ARCADIS

COG (ConocoPhillips)

2023 Soil Remediation Summary and Closure Request Report

Incident #'s nMLB1121352991 and nJMW1334648160

July 2023

2023 Soil Remediation Summary and Closure Request Report

SRO SWD #101
Incident #s nMLB1121352991 and nJMW1334648160

July 2023

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1 Introduction

Arcadis U.S., Inc. (Arcadis) has prepared this Soil Remediation Summary and Closure Request Report (Report), on behalf of Concho Operating, LLC (COG – now ConocoPhillips), for the release site known as the SRO SWD #101 (Site). Details of the two open release cases associated with the Site are summarized in the New Mexico Oil Conservation Division (NMOCD) Initial C-141 Forms included as **Appendix A**.

2 Project Summary

The Site is located on state land, approximately 17-miles southwest of the City of Malaga in Unit G, Section 30, Township 26 South, Range 29 East, Eddy County, New Mexico. Release areas detailed in this report were located on previously disturbed areas (former pad location). None of the areas affected by the releases were located off pad, therefore compliance with the Cultural Properties Protection (CPP) Rule was determined not to be applicable for the Site. A Site Location Map is included as **Figure 1**.

2.1 Incident # nMLB1121352991

According to the Initial C-141 Form, on February 8, 2022, a flex pipe was discovered bursting from abrasions due to severe weather at the Site. The leak resulted in the release of approximately 15.718 barrels (bbls) of produced water to ground surface at the Site. A vacuum truck recovered approximately 0 bbls of produced water. The impacted area measured approximately 650 feet by 45 feet. The Initial C-141 Form was submitted to the NMOCD on February 24, 2022 and assigned Incident ID number nMLB1121352991. The Initial C-141 Form is included as **Appendix A** and the Final C-141 form is included in **Appendix B.**

2.2 Incident # nJMW1334648160

According to the Initial C-141 Form, the release was discovered on November 26, 2013, and was caused by corrosion on a 3-inch steel line located between the H-pump and the well head. Approximately 85 bbls of produced water were released with 35 bbls recovered.

Tetra Tech personnel were on site on December 17, 2013, to inspect and sample the spill area. Fifteen (15) auger holes (AH-1 through AH-15) were installed and analyzed for chloride; benzene, toluene, ethylbenzene, and xylenes (BTEX); and total petroleum hydrocarbons (TPH). Chloride concentrations were reported above the historical applicable Recommended Remediation Action Levels (RRALs) in all soil samples collected with the exception of sample location AH-11.

Tetra Tech returned to the Site on March 12, 2014, and began remedial activities which consisted of excavation of areas AH-2 and AH-3 to depths of approximately 0.5 feet (ft) below ground surface (bgs) to 1 ft bgs; areas AH-1, AH-5, AH-6, AH-7, AH-9, AH-10, and AH-13 to depths of approximately 2 ft bgs; areas AH-4, AH-8 and AH-14 to depths of approximately 3 ft bgs; area AH-15 to a depth of approximately 4 ft bgs; and area AH-12 to a depth of approximately 6 ft bgs. Approximately 3,700 cubic yards of excavated material was removed from the remediated areas. A closure report was prepared by Tetra Tech dated May 6, 2014, and submitted to NMOCD. A Final C-141 was submitted to NMOCD and was received on June 4, 2014.

Email correspondence from NMOCD on June 11, 2014, to Tetra Tech in reference to Incident # nJMW1334648160 (2RP-2109) stated: additional clarification was needed associated with two historical background samples listed in the closure report submitted to the NMOCD and that there was concern from NMOCD regarding elevated levels of chloride left in place within areas AH-1, AH-3, and AH-4. The correspondence email chain is included in **Appendix C.**

NMOCD accepted the Final C-141 on July 16, 2015 with a note that stated, "shallow GW and elevated chloride on pad - leave open until abandonment."

3 Site Characterization

3.1 Incident # nMLB1121352991

Since no historical water wells were found within a ½ mile radius, a groundwater determination borehole was installed on March 15, 2022 to a depth of 55 feet bgs at the SRO 5 State CTB less than ½ a mile east of the release site. Soil assessment activities were performed at the Site on March 30, 2022 by Tetra Tech, Inc. to determine the horizