Solid	8015 NM	
880-51651-16	SB-37-4'	Total/NA	Solid	8015 NM	
880-51651-17	SB-38-4'	Total/NA	Solid	8015 NM	
880-51651-18	SB-39-4'	Total/NA	Solid	8015 NM	
880-51651-19	SB-40-4'	Total/NA	Solid	8015 NM	
880-51651-20	SB-41-4'	Total/NA	Solid	8015 NM	
880-51651-21	SB-42-4'	Total/NA	Solid	8015 NM	
880-51651-22	SB-43-4'	Total/NA	Solid	8015 NM	

Analysis Batch: 97128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-22	SB-43-4'	Total/NA	Solid	8015B NM	96946

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 97128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-96946/1-A	Method Blank	Total/NA	Solid	8015B NM	96946
LCS 880-96946/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96946
LCSD 880-96946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96946
880-51651-22 MS	SB-43-4'	Total/NA	Solid	8015B NM	96946
880-51651-22 MSD	SB-43-4'	Total/NA	Solid	8015B NM	96946

HPLC/IC

Leach Batch: 96992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Soluble	Solid	DI Leach	
880-51651-2	SB-23-4'	Soluble	Solid	DI Leach	
880-51651-3	SB-24-4'	Soluble	Solid	DI Leach	
880-51651-4	SB-25-4'	Soluble	Solid	DI Leach	
880-51651-5	SB-26-4'	Soluble	Solid	DI Leach	
880-51651-6	SB-27-4'	Soluble	Solid	DI Leach	
880-51651-7	SB-28-4'	Soluble	Solid	DI Leach	
880-51651-8	SB-29-4'	Soluble	Solid	DI Leach	
880-51651-9	SB-30-4'	Soluble	Solid	DI Leach	
MB 880-96992/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96992/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96992/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 97005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-1	SB-22-4'	Soluble	Solid	300.0	96992
880-51651-2	SB-23-4'	Soluble	Solid	300.0	96992
880-51651-3	SB-24-4'	Soluble	Solid	300.0	96992
880-51651-4	SB-25-4'	Soluble	Solid	300.0	96992
880-51651-5	SB-26-4'	Soluble	Solid	300.0	96992
880-51651-6	SB-27-4'	Soluble	Solid	300.0	96992
880-51651-7	SB-28-4'	Soluble	Solid	300.0	96992
880-51651-8	SB-29-4'	Soluble	Solid	300.0	96992
880-51651-9	SB-30-4'	Soluble	Solid	300.0	96992
MB 880-96992/1-A	Method Blank	Soluble	Solid	300.0	96992
LCS 880-96992/2-A	Lab Control Sample	Soluble	Solid	300.0	96992
LCSD 880-96992/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96992

Leach Batch: 97008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-10	SB-31-4'	Soluble	Solid	DI Leach	
880-51651-11	SB-32-4'	Soluble	Solid	DI Leach	
880-51651-12	SB-33-4'	Soluble	Solid	DI Leach	
880-51651-13	SB-34-4'	Soluble	Solid	DI Leach	
880-51651-14	SB-35-4'	Soluble	Solid	DI Leach	
880-51651-15	SB-36-4'	Soluble	Solid	DI Leach	
880-51651-16	SB-37-4'	Soluble	Solid	DI Leach	
880-51651-17	SB-38-4'	Soluble	Solid	DI Leach	
880-51651-18	SB-39-4'	Soluble	Solid	DI Leach	
880-51651-19	SB-40-4'	Soluble	Solid	DI Leach	
880-51651-20	SB-41-4'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 97008 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-21	SB-42-4'	Soluble	Solid	DI Leach	
880-51651-22	SB-43-4'	Soluble	Solid	DI Leach	
MB 880-97008/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97008/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97008/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51651-10 MS	SB-31-4'	Soluble	Solid	DI Leach	
880-51651-10 MSD	SB-31-4'	Soluble	Solid	DI Leach	
880-51651-20 MS	SB-41-4'	Soluble	Solid	DI Leach	
880-51651-20 MSD	SB-41-4'	Soluble	Solid	DI Leach	

Analysis Batch: 97057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51651-10	SB-31-4'	Soluble	Solid	300.0	97008
880-51651-11	SB-32-4'	Soluble	Solid	300.0	97008
880-51651-12	SB-33-4'	Soluble	Solid	300.0	97008
880-51651-13	SB-34-4'	Soluble	Solid	300.0	97008
880-51651-14	SB-35-4'	Soluble	Solid	300.0	97008
880-51651-15	SB-36-4'	Soluble	Solid	300.0	97008
880-51651-16	SB-37-4'	Soluble	Solid	300.0	97008
880-51651-17	SB-38-4'	Soluble	Solid	300.0	97008
880-51651-18	SB-39-4'	Soluble	Solid	300.0	97008
880-51651-19	SB-40-4'	Soluble	Solid	300.0	97008
880-51651-20	SB-41-4'	Soluble	Solid	300.0	97008
880-51651-21	SB-42-4'	Soluble	Solid	300.0	97008
880-51651-22	SB-43-4'	Soluble	Solid	300.0	97008
MB 880-97008/1-A	Method Blank	Soluble	Solid	300.0	97008
LCS 880-97008/2-A	Lab Control Sample	Soluble	Solid	300.0	97008
LCSD 880-97008/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97008
880-51651-10 MS	SB-31-4'	Soluble	Solid	300.0	97008
880-51651-10 MSD	SB-31-4'	Soluble	Solid	300.0	97008
880-51651-20 MS	SB-41-4'	Soluble	Solid	300.0	97008
880-51651-20 MSD	SB-41-4'	Soluble	Solid	300.0	97008

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-22-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-1
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			5.03 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 12:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 12:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 17:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 17:46	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 15:29	CH	EET MID

Client Sample ID: SB-23-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 12:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 12:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 18:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 18:32	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 15:35	CH	EET MID

Client Sample ID: SB-24-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 13:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 13:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 18:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 18:46	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 15:53	CH	EET MID

Client Sample ID: SB-25-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 13:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 13:22	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-25-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-4
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			97066	12/03/24 19:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 19:02	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 15:59	CH	EET MID

Client Sample ID: SB-26-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-5
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			5.05 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 13:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 13:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 19:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 19:17	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 16:05	CH	EET MID

Client Sample ID: SB-27-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-6
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			5.05 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 14:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 14:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 19:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 19:33	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 16:10	CH	EET MID

Client Sample ID: SB-28-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-7
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			5.01 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 14:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 14:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 19:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 19:47	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-28-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 16:16	CH	EET MID

Client Sample ID: SB-29-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 14:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 14:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 20:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 20:03	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 16:22	CH	EET MID

Client Sample ID: SB-30-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 15:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 15:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 20:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 20:17	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96992	12/03/24 13:07	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97005	12/05/24 16:28	CH	EET MID

Client Sample ID: SB-31-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 15:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 15:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 20:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 20:32	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 16:30	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-32-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-11
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			5.01 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 16:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 16:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 21:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 21:01	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 16:51	CH	EET MID

Client Sample ID: SB-33-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-12
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			4.97 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 17:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 17:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 21:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 21:16	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 16:57	CH	EET MID

Client Sample ID: SB-34-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-13
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			4.99 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 17:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 17:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 21:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 21:30	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97057	12/05/24 17:04	CH	EET MID

Client Sample ID: SB-35-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-14
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			5.02 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 17:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 17:59	SM	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-35-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-14
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			97066	12/03/24 21:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 21:46	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 17:11	CH	EET MID

Client Sample ID: SB-36-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 18:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 18:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 22:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 22:00	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 17:32	CH	EET MID

Client Sample ID: SB-37-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-16
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			4.97 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 18:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 18:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 22:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 22:16	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 17:39	CH	EET MID

Client Sample ID: SB-38-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 19:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 22:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 22:30	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-38-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97057	12/05/24 17:46	CH	EET MID

Client Sample ID: SB-39-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 19:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 19:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 22:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 22:45	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 17:53	CH	EET MID

Client Sample ID: SB-40-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 19:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 19:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 23:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 23:00	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 17:59	CH	EET MID

Client Sample ID: SB-41-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	96944	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96935	12/03/24 20:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 20:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 23:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96945	12/03/24 09:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97009	12/03/24 23:14	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97057	12/05/24 18:06	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Client Sample ID: SB-42-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	96894	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96934	12/03/24 17:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 17:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/03/24 23:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96909	12/02/24 16:32	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97011	12/03/24 23:14	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97057	12/05/24 18:27	CH	EET MID

Client Sample ID: SB-43-4'
Date Collected: 12/02/24 00:00
Date Received: 12/02/24 16:45

Lab Sample ID: 880-51651-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	96894	12/03/24 09:25	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96934	12/03/24 17:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			97047	12/03/24 17:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			97066	12/05/24 20:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 20:58	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	97008	12/03/24 16:44	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97057	12/05/24 18:34	CH	EET MID

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

Accreditation/Certification Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51651-1
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: WLU 47

Job ID: 880-51651-1
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: WLU 47

Job ID: 880-51651-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51651-1	SB-22-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-2	SB-23-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-3	SB-24-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-4	SB-25-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-5	SB-26-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-6	SB-27-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-7	SB-28-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-8	SB-29-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-9	SB-30-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-10	SB-31-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-11	SB-32-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-12	SB-33-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-13	SB-34-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-14	SB-35-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-15	SB-36-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-16	SB-37-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-17	SB-38-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-18	SB-39-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-19	SB-40-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-20	SB-41-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-21	SB-42-4'	Solid	12/02/24 00:00	12/02/24 16:45
880-51651-22	SB-43-4'	Solid	12/02/24 00:00	12/02/24 16:45

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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

Chain of Custody Record

eurofins

880-51651 Chain of Custody

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): 5 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: WLU 47	Project #: 30246600.0004		
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 (Y	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB-22-4'	12/02/24	0900	G	Solid	N	N	X	X	X	1	
SB-23-4'		0910	G	Solid	N	N	X	X	X	1	
SB-24-4'		0920	G	Solid	N	N	X	X	X	1	
SB-25-4'		0930	G	Solid	N	N	X	X	X	1	
SB-26-4'		0940	G	Solid	N	N	X	X	X	1	
SB-27-4'		0950	G	Solid	N	N	X	X	X	1	
SB-28-4'		1000	G	Solid	N	N	X	X	X	1	
SB-29-4'		1010	G	Solid	N	N	X	X	X	1	
SB-30-4'		1030	G	Solid	N	N	X	X	X	1	
SB-31-4'		1040	G	Solid	N	N	X	X	X	1	
SB-32-4'	X	1050	G	Solid	N	N	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
1	Chris Par	12-2-24	Arcadis		12/2/24 1615	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	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: 5.9/5.8 -.1

Ver: 05/06/2024

Released to Imaging: 1/10/2025 8:43:45 AM
Received by OCD: 1/9/2025 1:03:14 PM

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

Chain of Custody Record

eurofins | Environment Testing

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 2 of 2
Company: Arcadis U.S., Inc.	PWSID:	Analysis Requested		Job #: C651
Address: 1004 North Big Spring Suite 300	Due Date Requested:			Preservation Codes: N - None
City: Midland	TAT Requested (days): 5 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: WLU 47	Project #: 30246600.0004			
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		
SB-33-4'	12/02/24	1100	G	Solid	N	N	X	X	X	1	
SB-34-4'		1110	G	Solid	N	N	X	X	X	1	
SB-35-4'		1120	G	Solid	N	N	X	X	X	1	
SB-36-4'		1130	G	Solid	N	N	X	X	X	1	
SB-37-4'		1145	G	Solid	N	N	X	X	X	1	
SB-38-4'		1155	G	Solid	N	N	X	X	X	1	
SB-39-4'		1205	G	Solid	N	N	X	X	X	1	
SB-40-4'		1215	G	Solid	N	N	X	X	X	1	
SB-41-4'		1225	G	Solid	N	N	X	X	X	1	
SB-42-4'		1235	G	Solid	N	N	X	X	X	1	
SB-43-4'	X	1245	G	Solid	N	N	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
1	Chris Young	12-2-24	Arcadis		12/2/24 1645	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	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:

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51651-1
SDG Number: Lea County, NM

Login Number: 51651
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 12/9/2024 8:04:47 AM

JOB DESCRIPTION

WLU 47
Lea County, NM

JOB NUMBER

880-51705-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 1/10/2025 8:45:45 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
12/9/2024 8:04:47 AM

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

Client: Arcadis US Inc.
Project/Site: WLU 47

Laboratory Job ID: 880-51705-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
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: WLU 47

Job ID: 880-51705-1

Job ID: 880-51705-1 Eurofins Midland

Job Narrative
880-51705-1

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 12/4/2024 8:30 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 5.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-44-4' (880-51705-1), SB-45-4' (880-51705-2), SB-46-4' (880-51705-3), SB-47-4' (880-51705-4), SB-48-4' (880-51705-5), SB-49-4' (880-51705-6), SB-50-4' (880-51705-7), SB-51-4' (880-51705-8), SB-52-4' (880-51705-9), SB-53-4' (880-51705-10), SB-54-4' (880-51705-11), SB-55-4' (880-51705-12), SB-56-4' (880-51705-13), SB-57-4' (880-51705-14), SB-58-4' (880-51705-15), SB-59-4' (880-51705-16), SB-60-4' (880-51705-17), SB-61-4' (880-51705-18), SB-62-4' (880-51705-19), SB-63-4' (880-51705-20), SB-64-4' (880-51705-21), SB-65-4' (880-51705-22), SB-66-4' (880-51705-23), SB-67-4' (880-51705-24), SB-68-4' (880-51705-25), SB-69-4' (880-51705-26), SB-70-4' (880-51705-27), SB-71-4' (880-51705-28), SB-72-4' (880-51705-29), SB-73-4' (880-51705-30), SB-74-4' (880-51705-31), SB-75-4' (880-51705-32), SB-76-4' (880-51705-33), SB-77-4' (880-51705-34), SB-78-4' (880-51705-35), SB-79-4' (880-51705-36), SB-80-4' (880-51705-37), SB-81-4' (880-51705-38), SB-82-4' (880-51705-39), SB-83-4' (880-51705-40), SB-84-4' (880-51705-41), SB-85-4' (880-51705-42), SB-86-4' (880-51705-43), SB-87-4' (880-51705-44), SB-88-4' (880-51705-45), SB-89-4' (880-51705-46), SB-90-4' (880-51705-47) and SB-91-4' (880-51705-48).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-97056 and analytical batch 880-97032 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.

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-97051 and analytical batch 880-97087 was outside the upper control limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-97053 and analytical batch 880-97090 was outside the upper control limits.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-97090 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. The associated sample is impacted: (CCV 880-97090/21).

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-88-4' (880-51705-45). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-97059 and analytical batch 880-97079 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

Case Narrative

Client: Arcadis US Inc.
Project: WLU 47

Job ID: 880-51705-1

Job ID: 880-51705-1 (Continued) Eurofins Midland

within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97058 and analytical batch 880-97076 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 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-97077 and analytical batch 880-97080 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: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-44-4'

Date Collected: 12/03/24 09:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		12/04/24 10:52	12/04/24 12:33	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 10:52	12/04/24 12:33	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 10:52	12/04/24 12:33	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 10:52	12/04/24 12:33	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/04/24 10:52	12/04/24 12:33	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 10:52	12/04/24 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:33*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:33*	*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			12/04/24 12:33	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			12/04/24 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 16:23	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 16:23	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/04/24 09:45*	*12/04/24 16:23*	*1*
o-Terphenyl	*77*		*70 - 130*	*12/04/24 09:45*	*12/04/24 16:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**394**		9.96	0.393	mg/Kg			12/06/24 18:20	1

Client Sample ID: SB-45-4'

Date Collected: 12/03/24 09:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-2

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		12/04/24 10:52	12/04/24 12:54	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/04/24 10:52	12/04/24 12:54	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		12/04/24 10:52	12/04/24 12:54	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 10:52	12/04/24 12:54	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/04/24 10:52	12/04/24 12:54	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 10:52	12/04/24 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:54*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:54*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-45-4'

Date Collected: 12/03/24 09:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			12/04/24 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	<15.1	U	49.8	15.1	mg/Kg			12/04/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 17:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 17:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:11*	*1*
o-Terphenyl	*88*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2450**		49.6	1.96	mg/Kg			12/06/24 18:26	5

Client Sample ID: SB-46-4'

Date Collected: 12/03/24 09:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		12/04/24 10:52	12/04/24 13:14	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 10:52	12/04/24 13:14	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 10:52	12/04/24 13:14	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 10:52	12/04/24 13:14	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 10:52	12/04/24 13:14	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 10:52	12/04/24 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:14*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:14*	*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	0.00403	0.00230	mg/Kg			12/04/24 13:14	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			12/04/24 17:28	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	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 17:28	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 17:28	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-46-4' Lab Sample ID: 880-51705-3

Date Collected: 12/03/24 09:20 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:28*	*1*
o-Terphenyl	*87*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2600**		50.4	1.99	mg/Kg			12/06/24 18:32	5

Client Sample ID: SB-47-4' Lab Sample ID: 880-51705-4

Date Collected: 12/03/24 09:30 **Matrix: Solid**
Date Received: 12/04/24 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 10:52	12/04/24 13:35	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 10:52	12/04/24 13:35	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 10:52	12/04/24 13:35	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 13:35	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 10:52	12/04/24 13:35	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:35*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 13:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			12/04/24 17:44	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	<14.4	U	49.7	14.4	mg/Kg		12/04/24 09:45	12/04/24 17:44	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		12/04/24 09:45	12/04/24 17:44	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/04/24 09:45	12/04/24 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:44*	*1*
o-Terphenyl	*85*		*70 - 130*	*12/04/24 09:45*	*12/04/24 17:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1650**		49.8	1.97	mg/Kg			12/06/24 18:49	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-48-4'

Date Collected: 12/03/24 09:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/04/24 10:52	12/04/24 13:55	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 10:52	12/04/24 13:55	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 10:52	12/04/24 13:55	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 10:52	12/04/24 13:55	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 10:52	12/04/24 13:55	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 10:52	12/04/24 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:55*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/04/24 10:52*	*12/04/24 13:55*	*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			12/04/24 13:55	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			12/04/24 18:00	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	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 18:00	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:00	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:00*	*1*
o-Terphenyl	*85*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1350**		9.98	0.394	mg/Kg			12/06/24 18:55	1

Client Sample ID: SB-49-4'

Date Collected: 12/03/24 09:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-6
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		12/04/24 10:52	12/04/24 17:00	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		12/04/24 10:52	12/04/24 17:00	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		12/04/24 10:52	12/04/24 17:00	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 10:52	12/04/24 17:00	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		12/04/24 10:52	12/04/24 17:00	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 10:52	12/04/24 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:00*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:00*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-49-4'

Date Collected: 12/03/24 09:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			12/04/24 17:00	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			12/04/24 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:45	12/04/24 18:16	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:16	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:16*	*1*
o-Terphenyl	*93*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1790**		50.4	1.99	mg/Kg			12/06/24 19:01	5

Client Sample ID: SB-50-4'

Date Collected: 12/03/24 10:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 10:52	12/04/24 17:20	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 10:52	12/04/24 17:20	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 10:52	12/04/24 17:20	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 17:20	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 10:52	12/04/24 17:20	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:20*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 17:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			12/04/24 18:33	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 18:33	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:33	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-50-4' Lab Sample ID: 880-51705-7

Date Collected: 12/03/24 10:00 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:33*	*1*
o-Terphenyl	*86*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1200**		9.94	0.393	mg/Kg			12/06/24 19:07	1

Client Sample ID: SB-51-4' Lab Sample ID: 880-51705-8

Date Collected: 12/03/24 10:10 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 10:52	12/04/24 17:41	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 10:52	12/04/24 17:41	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 10:52	12/04/24 17:41	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 10:52	12/04/24 17:41	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 10:52	12/04/24 17:41	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 10:52	12/04/24 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:41*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/04/24 10:52*	*12/04/24 17:41*	*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			12/04/24 17:41	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			12/04/24 18:48	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	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:45	12/04/24 18:48	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:48	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:48*	*1*
o-Terphenyl	*84*		*70 - 130*	*12/04/24 09:45*	*12/04/24 18:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1270**		9.98	0.394	mg/Kg			12/06/24 19:13	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-52-4'

Date Collected: 12/03/24 10:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-9

Matrix: Solid

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		12/04/24 10:52	12/04/24 18:01	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 10:52	12/04/24 18:01	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 10:52	12/04/24 18:01	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 10:52	12/04/24 18:01	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 10:52	12/04/24 18:01	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 10:52	12/04/24 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:01*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:01*	*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			12/04/24 18:01	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	50.0	15.1	mg/Kg			12/04/24 19:05	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 19:05	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 19:05	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:05*	*1*
o-Terphenyl	*83*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**665**	**F1**	10.0	0.395	mg/Kg			12/06/24 19:19	1

Client Sample ID: SB-53-4'

Date Collected: 12/03/24 10:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-10

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		12/04/24 10:52	12/04/24 18:22	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/04/24 10:52	12/04/24 18:22	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		12/04/24 10:52	12/04/24 18:22	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		12/04/24 10:52	12/04/24 18:22	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/04/24 10:52	12/04/24 18:22	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		12/04/24 10:52	12/04/24 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:22*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:22*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-53-4'

Date Collected: 12/03/24 10:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-10

Matrix: Solid

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			12/04/24 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.7**	**J**	49.9	15.1	mg/Kg			12/04/24 19:21	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	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:45	12/04/24 19:21	1
Diesel Range Organics (Over C10-C28)	**16.7**	**J**	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 19:21	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:21*	*1*
o-Terphenyl	*75*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1710**		49.5	1.96	mg/Kg			12/06/24 19:37	5

Client Sample ID: SB-54-4'

Date Collected: 12/03/24 10:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-11

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		12/04/24 10:52	12/04/24 18:42	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 10:52	12/04/24 18:42	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 10:52	12/04/24 18:42	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 10:52	12/04/24 18:42	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 10:52	12/04/24 18:42	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 10:52	12/04/24 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:42*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/04/24 10:52*	*12/04/24 18:42*	*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	0.00401	0.00229	mg/Kg			12/04/24 18:42	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			12/04/24 19:54	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	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 19:54	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 19:54	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-54-4' Lab Sample ID: 880-51705-11

Date Collected: 12/03/24 10:40 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 09:45	12/04/24 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:54*	*1*
o-Terphenyl	*78*		*70 - 130*	*12/04/24 09:45*	*12/04/24 19:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**637**		9.90	0.391	mg/Kg			12/06/24 19:43	1

Client Sample ID: SB-55-4' Lab Sample ID: 880-51705-12

Date Collected: 12/03/24 10:50 **Matrix: Solid**
Date Received: 12/04/24 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 10:52	12/04/24 19:03	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 10:52	12/04/24 19:03	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 10:52	12/04/24 19:03	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 19:03	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 10:52	12/04/24 19:03	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 10:52	12/04/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:03*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 19:03	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			12/04/24 20:10	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 20:10	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:10	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:10*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1070**		10.0	0.397	mg/Kg			12/06/24 20:00	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-56-4'

Date Collected: 12/03/24 11:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-13

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		12/04/24 10:52	12/04/24 19:23	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		12/04/24 10:52	12/04/24 19:23	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		12/04/24 10:52	12/04/24 19:23	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 10:52	12/04/24 19:23	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		12/04/24 10:52	12/04/24 19:23	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 10:52	12/04/24 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:23*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:23*	*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			12/04/24 19:23	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			12/04/24 20:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 20:27	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:27	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:27*	*1*
o-Terphenyl	*77*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1130**		10.0	0.396	mg/Kg			12/06/24 20:06	1

Client Sample ID: SB-57-4'

Date Collected: 12/03/24 11:15
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-14

Matrix: Solid

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		12/04/24 10:52	12/04/24 19:44	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 10:52	12/04/24 19:44	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 10:52	12/04/24 19:44	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 10:52	12/04/24 19:44	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 10:52	12/04/24 19:44	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 10:52	12/04/24 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:44*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/04/24 10:52*	*12/04/24 19:44*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-57-4'

Date Collected: 12/03/24 11:15
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-14
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00231	U	0.00404	0.00231	mg/Kg			12/04/24 19:44	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			12/04/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 20:42	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:42	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:42*	*1*
o-Terphenyl	*81*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1450**		49.6	1.96	mg/Kg			12/06/24 20:12	5

Client Sample ID: SB-58-4'

Date Collected: 12/03/24 11:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-15
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		12/04/24 10:52	12/04/24 20:04	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 10:52	12/04/24 20:04	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 10:52	12/04/24 20:04	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 10:52	12/04/24 20:04	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 10:52	12/04/24 20:04	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 10:52	12/04/24 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/04/24 10:52*	*12/04/24 20:04*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*12/04/24 10:52*	*12/04/24 20:04*	*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	0.00400	0.00229	mg/Kg			12/04/24 20:04	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			12/04/24 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:45	12/04/24 20:59	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:59	1

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-58-4' Lab Sample ID: 880-51705-15

Date Collected: 12/03/24 11:25 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:59*	*1*
o-Terphenyl	*102*		*70 - 130*	*12/04/24 09:45*	*12/04/24 20:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**769**		10.1	0.399	mg/Kg			12/06/24 20:18	1

Client Sample ID: SB-59-4' Lab Sample ID: 880-51705-16

Date Collected: 12/03/24 11:35 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 11:09	12/04/24 15:40	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 15:40	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 15:40	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:09	12/04/24 15:40	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:09	12/04/24 15:40	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:09	12/04/24 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*12/04/24 11:09*	*12/04/24 15:40*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/04/24 11:09*	*12/04/24 15:40*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			12/04/24 15:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			12/04/24 21:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 21:15	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 21:15	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:15*	*1*
o-Terphenyl	*83*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1380**		9.94	0.393	mg/Kg			12/06/24 20:24	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-60-4'

Date Collected: 12/03/24 11:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-17
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		12/04/24 11:09	12/04/24 16:01	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 16:01	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 16:01	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:09	12/04/24 16:01	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:09	12/04/24 16:01	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:09	12/04/24 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/04/24 11:09*	*12/04/24 16:01*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:09*	*12/04/24 16:01*	*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	0.00400	0.00229	mg/Kg			12/04/24 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	<15.1	U	49.8	15.1	mg/Kg			12/04/24 21:31	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	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:45	12/04/24 21:31	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 21:31	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:45	12/04/24 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:31*	*1*
o-Terphenyl	*84*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**944**		9.98	0.394	mg/Kg			12/06/24 20:30	1

Client Sample ID: SB-61-4'

Date Collected: 12/03/24 11:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-18
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		12/04/24 11:09	12/04/24 17:35	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		12/04/24 11:09	12/04/24 17:35	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		12/04/24 11:09	12/04/24 17:35	1
m-Xylene & p-Xylene	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 11:09	12/04/24 17:35	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		12/04/24 11:09	12/04/24 17:35	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		12/04/24 11:09	12/04/24 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/04/24 11:09*	*12/04/24 17:35*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*12/04/24 11:09*	*12/04/24 17:35*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-61-4'

Date Collected: 12/03/24 11:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-18
Matrix: Solid

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			12/04/24 17:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			12/04/24 21:48	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	<14.4	U	49.7	14.4	mg/Kg		12/04/24 09:45	12/04/24 21:48	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		12/04/24 09:45	12/04/24 21:48	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/04/24 09:45	12/04/24 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:48*	*1*
o-Terphenyl	*79*		*70 - 130*	*12/04/24 09:45*	*12/04/24 21:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**930**		9.96	0.393	mg/Kg			12/06/24 20:36	1

Client Sample ID: SB-62-4'

Date Collected: 12/03/24 12:05
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-19
Matrix: Solid

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		12/04/24 11:09	12/04/24 17:56	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:09	12/04/24 17:56	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:09	12/04/24 17:56	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:09	12/04/24 17:56	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:09	12/04/24 17:56	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:09	12/04/24 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*12/04/24 11:09*	*12/04/24 17:56*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/04/24 11:09*	*12/04/24 17:56*	*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			12/04/24 17:56	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			12/04/24 22:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:45	12/04/24 22:04	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 22:04	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-62-4' Lab Sample ID: 880-51705-19

Date Collected: 12/03/24 12:05 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/04/24 09:45*	*12/04/24 22:04*	*1*
o-Terphenyl	*83*		*70 - 130*	*12/04/24 09:45*	*12/04/24 22:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**628**	**F1**	9.92	0.392	mg/Kg			12/05/24 23:51	1

Client Sample ID: SB-63-4' Lab Sample ID: 880-51705-20

Date Collected: 12/03/24 12:15 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 11:09	12/04/24 18:16	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 18:16	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 18:16	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:09	12/04/24 18:16	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 11:09	12/04/24 18:16	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:09	12/04/24 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*12/04/24 11:09*	*12/04/24 18:16*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/04/24 11:09*	*12/04/24 18:16*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			12/04/24 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			12/04/24 22:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:45	12/04/24 22:21	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 22:21	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:45	12/04/24 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*12/04/24 09:45*	*12/04/24 22:21*	*1*
o-Terphenyl	*77*		*70 - 130*	*12/04/24 09:45*	*12/04/24 22:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1860**		49.8	1.97	mg/Kg			12/06/24 00:12	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-64-4'

Date Collected: 12/03/24 12:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-21
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		12/04/24 11:04	12/04/24 15:44	1
Toluene	<0.00202	U F1	0.00202	0.00202	mg/Kg		12/04/24 11:04	12/04/24 15:44	1
Ethylbenzene	<0.00110	U F2 F1	0.00202	0.00110	mg/Kg		12/04/24 11:04	12/04/24 15:44	1
m-Xylene & p-Xylene	<0.00230	U F2 F1	0.00403	0.00230	mg/Kg		12/04/24 11:04	12/04/24 15:44	1
o-Xylene	<0.00160	U F2 F1	0.00202	0.00160	mg/Kg		12/04/24 11:04	12/04/24 15:44	1
Xylenes, Total	<0.00230	U F2 F1	0.00403	0.00230	mg/Kg		12/04/24 11:04	12/04/24 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/04/24 11:04*	*12/04/24 15:44*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 15:44*	*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	0.00403	0.00230	mg/Kg			12/04/24 15:44	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			12/04/24 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 16:23	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 16:23	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*12/04/24 09:51*	*12/04/24 16:23*	*1*
o-Terphenyl	*112*		*70 - 130*	*12/04/24 09:51*	*12/04/24 16:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1960**		49.9	1.97	mg/Kg			12/06/24 00:19	5

Client Sample ID: SB-65-4'

Date Collected: 12/03/24 12:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-22
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 11:04	12/04/24 16:05	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 16:05	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 16:05	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 16:05	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 11:04	12/04/24 16:05	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:05*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:05*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-65-4'

Date Collected: 12/03/24 12:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-22

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 16:05	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			12/04/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 17:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:11*	*1*
o-Terphenyl	*112*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1270**		10.0	0.396	mg/Kg			12/06/24 00:25	1

Client Sample ID: SB-66-4'

Date Collected: 12/03/24 12:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-23

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		12/04/24 11:04	12/04/24 16:25	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 16:25	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 16:25	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 16:25	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:04	12/04/24 16:25	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:25*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:25*	*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			12/04/24 16:25	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			12/04/24 17:28	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	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 17:28	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:28	1

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Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-66-4' Lab Sample ID: 880-51705-23

Date Collected: 12/03/24 12:45 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:28*	*1*
o-Terphenyl	*110*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**116**		9.96	0.393	mg/Kg			12/06/24 00:32	1

Client Sample ID: SB-67-4' Lab Sample ID: 880-51705-24

Date Collected: 12/03/24 12:55 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 11:04	12/04/24 16:46	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/04/24 11:04	12/04/24 16:46	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		12/04/24 11:04	12/04/24 16:46	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 11:04	12/04/24 16:46	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/04/24 11:04	12/04/24 16:46	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 11:04	12/04/24 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:46*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 16:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			12/04/24 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			12/04/24 17:44	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	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 17:44	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:44	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:44*	*1*
o-Terphenyl	*114*		*70 - 130*	*12/04/24 09:51*	*12/04/24 17:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1150**		9.92	0.392	mg/Kg			12/06/24 00:53	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-68-4'

Date Collected: 12/03/24 13:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-25

Matrix: Solid

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		12/04/24 11:04	12/04/24 17:06	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:04	12/04/24 17:06	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:04	12/04/24 17:06	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 17:06	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:04	12/04/24 17:06	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:06*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:06*	*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			12/04/24 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**15.9**	**J**	49.8	15.1	mg/Kg			12/04/24 18:00	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	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 18:00	1
Diesel Range Organics (Over C10-C28)	**15.9**	**J**	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:00	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:00*	*1*
o-Terphenyl	*109*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1410**		50.4	1.99	mg/Kg			12/06/24 01:00	5

Client Sample ID: SB-69-4'

Date Collected: 12/03/24 13:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-26

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		12/04/24 11:04	12/04/24 17:26	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 17:26	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 17:26	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 17:26	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:04	12/04/24 17:26	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:26*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:26*	*1*

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-69-4'

Date Collected: 12/03/24 13:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-26
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			12/04/24 17:26	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			12/04/24 18:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 18:16	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:16	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:16*	*1*
o-Terphenyl	*115*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2530**		49.7	1.96	mg/Kg			12/06/24 01:07	5

Client Sample ID: SB-70-4'

Date Collected: 12/03/24 13:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-27
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		12/04/24 11:04	12/04/24 17:47	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 17:47	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 17:47	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 11:04	12/04/24 17:47	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/04/24 11:04	12/04/24 17:47	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 11:04	12/04/24 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:47*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 17:47*	*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			12/04/24 17:47	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			12/04/24 18:33	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	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:51	12/04/24 18:33	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:33	1

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Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-70-4' Lab Sample ID: 880-51705-27

Date Collected: 12/03/24 13:20 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:33*	*1*
o-Terphenyl	*111*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1100**		9.98	0.394	mg/Kg			12/06/24 01:14	1

Client Sample ID: SB-71-4' Lab Sample ID: 880-51705-28

Date Collected: 12/03/24 13:30 **Matrix: Solid**
Date Received: 12/04/24 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		12/04/24 11:04	12/04/24 18:07	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:04	12/04/24 18:07	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:04	12/04/24 18:07	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:04	12/04/24 18:07	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:04	12/04/24 18:07	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:04	12/04/24 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:07*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:07*	*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	0.00403	0.00230	mg/Kg			12/04/24 18:07	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	50.0	15.1	mg/Kg			12/04/24 18:48	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 18:48	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:48	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:48*	*1*
o-Terphenyl	*106*		*70 - 130*	*12/04/24 09:51*	*12/04/24 18:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1720**		49.8	1.97	mg/Kg			12/06/24 01:21	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-72-4'

Date Collected: 12/03/24 13:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-29

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 11:04	12/04/24 18:28	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 18:28	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 18:28	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 18:28	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 11:04	12/04/24 18:28	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:28*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:28*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 18:28	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			12/04/24 19:05	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 19:05	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:05	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:05*	*1*
o-Terphenyl	*118*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1960**	**F1**	49.7	1.96	mg/Kg			12/06/24 01:27	5

Client Sample ID: SB-73-4'

Date Collected: 12/03/24 13:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-30

Matrix: Solid

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		12/04/24 11:04	12/04/24 18:48	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:04	12/04/24 18:48	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:04	12/04/24 18:48	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 18:48	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:04	12/04/24 18:48	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:48*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:04*	*12/04/24 18:48*	*1*

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-73-4'

Date Collected: 12/03/24 13:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-30
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00231	U	0.00404	0.00231	mg/Kg			12/04/24 18:48	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	50.0	15.1	mg/Kg			12/04/24 19:21	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 19:21	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:21	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:21*	*1*
o-Terphenyl	*107*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**289**		9.98	0.394	mg/Kg			12/06/24 01:48	1

Client Sample ID: SB-74-4'

Date Collected: 12/03/24 14:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-31
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		12/04/24 11:04	12/04/24 20:22	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/04/24 11:04	12/04/24 20:22	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		12/04/24 11:04	12/04/24 20:22	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		12/04/24 11:04	12/04/24 20:22	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/04/24 11:04	12/04/24 20:22	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		12/04/24 11:04	12/04/24 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/04/24 11:04*	*12/04/24 20:22*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/04/24 11:04*	*12/04/24 20:22*	*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			12/04/24 20:22	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			12/04/24 19:54	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		12/04/24 09:51	12/04/24 19:54	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:54	1

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-74-4'

Date Collected: 12/03/24 14:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-31
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)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:54*	*1*
o-Terphenyl	*106*		*70 - 130*	*12/04/24 09:51*	*12/04/24 19:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**838**		9.96	0.393	mg/Kg			12/06/24 01:55	1

Client Sample ID: SB-75-4'

Date Collected: 12/03/24 14:05
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-32
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		12/04/24 11:04	12/04/24 20:42	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 20:42	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 20:42	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 20:42	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 11:04	12/04/24 20:42	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*12/04/24 11:04*	*12/04/24 20:42*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 20:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			12/04/24 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	<15.1	U	50.0	15.1	mg/Kg			12/04/24 20:10	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	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 20:10	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:10	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:10*	*1*
o-Terphenyl	*102*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2060**		49.9	1.97	mg/Kg			12/06/24 02:16	5

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-76-4'

Date Collected: 12/03/24 14:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-33

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 11:04	12/04/24 21:02	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 21:02	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 21:02	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 21:02	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 11:04	12/04/24 21:02	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:02*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			12/04/24 20:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 20:27	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:27	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:27*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2080**		49.8	1.97	mg/Kg			12/06/24 02:23	5

Client Sample ID: SB-77-4'

Date Collected: 12/03/24 14:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-34

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		12/04/24 11:04	12/04/24 21:23	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 21:23	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 21:23	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 21:23	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:04	12/04/24 21:23	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:04	12/04/24 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:23*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:23*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-77-4'

Date Collected: 12/03/24 14:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-34

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			12/04/24 21:23	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			12/04/24 20:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 20:42	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:42	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:42*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1540**		49.6	1.96	mg/Kg			12/06/24 02:30	5

Client Sample ID: SB-78-4'

Date Collected: 12/03/24 14:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-35

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		12/04/24 11:04	12/04/24 21:43	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 21:43	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 21:43	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:04	12/04/24 21:43	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:04	12/04/24 21:43	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:04	12/04/24 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:43*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 21:43*	*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	0.00400	0.00229	mg/Kg			12/04/24 21:43	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			12/04/24 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:51	12/04/24 20:59	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:59	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-78-4'

Date Collected: 12/03/24 14:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-35
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)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:59*	*1*
o-Terphenyl	*103*		*70 - 130*	*12/04/24 09:51*	*12/04/24 20:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1280**		10.0	0.396	mg/Kg			12/06/24 02:36	1

Client Sample ID: SB-79-4'

Date Collected: 12/03/24 14:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-36
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		12/04/24 11:04	12/04/24 22:04	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 22:04	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 22:04	1
m-Xylene & p-Xylene	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 11:04	12/04/24 22:04	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		12/04/24 11:04	12/04/24 22:04	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		12/04/24 11:04	12/04/24 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:04*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:04*	*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			12/04/24 22:04	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			12/04/24 21:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 21:15	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:15	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:15*	*1*
o-Terphenyl	*105*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1370**		10.0	0.397	mg/Kg			12/06/24 02:43	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-80-4'

Date Collected: 12/03/24 14:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-37
Matrix: Solid

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		12/04/24 11:04	12/04/24 22:24	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:04	12/04/24 22:24	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:04	12/04/24 22:24	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 22:24	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:04	12/04/24 22:24	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:04	12/04/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:24*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00231	U	0.00404	0.00231	mg/Kg			12/04/24 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			12/04/24 21:31	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	<14.5	U	49.9	14.5	mg/Kg		12/04/24 09:51	12/04/24 21:31	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:31	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:31*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1070**		10.1	0.398	mg/Kg			12/06/24 02:50	1

Client Sample ID: SB-81-4'

Date Collected: 12/03/24 14:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-38
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		12/04/24 11:04	12/04/24 22:44	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 22:44	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 22:44	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 22:44	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 11:04	12/04/24 22:44	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:44*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 22:44*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-81-4'

Date Collected: 12/03/24 14:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-38

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			12/04/24 22:44	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			12/04/24 21:48	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	<14.5	U	49.8	14.5	mg/Kg		12/04/24 09:51	12/04/24 21:48	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:48	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/04/24 09:51	12/04/24 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:48*	*1*
o-Terphenyl	*100*		*70 - 130*	*12/04/24 09:51*	*12/04/24 21:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1110**		9.94	0.393	mg/Kg			12/06/24 02:57	1

Client Sample ID: SB-82-4'

Date Collected: 12/03/24 15:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-39

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 11:04	12/04/24 23:05	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:04	12/04/24 23:05	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:04	12/04/24 23:05	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 23:05	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 11:04	12/04/24 23:05	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:04	12/04/24 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*12/04/24 11:04*	*12/04/24 23:05*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/04/24 11:04*	*12/04/24 23:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 23:05	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			12/04/24 22:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 22:04	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 22:04	1

Eurofins Midland

Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-82-4' Lab Sample ID: 880-51705-39

Date Collected: 12/03/24 15:00 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*12/04/24 09:51*	*12/04/24 22:04*	*1*
o-Terphenyl	*110*		*70 - 130*	*12/04/24 09:51*	*12/04/24 22:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1670**	**F1**	50.4	1.99	mg/Kg			12/06/24 18:22	5

Client Sample ID: SB-83-4' Lab Sample ID: 880-51705-40

Date Collected: 12/03/24 15:10 **Matrix: Solid**
Date Received: 12/04/24 08:30

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		12/04/24 11:04	12/04/24 23:25	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 23:25	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 23:25	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 23:25	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 11:04	12/04/24 23:25	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:04	12/04/24 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*12/04/24 11:04*	*12/04/24 23:25*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/04/24 11:04*	*12/04/24 23:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			12/04/24 23:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			12/04/24 22:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/04/24 09:51	12/04/24 22:21	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 22:21	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*12/04/24 09:51*	*12/04/24 22:21*	*1*
o-Terphenyl	*99*		*70 - 130*	*12/04/24 09:51*	*12/04/24 22:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1090**		10.0	0.395	mg/Kg			12/06/24 18:43	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-84-4'

Date Collected: 12/03/24 15:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-41
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		12/04/24 11:09	12/04/24 12:56	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 12:56	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 12:56	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:09	12/04/24 12:56	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:09	12/04/24 12:56	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		12/04/24 11:09	12/04/24 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/04/24 11:09*	*12/04/24 12:56*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:09*	*12/04/24 12:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			12/04/24 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			12/05/24 23:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		12/03/24 09:41	12/05/24 23:07	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:07	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:07*	*1*
o-Terphenyl	*98*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**980**		9.96	0.393	mg/Kg			12/06/24 18:50	1

Client Sample ID: SB-85-4'

Date Collected: 12/03/24 15:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-42
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		12/04/24 11:09	12/04/24 13:17	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:09	12/04/24 13:17	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:09	12/04/24 13:17	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:09	12/04/24 13:17	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:09	12/04/24 13:17	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:09	12/04/24 13:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:17*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:17*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-85-4'

Date Collected: 12/03/24 15:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-42
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00403	0.00230	mg/Kg			12/04/24 13:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			12/05/24 23:22	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	50.0	14.5	mg/Kg		12/03/24 09:41	12/05/24 23:22	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:22	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:22*	*1*
o-Terphenyl	*100*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		50.2	1.98	mg/Kg			12/06/24 18:57	5

Client Sample ID: SB-86-4'

Date Collected: 12/03/24 15:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-43
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		12/04/24 11:09	12/04/24 13:37	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		12/04/24 11:09	12/04/24 13:37	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		12/04/24 11:09	12/04/24 13:37	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:09	12/04/24 13:37	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		12/04/24 11:09	12/04/24 13:37	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		12/04/24 11:09	12/04/24 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:37*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			12/04/24 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			12/05/24 23:38	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	<14.5	U	49.8	14.5	mg/Kg		12/03/24 09:41	12/05/24 23:38	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:38	1

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Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-86-4'

Date Collected: 12/03/24 15:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-43
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)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:38*	*1*
o-Terphenyl	*102*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1120**		9.92	0.392	mg/Kg			12/06/24 19:03	1

Client Sample ID: SB-87-4'

Date Collected: 12/03/24 15:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-44
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		12/04/24 11:09	12/04/24 13:58	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:09	12/04/24 13:58	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:09	12/04/24 13:58	1
m-Xylene & p-Xylene	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:09	12/04/24 13:58	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:09	12/04/24 13:58	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		12/04/24 11:09	12/04/24 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:58*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:09*	*12/04/24 13:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00403	0.00230	mg/Kg			12/04/24 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			12/05/24 23:54	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	49.8	14.5	mg/Kg		12/03/24 09:41	12/05/24 23:54	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:54	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		12/03/24 09:41	12/05/24 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:54*	*1*
o-Terphenyl	*101*		*70 - 130*	*12/03/24 09:41*	*12/05/24 23:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1070**		10.1	0.398	mg/Kg			12/06/24 19:24	1

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-88-4'

Date Collected: 12/03/24 15:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-45

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		12/04/24 11:09	12/04/24 14:18	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		12/04/24 11:09	12/04/24 14:18	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		12/04/24 11:09	12/04/24 14:18	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 11:09	12/04/24 14:18	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		12/04/24 11:09	12/04/24 14:18	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		12/04/24 11:09	12/04/24 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:18*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			12/04/24 14:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			12/06/24 00:26	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	<14.4	U	49.7	14.4	mg/Kg		12/03/24 09:41	12/06/24 00:26	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:41	12/06/24 00:26	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		12/03/24 09:41	12/06/24 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*138*	*S1+*	*70 - 130*	*12/03/24 09:41*	*12/06/24 00:26*	*1*
o-Terphenyl	*125*		*70 - 130*	*12/03/24 09:41*	*12/06/24 00:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**971**		9.94	0.393	mg/Kg			12/06/24 19:31	1

Client Sample ID: SB-89-4'

Date Collected: 12/03/24 16:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-46

Matrix: Solid

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		12/04/24 11:09	12/04/24 14:39	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		12/04/24 11:09	12/04/24 14:39	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		12/04/24 11:09	12/04/24 14:39	1
m-Xylene & p-Xylene	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:09	12/04/24 14:39	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		12/04/24 11:09	12/04/24 14:39	1
Xylenes, Total	<0.00231	U	0.00404	0.00231	mg/Kg		12/04/24 11:09	12/04/24 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:39*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:39*	*1*

Client Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-89-4'

Date Collected: 12/03/24 16:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-46

Matrix: Solid

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			12/04/24 14:39	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			12/06/24 00:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		12/03/24 09:41	12/06/24 00:42	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:41	12/06/24 00:42	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:41	12/06/24 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*12/03/24 09:41*	*12/06/24 00:42*	*1*
o-Terphenyl	*100*		*70 - 130*	*12/03/24 09:41*	*12/06/24 00:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**722**		9.96	0.393	mg/Kg			12/06/24 19:38	1

Client Sample ID: SB-90-4'

Date Collected: 12/03/24 16:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-47

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		12/04/24 11:09	12/04/24 14:59	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 14:59	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 14:59	1
m-Xylene & p-Xylene	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:09	12/04/24 14:59	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		12/04/24 11:09	12/04/24 14:59	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		12/04/24 11:09	12/04/24 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:59*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*12/04/24 11:09*	*12/04/24 14:59*	*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	0.00401	0.00229	mg/Kg			12/04/24 14:59	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			12/06/24 00:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		12/03/24 09:41	12/06/24 00:58	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:41	12/06/24 00:58	1

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Client Sample Results

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

Client Sample ID: SB-90-4' Lab Sample ID: 880-51705-47

Date Collected: 12/03/24 16:20 **Matrix: Solid**
Date Received: 12/04/24 08:30

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	50.0	15.1	mg/Kg		12/03/24 09:41	12/06/24 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*12/03/24 09:41*	*12/06/24 00:58*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/03/24 09:41*	*12/06/24 00:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**583**		10.0	0.397	mg/Kg			12/06/24 19:45	1

Client Sample ID: SB-91-4' Lab Sample ID: 880-51705-48

Date Collected: 12/03/24 16:25 **Matrix: Solid**
Date Received: 12/04/24 08:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00933**		0.00199	0.00138	mg/Kg		12/04/24 11:09	12/04/24 15:20	1
Toluene	**0.00514**		0.00199	0.00199	mg/Kg		12/04/24 11:09	12/04/24 15:20	1
Ethylbenzene	**0.0253**		0.00199	0.00108	mg/Kg		12/04/24 11:09	12/04/24 15:20	1
m-Xylene & p-Xylene	**0.00911**		0.00398	0.00227	mg/Kg		12/04/24 11:09	12/04/24 15:20	1
o-Xylene	**0.00562**		0.00199	0.00157	mg/Kg		12/04/24 11:09	12/04/24 15:20	1
Xylenes, Total	**0.0147**		0.00398	0.00227	mg/Kg		12/04/24 11:09	12/04/24 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*12/04/24 11:09*	*12/04/24 15:20*	*1*
1,4-Difluorobenzene (Surr)	*14*	*S1-*	*70 - 130*	*12/04/24 11:09*	*12/04/24 15:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0545**		0.00398	0.00227	mg/Kg			12/04/24 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	<15.1	U	49.9	15.1	mg/Kg			12/06/24 01:14	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	<14.5	U	49.9	14.5	mg/Kg		12/03/24 09:41	12/06/24 01:14	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:41	12/06/24 01:14	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		12/03/24 09:41	12/06/24 01:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*12/03/24 09:41*	*12/06/24 01:14*	*1*
o-Terphenyl	*101*		*70 - 130*	*12/03/24 09:41*	*12/06/24 01:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**583**		10.0	0.395	mg/Kg			12/06/24 19:52	1

Surrogate Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
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)										
880-51705-1	SB-44-4'	115	94										
880-51705-1 MS	SB-44-4'	99	97										
880-51705-1 MSD	SB-44-4'	95	94										
880-51705-2	SB-45-4'	111	91										
880-51705-3	SB-46-4'	116	92										
880-51705-4	SB-47-4'	113	94										
880-51705-5	SB-48-4'	112	93										
880-51705-6	SB-49-4'	105	90										
880-51705-7	SB-50-4'	120	92										
880-51705-8	SB-51-4'	111	92										
880-51705-9	SB-52-4'	109	94										
880-51705-10	SB-53-4'	113	90										
880-51705-11	SB-54-4'	109	92										
880-51705-12	SB-55-4'	111	90										
880-51705-13	SB-56-4'	115	92										
880-51705-14	SB-57-4'	119	94										
880-51705-15	SB-58-4'	120	94										
880-51705-16	SB-59-4'	102	101										
880-51705-17	SB-60-4'	110	100										
880-51705-18	SB-61-4'	112	103										
880-51705-19	SB-62-4'	103	101										
880-51705-20	SB-63-4'	104	101										
880-51705-21	SB-64-4'	116	98										
880-51705-21 MS	SB-64-4'	106	98										
880-51705-21 MSD	SB-64-4'	106	98										
880-51705-22	SB-65-4'	111	100										
880-51705-23	SB-66-4'	121	95										
880-51705-24	SB-67-4'	114	100										
880-51705-25	SB-68-4'	117	100										
880-51705-26	SB-69-4'	115	100										
880-51705-27	SB-70-4'	113	98										
880-51705-28	SB-71-4'	116	99										
880-51705-29	SB-72-4'	112	98										
880-51705-30	SB-73-4'	114	99										
880-51705-31	SB-74-4'	117	96										
880-51705-32	SB-75-4'	120	100										
880-51705-33	SB-76-4'	116	99										
880-51705-34	SB-77-4'	115	99										
880-51705-35	SB-78-4'	118	98										
880-51705-36	SB-79-4'	121	95										
880-51705-37	SB-80-4'	117	100										
880-51705-38	SB-81-4'	117	98										
880-51705-39	SB-82-4'	121	98										
880-51705-40	SB-83-4'	119	95										
880-51705-41	SB-84-4'	108	100										
880-51705-41 MS	SB-84-4'	106	101										
880-51705-41 MSD	SB-84-4'	109	103										
880-51705-42	SB-85-4'	109	102										
880-51705-43	SB-86-4'	108	100										

Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 SDG: Lea County, NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-51705-44	SB-87-4'	107	99
880-51705-45	SB-88-4'	110	100
880-51705-46	SB-89-4'	106	100
880-51705-47	SB-90-4'	107	101
880-51705-48	SB-91-4'	90	14 S1-
LCS 880-97055/1-A	Lab Control Sample	102	99
LCS 880-97056/1-A	Lab Control Sample	109	96
LCS 880-97060/1-A	Lab Control Sample	111	102
LCSD 880-97055/2-A	Lab Control Sample Dup	97	98
LCSD 880-97056/2-A	Lab Control Sample Dup	106	99
LCSD 880-97060/2-A	Lab Control Sample Dup	110	100
MB 880-97055/5-A	Method Blank	109	85
MB 880-97056/5-A	Method Blank	108	93
MB 880-97060/5-A	Method Blank	99	95

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)
880-51705-1	SB-44-4'	97	77
880-51705-1 MS	SB-44-4'	102	89
880-51705-1 MSD	SB-44-4'	102	88
880-51705-2	SB-45-4'	111	88
880-51705-3	SB-46-4'	112	87
880-51705-4	SB-47-4'	108	85
880-51705-5	SB-48-4'	109	85
880-51705-6	SB-49-4'	118	93
880-51705-7	SB-50-4'	103	86
880-51705-8	SB-51-4'	108	84
880-51705-9	SB-52-4'	104	83
880-51705-10	SB-53-4'	97	75
880-51705-11	SB-54-4'	98	78
880-51705-12	SB-55-4'	103	79
880-51705-13	SB-56-4'	97	77
880-51705-14	SB-57-4'	106	81
880-51705-15	SB-58-4'	130	102
880-51705-16	SB-59-4'	105	83
880-51705-17	SB-60-4'	107	84
880-51705-18	SB-61-4'	102	79
880-51705-19	SB-62-4'	106	83
880-51705-20	SB-63-4'	100	77
880-51705-21	SB-64-4'	120	112
880-51705-21 MS	SB-64-4'	112	111
880-51705-21 MSD	SB-64-4'	112	110
880-51705-22	SB-65-4'	120	112

Surrogate Summary

Client: Arcadis US Inc. Job ID: 880-51705-1
Project/Site: WLU 47 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)								
880-51705-23	SB-66-4'	118	110								
880-51705-24	SB-67-4'	124	114								
880-51705-25	SB-68-4'	117	109								
880-51705-26	SB-69-4'	125	115								
880-51705-27	SB-70-4'	120	111								
880-51705-28	SB-71-4'	116	106								
880-51705-29	SB-72-4'	129	118								
880-51705-30	SB-73-4'	117	107								
880-51705-31	SB-74-4'	115	106								
880-51705-32	SB-75-4'	110	102								
880-51705-33	SB-76-4'	111	104								
880-51705-34	SB-77-4'	114	104								
880-51705-35	SB-78-4'	111	103								
880-51705-36	SB-79-4'	113	105								
880-51705-37	SB-80-4'	113	104								
880-51705-38	SB-81-4'	107	100								
880-51705-39	SB-82-4'	118	110								
880-51705-40	SB-83-4'	106	99								
880-51705-41	SB-84-4'	109	98								
880-51705-42	SB-85-4'	111	100								
880-51705-43	SB-86-4'	112	102								
880-51705-44	SB-87-4'	111	101								
880-51705-45	SB-88-4'	138 S1+	125								
880-51705-46	SB-89-4'	109	100								
880-51705-47	SB-90-4'	113	104								
880-51705-48	SB-91-4'	112	101								
LCS 880-96946/2-A	Lab Control Sample	116	117								
LCS 880-97051/2-A	Lab Control Sample	103	93								
LCS 880-97053/2-A	Lab Control Sample	123	125								
LCSD 880-96946/3-A	Lab Control Sample Dup	116	117								
LCSD 880-97051/3-A	Lab Control Sample Dup	103	92								
LCSD 880-97053/3-A	Lab Control Sample Dup	108	108								
MB 880-96946/1-A	Method Blank	97	93								
MB 880-97051/1-A	Method Blank	158 S1+	126								
MB 880-97053/1-A	Method Blank	175 S1+	163 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-97055/5-A
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97055

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/04/24 10:52	12/04/24 12:12	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 10:52	12/04/24 12:12	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 10:52	12/04/24 12:12	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 10:52	12/04/24 12:12	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 10:52	12/04/24 12:12	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 10:52	12/04/24 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:12*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*12/04/24 10:52*	*12/04/24 12:12*	*1*

Lab Sample ID: LCS 880-97055/1-A
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97055

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1081		mg/Kg		108	70 - 130
Toluene	0.100	0.1025		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1066		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2143		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1093		mg/Kg		109	70 - 130

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

Lab Sample ID: LCSD 880-97055/2-A
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97055

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1097		mg/Kg		110	70 - 130	2	35
Toluene	0.100	0.1035		mg/Kg		103	70 - 130	1	35
Ethylbenzene	0.100	0.1072		mg/Kg		107	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2144		mg/Kg		107	70 - 130	0	35
o-Xylene	0.100	0.1094		mg/Kg		109	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-51705-1 MS
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: SB-44-4'
Prep Type: Total/NA
Prep Batch: 97055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00139	U	0.0992	0.09652		mg/Kg		97	70 - 130
Toluene	<0.00199	U	0.0992	0.08848		mg/Kg		89	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: 880-51705-1 MS
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: SB-44-4'
Prep Type: Total/NA
Prep Batch: 97055

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00108	U	0.0992	0.08670		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00228	U	0.198	0.1708		mg/Kg		86	70 - 130
o-Xylene	<0.00158	U	0.0992	0.08642		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-51705-1 MSD
Matrix: Solid
Analysis Batch: 97031

Client Sample ID: SB-44-4'
Prep Type: Total/NA
Prep Batch: 97055

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00139	U	0.100	0.09205		mg/Kg		92	70 - 130	5	35
Toluene	<0.00199	U	0.100	0.08495		mg/Kg		85	70 - 130	4	35
Ethylbenzene	<0.00108	U	0.100	0.08320		mg/Kg		83	70 - 130	4	35
m-Xylene & p-Xylene	<0.00228	U	0.200	0.1631		mg/Kg		81	70 - 130	5	35
o-Xylene	<0.00158	U	0.100	0.08298		mg/Kg		83	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 880-97056/5-A
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97056

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/04/24 11:04	12/04/24 15:23	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:04	12/04/24 15:23	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:04	12/04/24 15:23	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:04	12/04/24 15:23	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:04	12/04/24 15:23	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:04	12/04/24 15:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*12/04/24 11:04*	*12/04/24 15:23*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*12/04/24 11:04*	*12/04/24 15:23*	*1*

Lab Sample ID: LCS 880-97056/1-A
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97056

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1061		mg/Kg		106	70 - 130
Toluene	0.100	0.09829		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.1034		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	0.200	0.2041		mg/Kg		102	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-97056/1-A
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97056

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1030		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-97056/2-A
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97056

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1113		mg/Kg		111	70 - 130	5	35
Toluene			0.100	0.1031		mg/Kg		103	70 - 130	5	35
Ethylbenzene			0.100	0.1087		mg/Kg		109	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2149		mg/Kg		107	70 - 130	5	35
o-Xylene			0.100	0.1089		mg/Kg		109	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-51705-21 MS
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97056

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00140	U	0.101	0.07503		mg/Kg		74	70 - 130		
Toluene	<0.00202	U F1	0.101	0.06092	F1	mg/Kg		60	70 - 130		
Ethylbenzene	<0.00110	U F2 F1	0.101	0.05420	F1	mg/Kg		54	70 - 130		
m-Xylene & p-Xylene	<0.00230	U F2 F1	0.202	0.1041	F1	mg/Kg		52	70 - 130		
o-Xylene	<0.00160	U F2 F1	0.101	0.05387	F1	mg/Kg		53	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-51705-21 MSD
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97056

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	0.08786		mg/Kg		88	70 - 130	16	35
Toluene	<0.00202	U F1	0.100	0.07962		mg/Kg		80	70 - 130	27	35
Ethylbenzene	<0.00110	U F2 F1	0.100	0.08155	F2	mg/Kg		82	70 - 130	40	35
m-Xylene & p-Xylene	<0.00230	U F2 F1	0.200	0.1599	F2	mg/Kg		80	70 - 130	42	35
o-Xylene	<0.00160	U F2 F1	0.100	0.08134	F2	mg/Kg		81	70 - 130	41	35

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: 880-51705-21 MSD
Matrix: Solid
Analysis Batch: 97032

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97056

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-97060/5-A
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		12/04/24 11:09	12/04/24 12:35	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		12/04/24 11:09	12/04/24 12:35	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		12/04/24 11:09	12/04/24 12:35	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:09	12/04/24 12:35	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		12/04/24 11:09	12/04/24 12:35	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		12/04/24 11:09	12/04/24 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*12/04/24 11:09*	*12/04/24 12:35*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/04/24 11:09*	*12/04/24 12:35*	*1*

Lab Sample ID: LCS 880-97060/1-A
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97060

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09989		mg/Kg		100	70 - 130		
Toluene			0.100	0.1049		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1135		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2229		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1255		mg/Kg		125	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-97060/2-A
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97060

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1023		mg/Kg		102	70 - 130	2	35
Toluene			0.100	0.1020		mg/Kg		102	70 - 130	3	35
Ethylbenzene			0.100	0.1095		mg/Kg		110	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2202		mg/Kg		110	70 - 130	1	35
o-Xylene			0.100	0.1247		mg/Kg		125	70 - 130	1	35

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

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-97060/2-A
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97060

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

Lab Sample ID: 880-51705-41 MS
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: SB-84-4'
Prep Type: Total/NA
Prep Batch: 97060

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00139	U	0.0996	0.09775		mg/Kg		98	70 - 130
Toluene	<0.00200	U	0.0996	0.09549		mg/Kg		96	70 - 130
Ethylbenzene	<0.00109	U	0.0996	0.09927		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00228	U	0.199	0.1994		mg/Kg		100	70 - 130
o-Xylene	<0.00158	U	0.0996	0.1090		mg/Kg		109	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-51705-41 MSD
Matrix: Solid
Analysis Batch: 97033

Client Sample ID: SB-84-4'
Prep Type: Total/NA
Prep Batch: 97060

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00139	U	0.101	0.09589		mg/Kg		95	70 - 130	2	35
Toluene	<0.00200	U	0.101	0.09137		mg/Kg		91	70 - 130	4	35
Ethylbenzene	<0.00109	U	0.101	0.09300		mg/Kg		92	70 - 130	7	35
m-Xylene & p-Xylene	<0.00228	U	0.202	0.1848		mg/Kg		92	70 - 130	8	35
o-Xylene	<0.00158	U	0.101	0.1020		mg/Kg		101	70 - 130	7	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-96946/1-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96946

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		12/03/24 09:40	12/05/24 20:08	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:40	12/05/24 20:08	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/03/24 09:40	12/05/24 20:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	12/03/24 09:40	12/05/24 20:08	1
o-Terphenyl	93		70 - 130	12/03/24 09:40	12/05/24 20:08	1

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-96946/2-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1043		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1106		mg/Kg		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: LCSD 880-96946/3-A
Matrix: Solid
Analysis Batch: 97128

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96946

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1088		mg/Kg		109	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	978.7		mg/Kg		98	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*116*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: MB 880-97051/1-A
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97051

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		12/04/24 09:45	12/04/24 01:56	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 01:56	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:45	12/04/24 01:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*158*	*S1+*	*70 - 130*	*12/04/24 09:45*	*12/04/24 01:56*	*1*
o-Terphenyl	*126*		*70 - 130*	*12/04/24 09:45*	*12/04/24 01:56*	*1*

Lab Sample ID: LCS 880-97051/2-A
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1084		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	1000	901.1		mg/Kg		90	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-97051/2-A
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97051

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-97051/3-A
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97051

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1118		mg/Kg		112	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	924.6		mg/Kg		92	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-51705-1 MS
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: SB-44-4'
Prep Type: Total/NA
Prep Batch: 97051

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	995	897.2		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)	<15.1	U	995	709.3		mg/Kg		71	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-51705-1 MSD
Matrix: Solid
Analysis Batch: 97087

Client Sample ID: SB-44-4'
Prep Type: Total/NA
Prep Batch: 97051

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	995	907.2		mg/Kg		91	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.1	U	995	704.5		mg/Kg		71	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	88		70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-97053/1-A
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 97053

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		12/04/24 09:51	12/04/24 02:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 02:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		12/04/24 09:51	12/04/24 02:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*175*	*S1+*	*70 - 130*	*12/04/24 09:51*	*12/04/24 02:11*	*1*
o-Terphenyl	*163*	*S1+*	*70 - 130*	*12/04/24 09:51*	*12/04/24 02:11*	*1*

Lab Sample ID: LCS 880-97053/2-A
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 97053

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1232		mg/Kg		123	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1159		mg/Kg		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*125*		*70 - 130*

Lab Sample ID: LCSD 880-97053/3-A
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 97053

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	12	20
Diesel Range Organics (Over C10-C28)	1000	950.6		mg/Kg		95	70 - 130	20	20

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

Lab Sample ID: 880-51705-21 MS
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97053

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	996	971.4		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<15.1	U	996	862.9		mg/Kg		87	70 - 130

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

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

Lab Sample ID: 880-51705-21 MS
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97053

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	111		70 - 130

Lab Sample ID: 880-51705-21 MSD
Matrix: Solid
Analysis Batch: 97090

Client Sample ID: SB-64-4'
Prep Type: Total/NA
Prep Batch: 97053

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	996	963.9		mg/Kg		97	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.1	U	996	853.8		mg/Kg		86	70 - 130	1	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-97058/1-A
Matrix: Solid
Analysis Batch: 97076

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			12/06/24 17:39	1

Lab Sample ID: LCS 880-97058/2-A
Matrix: Solid
Analysis Batch: 97076

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	261.6		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-97058/3-A
Matrix: Solid
Analysis Batch: 97076

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	261.7		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 880-51705-9 MS
Matrix: Solid
Analysis Batch: 97076

Client Sample ID: SB-52-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	665	F1	250	1029	F1	mg/Kg		146	90 - 110

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-51705-9 MSD
Matrix: Solid
Analysis Batch: 97076

Client Sample ID: SB-52-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	665	F1	250	1029	F1	mg/Kg		146	90 - 110	0	20

Lab Sample ID: MB 880-97059/1-A
Matrix: Solid
Analysis Batch: 97079

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			12/05/24 23:30	1

Lab Sample ID: LCS 880-97059/2-A
Matrix: Solid
Analysis Batch: 97079

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.7		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-97059/3-A
Matrix: Solid
Analysis Batch: 97079

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	269.1		mg/Kg		108	90 - 110	4	20

Lab Sample ID: 880-51705-19 MS
Matrix: Solid
Analysis Batch: 97079

Client Sample ID: SB-62-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	628	F1	248	915.2	F1	mg/Kg		116	90 - 110

Lab Sample ID: 880-51705-19 MSD
Matrix: Solid
Analysis Batch: 97079

Client Sample ID: SB-62-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	628	F1	248	930.1	F1	mg/Kg		122	90 - 110	2	20

Lab Sample ID: 880-51705-29 MS
Matrix: Solid
Analysis Batch: 97079

Client Sample ID: SB-72-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1960	F1	1240	3584	F1	mg/Kg		130	90 - 110

Lab Sample ID: 880-51705-29 MSD
Matrix: Solid
Analysis Batch: 97079

Client Sample ID: SB-72-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1960	F1	1240	3450	F1	mg/Kg		120	90 - 110	4	20

QC Sample Results

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-97077/1-A
Matrix: Solid
Analysis Batch: 97080

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			12/06/24 18:02	1

Lab Sample ID: LCS 880-97077/2-A
Matrix: Solid
Analysis Batch: 97080

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	241.2		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-97077/3-A
Matrix: Solid
Analysis Batch: 97080

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	248.1		mg/Kg		99	90 - 110	3	20

Lab Sample ID: 880-51705-39 MS
Matrix: Solid
Analysis Batch: 97080

Client Sample ID: SB-82-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1670	F1	1260	3352	F1	mg/Kg		133	90 - 110		

Lab Sample ID: 880-51705-39 MSD
Matrix: Solid
Analysis Batch: 97080

Client Sample ID: SB-82-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1670	F1	1260	3181	F1	mg/Kg		120	90 - 110	5	20

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 97031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	8021B	97055
880-51705-2	SB-45-4'	Total/NA	Solid	8021B	97055
880-51705-3	SB-46-4'	Total/NA	Solid	8021B	97055
880-51705-4	SB-47-4'	Total/NA	Solid	8021B	97055
880-51705-5	SB-48-4'	Total/NA	Solid	8021B	97055
880-51705-6	SB-49-4'	Total/NA	Solid	8021B	97055
880-51705-7	SB-50-4'	Total/NA	Solid	8021B	97055
880-51705-8	SB-51-4'	Total/NA	Solid	8021B	97055
880-51705-9	SB-52-4'	Total/NA	Solid	8021B	97055
880-51705-10	SB-53-4'	Total/NA	Solid	8021B	97055
880-51705-11	SB-54-4'	Total/NA	Solid	8021B	97055
880-51705-12	SB-55-4'	Total/NA	Solid	8021B	97055
880-51705-13	SB-56-4'	Total/NA	Solid	8021B	97055
880-51705-14	SB-57-4'	Total/NA	Solid	8021B	97055
880-51705-15	SB-58-4'	Total/NA	Solid	8021B	97055
MB 880-97055/5-A	Method Blank	Total/NA	Solid	8021B	97055
LCS 880-97055/1-A	Lab Control Sample	Total/NA	Solid	8021B	97055
LCSD 880-97055/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97055
880-51705-1 MS	SB-44-4'	Total/NA	Solid	8021B	97055
880-51705-1 MSD	SB-44-4'	Total/NA	Solid	8021B	97055

Analysis Batch: 97032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-21	SB-64-4'	Total/NA	Solid	8021B	97056
880-51705-22	SB-65-4'	Total/NA	Solid	8021B	97056
880-51705-23	SB-66-4'	Total/NA	Solid	8021B	97056
880-51705-24	SB-67-4'	Total/NA	Solid	8021B	97056
880-51705-25	SB-68-4'	Total/NA	Solid	8021B	97056
880-51705-26	SB-69-4'	Total/NA	Solid	8021B	97056
880-51705-27	SB-70-4'	Total/NA	Solid	8021B	97056
880-51705-28	SB-71-4'	Total/NA	Solid	8021B	97056
880-51705-29	SB-72-4'	Total/NA	Solid	8021B	97056
880-51705-30	SB-73-4'	Total/NA	Solid	8021B	97056
880-51705-31	SB-74-4'	Total/NA	Solid	8021B	97056
880-51705-32	SB-75-4'	Total/NA	Solid	8021B	97056
880-51705-33	SB-76-4'	Total/NA	Solid	8021B	97056
880-51705-34	SB-77-4'	Total/NA	Solid	8021B	97056
880-51705-35	SB-78-4'	Total/NA	Solid	8021B	97056
880-51705-36	SB-79-4'	Total/NA	Solid	8021B	97056
880-51705-37	SB-80-4'	Total/NA	Solid	8021B	97056
880-51705-38	SB-81-4'	Total/NA	Solid	8021B	97056
880-51705-39	SB-82-4'	Total/NA	Solid	8021B	97056
880-51705-40	SB-83-4'	Total/NA	Solid	8021B	97056
MB 880-97056/5-A	Method Blank	Total/NA	Solid	8021B	97056
LCS 880-97056/1-A	Lab Control Sample	Total/NA	Solid	8021B	97056
LCSD 880-97056/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97056
880-51705-21 MS	SB-64-4'	Total/NA	Solid	8021B	97056
880-51705-21 MSD	SB-64-4'	Total/NA	Solid	8021B	97056

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 97033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-16	SB-59-4'	Total/NA	Solid	8021B	97060
880-51705-17	SB-60-4'	Total/NA	Solid	8021B	97060
880-51705-18	SB-61-4'	Total/NA	Solid	8021B	97060
880-51705-19	SB-62-4'	Total/NA	Solid	8021B	97060
880-51705-20	SB-63-4'	Total/NA	Solid	8021B	97060
880-51705-41	SB-84-4'	Total/NA	Solid	8021B	97060
880-51705-42	SB-85-4'	Total/NA	Solid	8021B	97060
880-51705-43	SB-86-4'	Total/NA	Solid	8021B	97060
880-51705-44	SB-87-4'	Total/NA	Solid	8021B	97060
880-51705-45	SB-88-4'	Total/NA	Solid	8021B	97060
880-51705-46	SB-89-4'	Total/NA	Solid	8021B	97060
880-51705-47	SB-90-4'	Total/NA	Solid	8021B	97060
880-51705-48	SB-91-4'	Total/NA	Solid	8021B	97060
MB 880-97060/5-A	Method Blank	Total/NA	Solid	8021B	97060
LCS 880-97060/1-A	Lab Control Sample	Total/NA	Solid	8021B	97060
LCSD 880-97060/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	97060
880-51705-41 MS	SB-84-4'	Total/NA	Solid	8021B	97060
880-51705-41 MSD	SB-84-4'	Total/NA	Solid	8021B	97060

Prep Batch: 97055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	5030B	
880-51705-2	SB-45-4'	Total/NA	Solid	5030B	
880-51705-3	SB-46-4'	Total/NA	Solid	5030B	
880-51705-4	SB-47-4'	Total/NA	Solid	5030B	
880-51705-5	SB-48-4'	Total/NA	Solid	5030B	
880-51705-6	SB-49-4'	Total/NA	Solid	5030B	
880-51705-7	SB-50-4'	Total/NA	Solid	5030B	
880-51705-8	SB-51-4'	Total/NA	Solid	5030B	
880-51705-9	SB-52-4'	Total/NA	Solid	5030B	
880-51705-10	SB-53-4'	Total/NA	Solid	5030B	
880-51705-11	SB-54-4'	Total/NA	Solid	5030B	
880-51705-12	SB-55-4'	Total/NA	Solid	5030B	
880-51705-13	SB-56-4'	Total/NA	Solid	5030B	
880-51705-14	SB-57-4'	Total/NA	Solid	5030B	
880-51705-15	SB-58-4'	Total/NA	Solid	5030B	
MB 880-97055/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-97055/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-97055/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51705-1 MS	SB-44-4'	Total/NA	Solid	5030B	
880-51705-1 MSD	SB-44-4'	Total/NA	Solid	5030B	

Prep Batch: 97056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-21	SB-64-4'	Total/NA	Solid	5030B	
880-51705-22	SB-65-4'	Total/NA	Solid	5030B	
880-51705-23	SB-66-4'	Total/NA	Solid	5030B	
880-51705-24	SB-67-4'	Total/NA	Solid	5030B	
880-51705-25	SB-68-4'	Total/NA	Solid	5030B	
880-51705-26	SB-69-4'	Total/NA	Solid	5030B	
880-51705-27	SB-70-4'	Total/NA	Solid	5030B	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC VOA (Continued)

Prep Batch: 97056 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-28	SB-71-4'	Total/NA	Solid	5030B	
880-51705-29	SB-72-4'	Total/NA	Solid	5030B	
880-51705-30	SB-73-4'	Total/NA	Solid	5030B	
880-51705-31	SB-74-4'	Total/NA	Solid	5030B	
880-51705-32	SB-75-4'	Total/NA	Solid	5030B	
880-51705-33	SB-76-4'	Total/NA	Solid	5030B	
880-51705-34	SB-77-4'	Total/NA	Solid	5030B	
880-51705-35	SB-78-4'	Total/NA	Solid	5030B	
880-51705-36	SB-79-4'	Total/NA	Solid	5030B	
880-51705-37	SB-80-4'	Total/NA	Solid	5030B	
880-51705-38	SB-81-4'	Total/NA	Solid	5030B	
880-51705-39	SB-82-4'	Total/NA	Solid	5030B	
880-51705-40	SB-83-4'	Total/NA	Solid	5030B	
MB 880-97056/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-97056/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-97056/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51705-21 MS	SB-64-4'	Total/NA	Solid	5030B	
880-51705-21 MSD	SB-64-4'	Total/NA	Solid	5030B	

Prep Batch: 97060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-16	SB-59-4'	Total/NA	Solid	5030B	
880-51705-17	SB-60-4'	Total/NA	Solid	5030B	
880-51705-18	SB-61-4'	Total/NA	Solid	5030B	
880-51705-19	SB-62-4'	Total/NA	Solid	5030B	
880-51705-20	SB-63-4'	Total/NA	Solid	5030B	
880-51705-41	SB-84-4'	Total/NA	Solid	5030B	
880-51705-42	SB-85-4'	Total/NA	Solid	5030B	
880-51705-43	SB-86-4'	Total/NA	Solid	5030B	
880-51705-44	SB-87-4'	Total/NA	Solid	5030B	
880-51705-45	SB-88-4'	Total/NA	Solid	5030B	
880-51705-46	SB-89-4'	Total/NA	Solid	5030B	
880-51705-47	SB-90-4'	Total/NA	Solid	5030B	
880-51705-48	SB-91-4'	Total/NA	Solid	5030B	
MB 880-97060/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-97060/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-97060/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-51705-41 MS	SB-84-4'	Total/NA	Solid	5030B	
880-51705-41 MSD	SB-84-4'	Total/NA	Solid	5030B	

Analysis Batch: 97092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	Total BTEX	
880-51705-2	SB-45-4'	Total/NA	Solid	Total BTEX	
880-51705-3	SB-46-4'	Total/NA	Solid	Total BTEX	
880-51705-4	SB-47-4'	Total/NA	Solid	Total BTEX	
880-51705-5	SB-48-4'	Total/NA	Solid	Total BTEX	
880-51705-6	SB-49-4'	Total/NA	Solid	Total BTEX	
880-51705-7	SB-50-4'	Total/NA	Solid	Total BTEX	
880-51705-8	SB-51-4'	Total/NA	Solid	Total BTEX	
880-51705-9	SB-52-4'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC VOA (Continued)

Analysis Batch: 97092 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-10	SB-53-4'	Total/NA	Solid	Total BTEX	
880-51705-11	SB-54-4'	Total/NA	Solid	Total BTEX	
880-51705-12	SB-55-4'	Total/NA	Solid	Total BTEX	
880-51705-13	SB-56-4'	Total/NA	Solid	Total BTEX	
880-51705-14	SB-57-4'	Total/NA	Solid	Total BTEX	
880-51705-15	SB-58-4'	Total/NA	Solid	Total BTEX	
880-51705-16	SB-59-4'	Total/NA	Solid	Total BTEX	
880-51705-17	SB-60-4'	Total/NA	Solid	Total BTEX	
880-51705-18	SB-61-4'	Total/NA	Solid	Total BTEX	
880-51705-19	SB-62-4'	Total/NA	Solid	Total BTEX	
880-51705-20	SB-63-4'	Total/NA	Solid	Total BTEX	
880-51705-21	SB-64-4'	Total/NA	Solid	Total BTEX	
880-51705-22	SB-65-4'	Total/NA	Solid	Total BTEX	
880-51705-23	SB-66-4'	Total/NA	Solid	Total BTEX	
880-51705-24	SB-67-4'	Total/NA	Solid	Total BTEX	
880-51705-25	SB-68-4'	Total/NA	Solid	Total BTEX	
880-51705-26	SB-69-4'	Total/NA	Solid	Total BTEX	
880-51705-27	SB-70-4'	Total/NA	Solid	Total BTEX	
880-51705-28	SB-71-4'	Total/NA	Solid	Total BTEX	
880-51705-29	SB-72-4'	Total/NA	Solid	Total BTEX	
880-51705-30	SB-73-4'	Total/NA	Solid	Total BTEX	
880-51705-31	SB-74-4'	Total/NA	Solid	Total BTEX	
880-51705-32	SB-75-4'	Total/NA	Solid	Total BTEX	
880-51705-33	SB-76-4'	Total/NA	Solid	Total BTEX	
880-51705-34	SB-77-4'	Total/NA	Solid	Total BTEX	
880-51705-35	SB-78-4'	Total/NA	Solid	Total BTEX	
880-51705-36	SB-79-4'	Total/NA	Solid	Total BTEX	
880-51705-37	SB-80-4'	Total/NA	Solid	Total BTEX	
880-51705-38	SB-81-4'	Total/NA	Solid	Total BTEX	
880-51705-39	SB-82-4'	Total/NA	Solid	Total BTEX	
880-51705-40	SB-83-4'	Total/NA	Solid	Total BTEX	
880-51705-41	SB-84-4'	Total/NA	Solid	Total BTEX	
880-51705-42	SB-85-4'	Total/NA	Solid	Total BTEX	
880-51705-43	SB-86-4'	Total/NA	Solid	Total BTEX	
880-51705-44	SB-87-4'	Total/NA	Solid	Total BTEX	
880-51705-45	SB-88-4'	Total/NA	Solid	Total BTEX	
880-51705-46	SB-89-4'	Total/NA	Solid	Total BTEX	
880-51705-47	SB-90-4'	Total/NA	Solid	Total BTEX	
880-51705-48	SB-91-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-41	SB-84-4'	Total/NA	Solid	8015NM Prep	
880-51705-42	SB-85-4'	Total/NA	Solid	8015NM Prep	
880-51705-43	SB-86-4'	Total/NA	Solid	8015NM Prep	
880-51705-44	SB-87-4'	Total/NA	Solid	8015NM Prep	
880-51705-45	SB-88-4'	Total/NA	Solid	8015NM Prep	
880-51705-46	SB-89-4'	Total/NA	Solid	8015NM Prep	
880-51705-47	SB-90-4'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 96946 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-48	SB-91-4'	Total/NA	Solid	8015NM Prep	
MB 880-96946/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96946/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 97051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	8015NM Prep	
880-51705-2	SB-45-4'	Total/NA	Solid	8015NM Prep	
880-51705-3	SB-46-4'	Total/NA	Solid	8015NM Prep	
880-51705-4	SB-47-4'	Total/NA	Solid	8015NM Prep	
880-51705-5	SB-48-4'	Total/NA	Solid	8015NM Prep	
880-51705-6	SB-49-4'	Total/NA	Solid	8015NM Prep	
880-51705-7	SB-50-4'	Total/NA	Solid	8015NM Prep	
880-51705-8	SB-51-4'	Total/NA	Solid	8015NM Prep	
880-51705-9	SB-52-4'	Total/NA	Solid	8015NM Prep	
880-51705-10	SB-53-4'	Total/NA	Solid	8015NM Prep	
880-51705-11	SB-54-4'	Total/NA	Solid	8015NM Prep	
880-51705-12	SB-55-4'	Total/NA	Solid	8015NM Prep	
880-51705-13	SB-56-4'	Total/NA	Solid	8015NM Prep	
880-51705-14	SB-57-4'	Total/NA	Solid	8015NM Prep	
880-51705-15	SB-58-4'	Total/NA	Solid	8015NM Prep	
880-51705-16	SB-59-4'	Total/NA	Solid	8015NM Prep	
880-51705-17	SB-60-4'	Total/NA	Solid	8015NM Prep	
880-51705-18	SB-61-4'	Total/NA	Solid	8015NM Prep	
880-51705-19	SB-62-4'	Total/NA	Solid	8015NM Prep	
880-51705-20	SB-63-4'	Total/NA	Solid	8015NM Prep	
MB 880-97051/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97051/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97051/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-51705-1 MS	SB-44-4'	Total/NA	Solid	8015NM Prep	
880-51705-1 MSD	SB-44-4'	Total/NA	Solid	8015NM Prep	

Prep Batch: 97053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-21	SB-64-4'	Total/NA	Solid	8015NM Prep	
880-51705-22	SB-65-4'	Total/NA	Solid	8015NM Prep	
880-51705-23	SB-66-4'	Total/NA	Solid	8015NM Prep	
880-51705-24	SB-67-4'	Total/NA	Solid	8015NM Prep	
880-51705-25	SB-68-4'	Total/NA	Solid	8015NM Prep	
880-51705-26	SB-69-4'	Total/NA	Solid	8015NM Prep	
880-51705-27	SB-70-4'	Total/NA	Solid	8015NM Prep	
880-51705-28	SB-71-4'	Total/NA	Solid	8015NM Prep	
880-51705-29	SB-72-4'	Total/NA	Solid	8015NM Prep	
880-51705-30	SB-73-4'	Total/NA	Solid	8015NM Prep	
880-51705-31	SB-74-4'	Total/NA	Solid	8015NM Prep	
880-51705-32	SB-75-4'	Total/NA	Solid	8015NM Prep	
880-51705-33	SB-76-4'	Total/NA	Solid	8015NM Prep	
880-51705-34	SB-77-4'	Total/NA	Solid	8015NM Prep	
880-51705-35	SB-78-4'	Total/NA	Solid	8015NM Prep	
880-51705-36	SB-79-4'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 97053 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-37	SB-80-4'	Total/NA	Solid	8015NM Prep	
880-51705-38	SB-81-4'	Total/NA	Solid	8015NM Prep	
880-51705-39	SB-82-4'	Total/NA	Solid	8015NM Prep	
880-51705-40	SB-83-4'	Total/NA	Solid	8015NM Prep	
MB 880-97053/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-97053/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-97053/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-51705-21 MS	SB-64-4'	Total/NA	Solid	8015NM Prep	
880-51705-21 MSD	SB-64-4'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 97087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	8015B NM	97051
880-51705-2	SB-45-4'	Total/NA	Solid	8015B NM	97051
880-51705-3	SB-46-4'	Total/NA	Solid	8015B NM	97051
880-51705-4	SB-47-4'	Total/NA	Solid	8015B NM	97051
880-51705-5	SB-48-4'	Total/NA	Solid	8015B NM	97051
880-51705-6	SB-49-4'	Total/NA	Solid	8015B NM	97051
880-51705-7	SB-50-4'	Total/NA	Solid	8015B NM	97051
880-51705-8	SB-51-4'	Total/NA	Solid	8015B NM	97051
880-51705-9	SB-52-4'	Total/NA	Solid	8015B NM	97051
880-51705-10	SB-53-4'	Total/NA	Solid	8015B NM	97051
880-51705-11	SB-54-4'	Total/NA	Solid	8015B NM	97051
880-51705-12	SB-55-4'	Total/NA	Solid	8015B NM	97051
880-51705-13	SB-56-4'	Total/NA	Solid	8015B NM	97051
880-51705-14	SB-57-4'	Total/NA	Solid	8015B NM	97051
880-51705-15	SB-58-4'	Total/NA	Solid	8015B NM	97051
880-51705-16	SB-59-4'	Total/NA	Solid	8015B NM	97051
880-51705-17	SB-60-4'	Total/NA	Solid	8015B NM	97051
880-51705-18	SB-61-4'	Total/NA	Solid	8015B NM	97051
880-51705-19	SB-62-4'	Total/NA	Solid	8015B NM	97051
880-51705-20	SB-63-4'	Total/NA	Solid	8015B NM	97051
MB 880-97051/1-A	Method Blank	Total/NA	Solid	8015B NM	97051
LCS 880-97051/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97051
LCSD 880-97051/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97051
880-51705-1 MS	SB-44-4'	Total/NA	Solid	8015B NM	97051
880-51705-1 MSD	SB-44-4'	Total/NA	Solid	8015B NM	97051

Analysis Batch: 97090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-21	SB-64-4'	Total/NA	Solid	8015B NM	97053
880-51705-22	SB-65-4'	Total/NA	Solid	8015B NM	97053
880-51705-23	SB-66-4'	Total/NA	Solid	8015B NM	97053
880-51705-24	SB-67-4'	Total/NA	Solid	8015B NM	97053
880-51705-25	SB-68-4'	Total/NA	Solid	8015B NM	97053
880-51705-26	SB-69-4'	Total/NA	Solid	8015B NM	97053
880-51705-27	SB-70-4'	Total/NA	Solid	8015B NM	97053
880-51705-28	SB-71-4'	Total/NA	Solid	8015B NM	97053
880-51705-29	SB-72-4'	Total/NA	Solid	8015B NM	97053
880-51705-30	SB-73-4'	Total/NA	Solid	8015B NM	97053
880-51705-31	SB-74-4'	Total/NA	Solid	8015B NM	97053

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 97090 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-32	SB-75-4'	Total/NA	Solid	8015B NM	97053
880-51705-33	SB-76-4'	Total/NA	Solid	8015B NM	97053
880-51705-34	SB-77-4'	Total/NA	Solid	8015B NM	97053
880-51705-35	SB-78-4'	Total/NA	Solid	8015B NM	97053
880-51705-36	SB-79-4'	Total/NA	Solid	8015B NM	97053
880-51705-37	SB-80-4'	Total/NA	Solid	8015B NM	97053
880-51705-38	SB-81-4'	Total/NA	Solid	8015B NM	97053
880-51705-39	SB-82-4'	Total/NA	Solid	8015B NM	97053
880-51705-40	SB-83-4'	Total/NA	Solid	8015B NM	97053
MB 880-97053/1-A	Method Blank	Total/NA	Solid	8015B NM	97053
LCS 880-97053/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	97053
LCSD 880-97053/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	97053
880-51705-21 MS	SB-64-4'	Total/NA	Solid	8015B NM	97053
880-51705-21 MSD	SB-64-4'	Total/NA	Solid	8015B NM	97053

Analysis Batch: 97128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-41	SB-84-4'	Total/NA	Solid	8015B NM	96946
880-51705-42	SB-85-4'	Total/NA	Solid	8015B NM	96946
880-51705-43	SB-86-4'	Total/NA	Solid	8015B NM	96946
880-51705-44	SB-87-4'	Total/NA	Solid	8015B NM	96946
880-51705-45	SB-88-4'	Total/NA	Solid	8015B NM	96946
880-51705-46	SB-89-4'	Total/NA	Solid	8015B NM	96946
880-51705-47	SB-90-4'	Total/NA	Solid	8015B NM	96946
880-51705-48	SB-91-4'	Total/NA	Solid	8015B NM	96946
MB 880-96946/1-A	Method Blank	Total/NA	Solid	8015B NM	96946
LCS 880-96946/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96946
LCSD 880-96946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96946

Analysis Batch: 97183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Total/NA	Solid	8015 NM	
880-51705-2	SB-45-4'	Total/NA	Solid	8015 NM	
880-51705-3	SB-46-4'	Total/NA	Solid	8015 NM	
880-51705-4	SB-47-4'	Total/NA	Solid	8015 NM	
880-51705-5	SB-48-4'	Total/NA	Solid	8015 NM	
880-51705-6	SB-49-4'	Total/NA	Solid	8015 NM	
880-51705-7	SB-50-4'	Total/NA	Solid	8015 NM	
880-51705-8	SB-51-4'	Total/NA	Solid	8015 NM	
880-51705-9	SB-52-4'	Total/NA	Solid	8015 NM	
880-51705-10	SB-53-4'	Total/NA	Solid	8015 NM	
880-51705-11	SB-54-4'	Total/NA	Solid	8015 NM	
880-51705-12	SB-55-4'	Total/NA	Solid	8015 NM	
880-51705-13	SB-56-4'	Total/NA	Solid	8015 NM	
880-51705-14	SB-57-4'	Total/NA	Solid	8015 NM	
880-51705-15	SB-58-4'	Total/NA	Solid	8015 NM	
880-51705-16	SB-59-4'	Total/NA	Solid	8015 NM	
880-51705-17	SB-60-4'	Total/NA	Solid	8015 NM	
880-51705-18	SB-61-4'	Total/NA	Solid	8015 NM	
880-51705-19	SB-62-4'	Total/NA	Solid	8015 NM	
880-51705-20	SB-63-4'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 97183 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-21	SB-64-4'	Total/NA	Solid	8015 NM	
880-51705-22	SB-65-4'	Total/NA	Solid	8015 NM	
880-51705-23	SB-66-4'	Total/NA	Solid	8015 NM	
880-51705-24	SB-67-4'	Total/NA	Solid	8015 NM	
880-51705-25	SB-68-4'	Total/NA	Solid	8015 NM	
880-51705-26	SB-69-4'	Total/NA	Solid	8015 NM	
880-51705-27	SB-70-4'	Total/NA	Solid	8015 NM	
880-51705-28	SB-71-4'	Total/NA	Solid	8015 NM	
880-51705-29	SB-72-4'	Total/NA	Solid	8015 NM	
880-51705-30	SB-73-4'	Total/NA	Solid	8015 NM	
880-51705-31	SB-74-4'	Total/NA	Solid	8015 NM	
880-51705-32	SB-75-4'	Total/NA	Solid	8015 NM	
880-51705-33	SB-76-4'	Total/NA	Solid	8015 NM	
880-51705-34	SB-77-4'	Total/NA	Solid	8015 NM	
880-51705-35	SB-78-4'	Total/NA	Solid	8015 NM	
880-51705-36	SB-79-4'	Total/NA	Solid	8015 NM	
880-51705-37	SB-80-4'	Total/NA	Solid	8015 NM	
880-51705-38	SB-81-4'	Total/NA	Solid	8015 NM	
880-51705-39	SB-82-4'	Total/NA	Solid	8015 NM	
880-51705-40	SB-83-4'	Total/NA	Solid	8015 NM	
880-51705-41	SB-84-4'	Total/NA	Solid	8015 NM	
880-51705-42	SB-85-4'	Total/NA	Solid	8015 NM	
880-51705-43	SB-86-4'	Total/NA	Solid	8015 NM	
880-51705-44	SB-87-4'	Total/NA	Solid	8015 NM	
880-51705-45	SB-88-4'	Total/NA	Solid	8015 NM	
880-51705-46	SB-89-4'	Total/NA	Solid	8015 NM	
880-51705-47	SB-90-4'	Total/NA	Solid	8015 NM	
880-51705-48	SB-91-4'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 97058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Soluble	Solid	DI Leach	
880-51705-2	SB-45-4'	Soluble	Solid	DI Leach	
880-51705-3	SB-46-4'	Soluble	Solid	DI Leach	
880-51705-4	SB-47-4'	Soluble	Solid	DI Leach	
880-51705-5	SB-48-4'	Soluble	Solid	DI Leach	
880-51705-6	SB-49-4'	Soluble	Solid	DI Leach	
880-51705-7	SB-50-4'	Soluble	Solid	DI Leach	
880-51705-8	SB-51-4'	Soluble	Solid	DI Leach	
880-51705-9	SB-52-4'	Soluble	Solid	DI Leach	
880-51705-10	SB-53-4'	Soluble	Solid	DI Leach	
880-51705-11	SB-54-4'	Soluble	Solid	DI Leach	
880-51705-12	SB-55-4'	Soluble	Solid	DI Leach	
880-51705-13	SB-56-4'	Soluble	Solid	DI Leach	
880-51705-14	SB-57-4'	Soluble	Solid	DI Leach	
880-51705-15	SB-58-4'	Soluble	Solid	DI Leach	
880-51705-16	SB-59-4'	Soluble	Solid	DI Leach	
880-51705-17	SB-60-4'	Soluble	Solid	DI Leach	
880-51705-18	SB-61-4'	Soluble	Solid	DI Leach	

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 97058 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-97058/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97058/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97058/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51705-9 MS	SB-52-4'	Soluble	Solid	DI Leach	
880-51705-9 MSD	SB-52-4'	Soluble	Solid	DI Leach	

Leach Batch: 97059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-19	SB-62-4'	Soluble	Solid	DI Leach	
880-51705-20	SB-63-4'	Soluble	Solid	DI Leach	
880-51705-21	SB-64-4'	Soluble	Solid	DI Leach	
880-51705-22	SB-65-4'	Soluble	Solid	DI Leach	
880-51705-23	SB-66-4'	Soluble	Solid	DI Leach	
880-51705-24	SB-67-4'	Soluble	Solid	DI Leach	
880-51705-25	SB-68-4'	Soluble	Solid	DI Leach	
880-51705-26	SB-69-4'	Soluble	Solid	DI Leach	
880-51705-27	SB-70-4'	Soluble	Solid	DI Leach	
880-51705-28	SB-71-4'	Soluble	Solid	DI Leach	
880-51705-29	SB-72-4'	Soluble	Solid	DI Leach	
880-51705-30	SB-73-4'	Soluble	Solid	DI Leach	
880-51705-31	SB-74-4'	Soluble	Solid	DI Leach	
880-51705-32	SB-75-4'	Soluble	Solid	DI Leach	
880-51705-33	SB-76-4'	Soluble	Solid	DI Leach	
880-51705-34	SB-77-4'	Soluble	Solid	DI Leach	
880-51705-35	SB-78-4'	Soluble	Solid	DI Leach	
880-51705-36	SB-79-4'	Soluble	Solid	DI Leach	
880-51705-37	SB-80-4'	Soluble	Solid	DI Leach	
880-51705-38	SB-81-4'	Soluble	Solid	DI Leach	
MB 880-97059/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97059/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97059/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51705-19 MS	SB-62-4'	Soluble	Solid	DI Leach	
880-51705-19 MSD	SB-62-4'	Soluble	Solid	DI Leach	
880-51705-29 MS	SB-72-4'	Soluble	Solid	DI Leach	
880-51705-29 MSD	SB-72-4'	Soluble	Solid	DI Leach	

Analysis Batch: 97076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-1	SB-44-4'	Soluble	Solid	300.0	97058
880-51705-2	SB-45-4'	Soluble	Solid	300.0	97058
880-51705-3	SB-46-4'	Soluble	Solid	300.0	97058
880-51705-4	SB-47-4'	Soluble	Solid	300.0	97058
880-51705-5	SB-48-4'	Soluble	Solid	300.0	97058
880-51705-6	SB-49-4'	Soluble	Solid	300.0	97058
880-51705-7	SB-50-4'	Soluble	Solid	300.0	97058
880-51705-8	SB-51-4'	Soluble	Solid	300.0	97058
880-51705-9	SB-52-4'	Soluble	Solid	300.0	97058
880-51705-10	SB-53-4'	Soluble	Solid	300.0	97058
880-51705-11	SB-54-4'	Soluble	Solid	300.0	97058
880-51705-12	SB-55-4'	Soluble	Solid	300.0	97058
880-51705-13	SB-56-4'	Soluble	Solid	300.0	97058

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 97076 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-14	SB-57-4'	Soluble	Solid	300.0	97058
880-51705-15	SB-58-4'	Soluble	Solid	300.0	97058
880-51705-16	SB-59-4'	Soluble	Solid	300.0	97058
880-51705-17	SB-60-4'	Soluble	Solid	300.0	97058
880-51705-18	SB-61-4'	Soluble	Solid	300.0	97058
MB 880-97058/1-A	Method Blank	Soluble	Solid	300.0	97058
LCS 880-97058/2-A	Lab Control Sample	Soluble	Solid	300.0	97058
LCSD 880-97058/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97058
880-51705-9 MS	SB-52-4'	Soluble	Solid	300.0	97058
880-51705-9 MSD	SB-52-4'	Soluble	Solid	300.0	97058

Leach Batch: 97077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-39	SB-82-4'	Soluble	Solid	DI Leach	
880-51705-40	SB-83-4'	Soluble	Solid	DI Leach	
880-51705-41	SB-84-4'	Soluble	Solid	DI Leach	
880-51705-42	SB-85-4'	Soluble	Solid	DI Leach	
880-51705-43	SB-86-4'	Soluble	Solid	DI Leach	
880-51705-44	SB-87-4'	Soluble	Solid	DI Leach	
880-51705-45	SB-88-4'	Soluble	Solid	DI Leach	
880-51705-46	SB-89-4'	Soluble	Solid	DI Leach	
880-51705-47	SB-90-4'	Soluble	Solid	DI Leach	
880-51705-48	SB-91-4'	Soluble	Solid	DI Leach	
MB 880-97077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-97077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-97077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-51705-39 MS	SB-82-4'	Soluble	Solid	DI Leach	
880-51705-39 MSD	SB-82-4'	Soluble	Solid	DI Leach	

Analysis Batch: 97079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-19	SB-62-4'	Soluble	Solid	300.0	97059
880-51705-20	SB-63-4'	Soluble	Solid	300.0	97059
880-51705-21	SB-64-4'	Soluble	Solid	300.0	97059
880-51705-22	SB-65-4'	Soluble	Solid	300.0	97059
880-51705-23	SB-66-4'	Soluble	Solid	300.0	97059
880-51705-24	SB-67-4'	Soluble	Solid	300.0	97059
880-51705-25	SB-68-4'	Soluble	Solid	300.0	97059
880-51705-26	SB-69-4'	Soluble	Solid	300.0	97059
880-51705-27	SB-70-4'	Soluble	Solid	300.0	97059
880-51705-28	SB-71-4'	Soluble	Solid	300.0	97059
880-51705-29	SB-72-4'	Soluble	Solid	300.0	97059
880-51705-30	SB-73-4'	Soluble	Solid	300.0	97059
880-51705-31	SB-74-4'	Soluble	Solid	300.0	97059
880-51705-32	SB-75-4'	Soluble	Solid	300.0	97059
880-51705-33	SB-76-4'	Soluble	Solid	300.0	97059
880-51705-34	SB-77-4'	Soluble	Solid	300.0	97059
880-51705-35	SB-78-4'	Soluble	Solid	300.0	97059
880-51705-36	SB-79-4'	Soluble	Solid	300.0	97059
880-51705-37	SB-80-4'	Soluble	Solid	300.0	97059
880-51705-38	SB-81-4'	Soluble	Solid	300.0	97059

QC Association Summary

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 97079 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-97059/1-A	Method Blank	Soluble	Solid	300.0	97059
LCS 880-97059/2-A	Lab Control Sample	Soluble	Solid	300.0	97059
LCSD 880-97059/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97059
880-51705-19 MS	SB-62-4'	Soluble	Solid	300.0	97059
880-51705-19 MSD	SB-62-4'	Soluble	Solid	300.0	97059
880-51705-29 MS	SB-72-4'	Soluble	Solid	300.0	97059
880-51705-29 MSD	SB-72-4'	Soluble	Solid	300.0	97059

Analysis Batch: 97080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-51705-39	SB-82-4'	Soluble	Solid	300.0	97077
880-51705-40	SB-83-4'	Soluble	Solid	300.0	97077
880-51705-41	SB-84-4'	Soluble	Solid	300.0	97077
880-51705-42	SB-85-4'	Soluble	Solid	300.0	97077
880-51705-43	SB-86-4'	Soluble	Solid	300.0	97077
880-51705-44	SB-87-4'	Soluble	Solid	300.0	97077
880-51705-45	SB-88-4'	Soluble	Solid	300.0	97077
880-51705-46	SB-89-4'	Soluble	Solid	300.0	97077
880-51705-47	SB-90-4'	Soluble	Solid	300.0	97077
880-51705-48	SB-91-4'	Soluble	Solid	300.0	97077
MB 880-97077/1-A	Method Blank	Soluble	Solid	300.0	97077
LCS 880-97077/2-A	Lab Control Sample	Soluble	Solid	300.0	97077
LCSD 880-97077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	97077
880-51705-39 MS	SB-82-4'	Soluble	Solid	300.0	97077
880-51705-39 MSD	SB-82-4'	Soluble	Solid	300.0	97077

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-44-4'

Lab Sample ID: 880-51705-1
Matrix: Solid
Date Collected: 12/03/24 09:00
Date Received: 12/04/24 08:30

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	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 12:33	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 12:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 16:23	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 18:20	CH	EET MID

Client Sample ID: SB-45-4'

Lab Sample ID: 880-51705-2
Matrix: Solid
Date Collected: 12/03/24 09:10
Date Received: 12/04/24 08:30

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	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 12:54	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 12:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 17:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 18:26	CH	EET MID

Client Sample ID: SB-46-4'

Lab Sample ID: 880-51705-3
Matrix: Solid
Date Collected: 12/03/24 09:20
Date Received: 12/04/24 08:30

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	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 13:14	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 17:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 17:28	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 18:32	CH	EET MID

Client Sample ID: SB-47-4'

Lab Sample ID: 880-51705-4
Matrix: Solid
Date Collected: 12/03/24 09:30
Date Received: 12/04/24 08:30

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	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 13:35	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:35	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-47-4'

Date Collected: 12/03/24 09:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-4
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			97183	12/04/24 17:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 17:44	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 18:49	CH	EET MID

Client Sample ID: SB-48-4'

Date Collected: 12/03/24 09:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-5
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	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 13:55	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 18:00	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 18:55	CH	EET MID

Client Sample ID: SB-49-4'

Date Collected: 12/03/24 09:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-6
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			5.05 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 17:00	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 18:16	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 19:01	CH	EET MID

Client Sample ID: SB-50-4'

Date Collected: 12/03/24 10:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-7
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			5.03 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 17:20	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 18:33	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-50-4'
Date Collected: 12/03/24 10:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 19:07	CH	EET MID

Client Sample ID: SB-51-4'
Date Collected: 12/03/24 10:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 17:41	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:41	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 18:48	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 19:13	CH	EET MID

Client Sample ID: SB-52-4'
Date Collected: 12/03/24 10:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 18:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 19:05	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 19:19	CH	EET MID

Client Sample ID: SB-53-4'
Date Collected: 12/03/24 10:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 18:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 19:21	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 19:37	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-54-4'

Date Collected: 12/03/24 10:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-11

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			4.99 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 18:42	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 19:54	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 19:43	CH	EET MID

Client Sample ID: SB-55-4'

Date Collected: 12/03/24 10:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-12

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			5.03 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 19:03	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 19:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 20:10	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:00	CH	EET MID

Client Sample ID: SB-56-4'

Date Collected: 12/03/24 11:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-13

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			5.05 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 19:23	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 19:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 20:27	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:06	CH	EET MID

Client Sample ID: SB-57-4'

Date Collected: 12/03/24 11:15
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-14

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			4.95 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 19:44	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 19:44	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-57-4'
Date Collected: 12/03/24 11:15
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-14
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			97183	12/04/24 20:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 20:42	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97076	12/06/24 20:12	CH	EET MID

Client Sample ID: SB-58-4'
Date Collected: 12/03/24 11:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	97055	12/04/24 10:52	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97031	12/04/24 20:04	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 20:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 20:59	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:18	CH	EET MID

Client Sample ID: SB-59-4'
Date Collected: 12/03/24 11:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-16
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			5.01 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 15:40	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 15:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 21:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:24	CH	EET MID

Client Sample ID: SB-60-4'
Date Collected: 12/03/24 11:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 16:01	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 16:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 21:31	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-60-4'

Date Collected: 12/03/24 11:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:30	CH	EET MID

Client Sample ID: SB-61-4'

Date Collected: 12/03/24 11:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 17:35	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 21:48	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97058	12/04/24 11:05	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97076	12/06/24 20:36	CH	EET MID

Client Sample ID: SB-62-4'

Date Collected: 12/03/24 12:05
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 17:56	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 22:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 22:04	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/05/24 23:51	CH	EET MID

Client Sample ID: SB-63-4'

Date Collected: 12/03/24 12:15
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 18:16	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 22:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97051	12/04/24 09:45	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97087	12/04/24 22:21	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 00:12	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-64-4'

Date Collected: 12/03/24 12:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 15:44	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 15:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 16:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 16:23	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 00:19	CH	EET MID

Client Sample ID: SB-65-4'

Date Collected: 12/03/24 12:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 16:05	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 16:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 17:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 17:11	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 00:25	CH	EET MID

Client Sample ID: SB-66-4'

Date Collected: 12/03/24 12:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-23

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 16:25	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 16:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 17:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 17:28	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 00:32	CH	EET MID

Client Sample ID: SB-67-4'

Date Collected: 12/03/24 12:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 16:46	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 16:46	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-67-4'

Date Collected: 12/03/24 12:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-24

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			97183	12/04/24 17:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 17:44	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 00:53	CH	EET MID

Client Sample ID: SB-68-4'

Date Collected: 12/03/24 13:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-25

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 17:06	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 18:00	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 01:00	CH	EET MID

Client Sample ID: SB-69-4'

Date Collected: 12/03/24 13:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-26

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 17:26	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 18:16	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 01:07	CH	EET MID

Client Sample ID: SB-70-4'

Date Collected: 12/03/24 13:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-27

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 17:47	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 17:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 18:33	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-70-4'
Date Collected: 12/03/24 13:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 01:14	CH	EET MID

Client Sample ID: SB-71-4'
Date Collected: 12/03/24 13:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-28
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 18:07	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 18:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 18:48	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 01:21	CH	EET MID

Client Sample ID: SB-72-4'
Date Collected: 12/03/24 13:40
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-29
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 18:28	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 19:05	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 01:27	CH	EET MID

Client Sample ID: SB-73-4'
Date Collected: 12/03/24 13:50
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-30
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 18:48	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 18:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 19:21	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 01:48	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-74-4'

Date Collected: 12/03/24 14:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-31

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.97 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 20:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 20:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 19:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 19:54	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 01:55	CH	EET MID

Client Sample ID: SB-75-4'

Date Collected: 12/03/24 14:05
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-32

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 20:42	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 20:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 20:10	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 02:16	CH	EET MID

Client Sample ID: SB-76-4'

Date Collected: 12/03/24 14:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-33

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 21:02	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 21:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 20:27	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 02:23	CH	EET MID

Client Sample ID: SB-77-4'

Date Collected: 12/03/24 14:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-34

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 21:23	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 21:23	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-77-4'
Date Collected: 12/03/24 14:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-34
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 20:42	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97079	12/06/24 02:30	CH	EET MID

Client Sample ID: SB-78-4'
Date Collected: 12/03/24 14:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-35
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 21:43	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 21:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 20:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 20:59	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 02:36	CH	EET MID

Client Sample ID: SB-79-4'
Date Collected: 12/03/24 14:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-36
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 22:04	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 22:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 21:15	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 02:43	CH	EET MID

Client Sample ID: SB-80-4'
Date Collected: 12/03/24 14:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-37
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 22:24	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 21:31	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-80-4'
Date Collected: 12/03/24 14:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-37
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 02:50	CH	EET MID

Client Sample ID: SB-81-4'
Date Collected: 12/03/24 14:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-38
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 22:44	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 22:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 21:48	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97059	12/04/24 11:08	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97079	12/06/24 02:57	CH	EET MID

Client Sample ID: SB-82-4'
Date Collected: 12/03/24 15:00
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-39
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 23:05	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 23:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 22:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 22:04	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97080	12/06/24 18:22	CH	EET MID

Client Sample ID: SB-83-4'
Date Collected: 12/03/24 15:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-40
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	97056	12/04/24 11:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97032	12/04/24 23:25	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 23:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/04/24 22:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	97053	12/04/24 09:51	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97090	12/04/24 22:21	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 18:43	CH	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-84-4'
Date Collected: 12/03/24 15:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-41
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 12:56	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 12:56	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/05/24 23:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 23:07	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 18:50	CH	EET MID

Client Sample ID: SB-85-4'
Date Collected: 12/03/24 15:30
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-42
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			4.96 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 13:17	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/05/24 23:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 23:22	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	97080	12/06/24 18:57	CH	EET MID

Client Sample ID: SB-86-4'
Date Collected: 12/03/24 15:35
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-43
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 13:37	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:37	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/05/24 23:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 23:38	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:03	CH	EET MID

Client Sample ID: SB-87-4'
Date Collected: 12/03/24 15:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.96 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 13:58	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 13:58	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-87-4'
Date Collected: 12/03/24 15:45
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-44
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			97183	12/05/24 23:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/05/24 23:54	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:24	CH	EET MID

Client Sample ID: SB-88-4'
Date Collected: 12/03/24 15:55
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-45
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 14:18	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 14:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/06/24 00:26	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/06/24 00:26	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:31	CH	EET MID

Client Sample ID: SB-89-4'
Date Collected: 12/03/24 16:10
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-46
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 14:39	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 14:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/06/24 00:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/06/24 00:42	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:38	CH	EET MID

Client Sample ID: SB-90-4'
Date Collected: 12/03/24 16:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-47
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.99 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 14:59	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 14:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/06/24 00:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/06/24 00:58	TKC	EET MID

Lab Chronicle

Client: Arcadis US Inc.
Project/Site: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Client Sample ID: SB-90-4'

Date Collected: 12/03/24 16:20
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-47

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:45	CH	EET MID

Client Sample ID: SB-91-4'

Date Collected: 12/03/24 16:25
Date Received: 12/04/24 08:30

Lab Sample ID: 880-51705-48

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.03 g	5 mL	97060	12/04/24 11:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	97033	12/04/24 15:20	EL	EET MID
Total/NA	Analysis	Total BTEX		1			97092	12/04/24 15:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			97183	12/06/24 01:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96946	12/03/24 09:41	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	97128	12/06/24 01:14	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	97077	12/04/24 14:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	97080	12/06/24 19:52	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 47

Job ID: 880-51705-1
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: WLU 47

Job ID: 880-51705-1
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: WLU 47

Job ID: 880-51705-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-51705-1	SB-44-4'	Solid	12/03/24 09:00	12/04/24 08:30
880-51705-2	SB-45-4'	Solid	12/03/24 09:10	12/04/24 08:30
880-51705-3	SB-46-4'	Solid	12/03/24 09:20	12/04/24 08:30
880-51705-4	SB-47-4'	Solid	12/03/24 09:30	12/04/24 08:30
880-51705-5	SB-48-4'	Solid	12/03/24 09:40	12/04/24 08:30
880-51705-6	SB-49-4'	Solid	12/03/24 09:50	12/04/24 08:30
880-51705-7	SB-50-4'	Solid	12/03/24 10:00	12/04/24 08:30
880-51705-8	SB-51-4'	Solid	12/03/24 10:10	12/04/24 08:30
880-51705-9	SB-52-4'	Solid	12/03/24 10:20	12/04/24 08:30
880-51705-10	SB-53-4'	Solid	12/03/24 10:30	12/04/24 08:30
880-51705-11	SB-54-4'	Solid	12/03/24 10:40	12/04/24 08:30
880-51705-12	SB-55-4'	Solid	12/03/24 10:50	12/04/24 08:30
880-51705-13	SB-56-4'	Solid	12/03/24 11:00	12/04/24 08:30
880-51705-14	SB-57-4'	Solid	12/03/24 11:15	12/04/24 08:30
880-51705-15	SB-58-4'	Solid	12/03/24 11:25	12/04/24 08:30
880-51705-16	SB-59-4'	Solid	12/03/24 11:35	12/04/24 08:30
880-51705-17	SB-60-4'	Solid	12/03/24 11:45	12/04/24 08:30
880-51705-18	SB-61-4'	Solid	12/03/24 11:55	12/04/24 08:30
880-51705-19	SB-62-4'	Solid	12/03/24 12:05	12/04/24 08:30
880-51705-20	SB-63-4'	Solid	12/03/24 12:15	12/04/24 08:30
880-51705-21	SB-64-4'	Solid	12/03/24 12:25	12/04/24 08:30
880-51705-22	SB-65-4'	Solid	12/03/24 12:35	12/04/24 08:30
880-51705-23	SB-66-4'	Solid	12/03/24 12:45	12/04/24 08:30
880-51705-24	SB-67-4'	Solid	12/03/24 12:55	12/04/24 08:30
880-51705-25	SB-68-4'	Solid	12/03/24 13:00	12/04/24 08:30
880-51705-26	SB-69-4'	Solid	12/03/24 13:10	12/04/24 08:30
880-51705-27	SB-70-4'	Solid	12/03/24 13:20	12/04/24 08:30
880-51705-28	SB-71-4'	Solid	12/03/24 13:30	12/04/24 08:30
880-51705-29	SB-72-4'	Solid	12/03/24 13:40	12/04/24 08:30
880-51705-30	SB-73-4'	Solid	12/03/24 13:50	12/04/24 08:30
880-51705-31	SB-74-4'	Solid	12/03/24 14:00	12/04/24 08:30
880-51705-32	SB-75-4'	Solid	12/03/24 14:05	12/04/24 08:30
880-51705-33	SB-76-4'	Solid	12/03/24 14:10	12/04/24 08:30
880-51705-34	SB-77-4'	Solid	12/03/24 14:20	12/04/24 08:30
880-51705-35	SB-78-4'	Solid	12/03/24 14:25	12/04/24 08:30
880-51705-36	SB-79-4'	Solid	12/03/24 14:35	12/04/24 08:30
880-51705-37	SB-80-4'	Solid	12/03/24 14:45	12/04/24 08:30
880-51705-38	SB-81-4'	Solid	12/03/24 14:55	12/04/24 08:30
880-51705-39	SB-82-4'	Solid	12/03/24 15:00	12/04/24 08:30
880-51705-40	SB-83-4'	Solid	12/03/24 15:10	12/04/24 08:30
880-51705-41	SB-84-4'	Solid	12/03/24 15:20	12/04/24 08:30
880-51705-42	SB-85-4'	Solid	12/03/24 15:30	12/04/24 08:30
880-51705-43	SB-86-4'	Solid	12/03/24 15:35	12/04/24 08:30
880-51705-44	SB-87-4'	Solid	12/03/24 15:45	12/04/24 08:30
880-51705-45	SB-88-4'	Solid	12/03/24 15:55	12/04/24 08:30
880-51705-46	SB-89-4'	Solid	12/03/24 16:10	12/04/24 08:30
880-51705-47	SB-90-4'	Solid	12/03/24 16:20	12/04/24 08:30
880-51705-48	SB-91-4'	Solid	12/03/24 16:25	12/04/24 08:30

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

Chain of Custody Record

eurofins

880-51705 Chain of Custody

12/9/2024

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): 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: WW 47	Project #: 30246600.0004		
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		
SB-44-4'	12/03/24	0900	G	Solid			X	X	X	1	
SB-45-4'		0910		Solid			X	X	X	1	
SB-46-4'		0920		Solid			X	X	X	1	
SB-47-4'		0930		Solid			X	X	X	1	
SB-48-4'		0940		Solid			X	X	X	1	
SB-49-4'		0950		Solid			X	X	X	1	
SB-50-4'		1000		Solid			X	X	X	1	
SB-51-4'		1010		Solid			X	X	X	1	
SB-52-4'		1020		Solid			X	X	X	1	
SB-53-4'		1030		Solid			X	X	X	1	
SB-54-4'	X	1040	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
1	[signature]	12-4-24	Arcadis	[signature]	12/4/24 830	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	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: 5.9/5.8 -.1

Ver: 05/06/2024

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Received by OCD: 1/9/2025 1:03:14 PM

Released to Imaging: 1/10/2025 8:43:45 AM

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

Chain of Custody Record

eurofins | Environment Testing

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 5 Page 1 of 1
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: WLU 47	Project #: 30246600.0004			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)	MS/MSD	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SB-55-4'	12/03/24	1050	G	Solid			X	X	X	1	
SB-56-4'		1100		Solid			X	X	X	1	
SB-57-4'		1115		Solid			X	X	X	1	
SB-58-4'		1125		Solid			X	X	X	1	
SB-59-4'		1135		Solid			X	X	X	1	
SB-60-4'		1145		Solid			X	X	X	1	
SB-61-4'		1155		Solid			X	X	X	1	
SB-62-4'		1205		Solid			X	X	X	1	
SB-63-4'		1215		Solid			X	X	X	1	
SB-64-4'		1225		Solid			X	X	X	1	
SB-65-4'	X	1235	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 Playle	12-4-24	Arcadis		12/4/24 830	
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

Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM
12/9/2024
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Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins | Environment Testing

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: 35 Page 1 of 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: WW 47	Project #: 30246600.0004			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		
SB-66-4'	12/03/24	1245	G	Solid			X	X	X	1	
SB-67-4'		1255		Solid			X	X	X	1	
SB-68-4'		1300		Solid			X	X	X	1	
SB-69-4'		1310		Solid			X	X	X	1	
SB-70-4'		1320		Solid			X	X	X	1	
SB-71-4'		1330		Solid			X	X	X	1	
SB-72-4'		1340		Solid			X	X	X	1	
SB-73-4'		1350		Solid			X	X	X	1	
SB-74-4'		1400		Solid			X	X	X	1	
SB-75-4'		1405		Solid			X	X	X	1	
SB-76-4'	X	1410	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 Par	12-4-24	Arcadis		12/4/24 430	
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

Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM
12/9/2024
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Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins | Environment Testing

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 4 of 5
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 #:			Other:
Project Name: WW 47	Project #: 30246600.0004			
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		
SB-77-4'	12/03/24	1420	G	Solid			X	X	X	1	
SB-78-4'		1425		Solid			X	X	X	1	
SB-79-4'		1435		Solid			X	X	X	1	
SB-80-4'		1445		Solid			X	X	X	1	
SB-81-4'		1455		Solid			X	X	X	1	
SB-82-4'		1500		Solid			X	X	X	1	
SB-83-4'		1510		Solid			X	X	X	1	
SB-84-4'		1520		Solid			X	X	X	1	
SB-85-4'		1530		Solid			X	X	X	1	
SB-86-4'		1535		Solid			X	X	X	1	
SB-87-4'	X	1545	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
Luis Esparza	12-4-24	Arcadis		12/4/24 1430	
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

Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM
12/9/2024
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Eurofins Midland
1211 W. Florida Ave
Midland, TX 79701
Phone (432) 704-5440

Chain of Custody Record

eurofins | Environment Testing

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 5 of 5
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: WLU 47	Project #: 30246100.0004			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		
SB-88-4'	12/03/24	1555	G	Solid			X	X	X	1	
SB-89-4'	"	1610	"	Solid			X	X	X	1	
SB-90-4'	"	1620	"	Solid			X	X	X	1	
SB-91-4'	X	1625	X	Solid			X	X	X	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
Chris Park	12-4-24	Arcadis		12/4/24 830	
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

Received by OCD: 1/9/2025 1:03:14 PM
Released to Imaging: 1/10/2025 8:43:45 AM
12/9/2024
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Login Sample Receipt Checklist

Client: Arcadis US Inc.

Job Number: 880-51705-1
SDG Number: Lea County, NM

Login Number: 51705
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 E

Photo Log

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

Photo No.	Date:
1	11/13/2024

Coordinates:

32.856327, -103.365962

Description:

Soil borings (SB-1 & SB-2) by drill rig onsite for vertical and to verify depth to groundwater.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

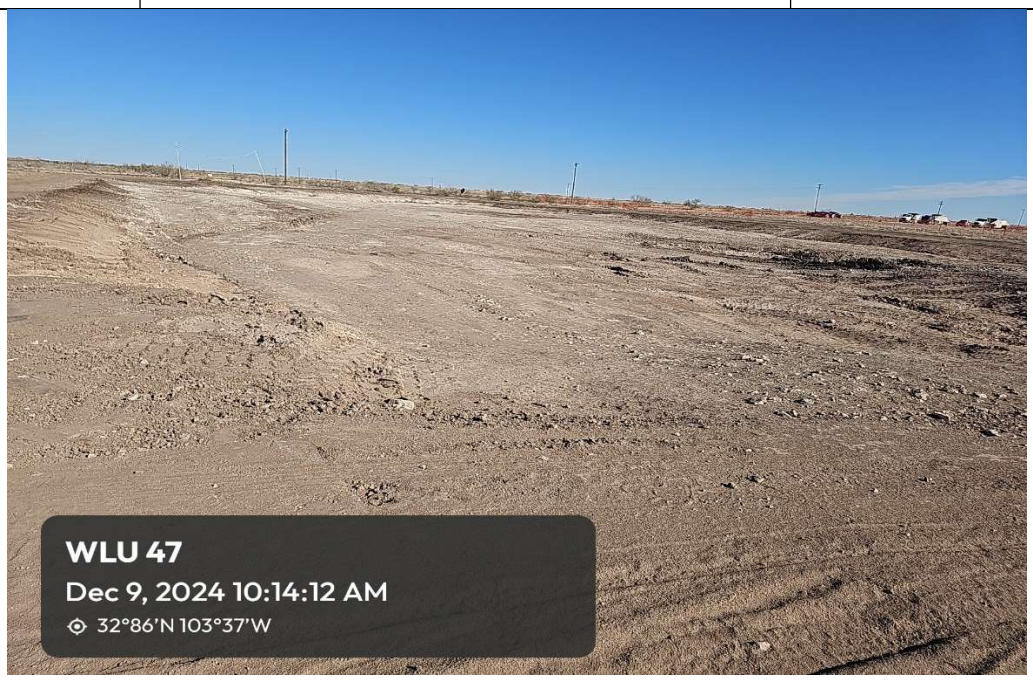
Photo No.	Date:
2	12/9/2024

Coordinates:

32.856327, -103.365962

Description:

Excavation completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

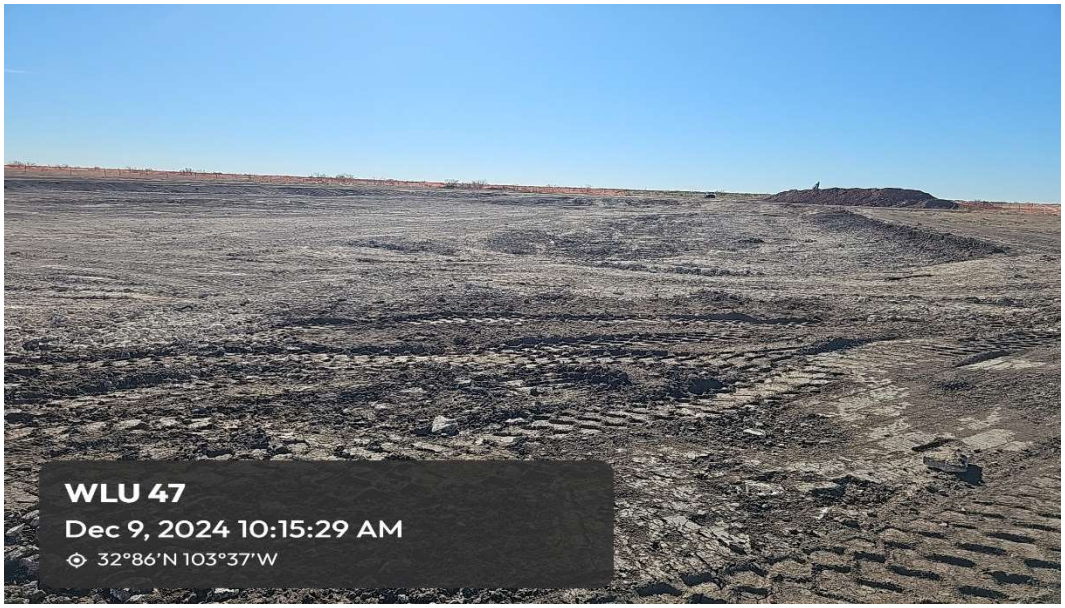
Photo No.	Date:
3	12/9/2024

Coordinates:

32.856327, -103.365962

Description:

Excavation completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

Photo No.	Date:
4	12/13/2024

Coordinates:

32.856327, -103.365962

Description:

Excavation backfilling in progress.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

Photo No.	Date:
5	12/18/2024

Coordinates:

32.856327, -103.365962

Description:

Excavation backfilling completed.



ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Incident No.
West Lovington Unit #047	Lea County, NM	nPAC0708526071

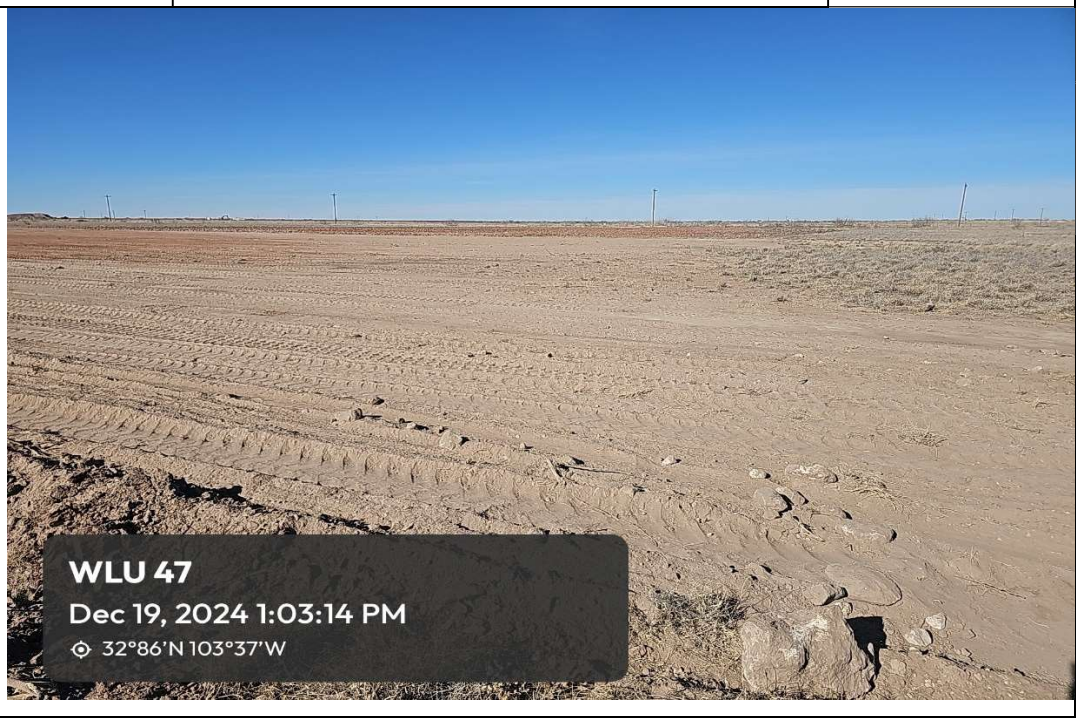
Photo No.	Date:
6	12/18/2024

Coordinates:

32.856327, -103.365962

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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Phone: (505) 476-3441

General Information
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 419050

QUESTIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nPAC0708526071**
Incident Name	**NPAC0708526071 WEST LOVINGTON UNIT #047 @ 30-025-03920**
Incident Type	**Produced Water Release**
Incident Status	**Reclamation Report Received**
Incident Well	**[30-025-03920] WEST LOVINGTON UNIT #047**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	WEST LOVINGTON UNIT #047
Date Release Discovered	01/14/2007
Surface Owner	Private

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: Corrosion | Flow Line - Injection | Produced Water | Released: 5 BBL | Recovered: 0 BBL | Lost: 5 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
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**More info needed to determine if this will be treated as 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)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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 ½ and 1 (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 ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between ½ and 1 (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)	7420
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	182
GRO+DRO	(EPA SW-846 Method 8015M)	182
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		33500
What is the estimated volume (in cubic yards) that will be reclaimed		6720
What is the estimated surface area (in square feet) that will be remediated		33500
What is the estimated volume (in cubic yards) that will be remediated		6720
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)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	GANDY MARLEY LANDFARM/LANDFILL [fEEM0112338393]
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: 01/09/2025
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)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**400745**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**11/13/2024**
What was the (estimated) number of samples that were to be gathered	**165**
What was the sampling surface area in square feet	**32000**

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	41750
What was the total volume (cubic yards) remediated	6185
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	41750
What was the total volume (in cubic yards) reclaimed	6185
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)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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	41750
What was the total volume of replacement material (in cubic yards) for this site	6185
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)	01/15/2025
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)

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	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.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 419050
	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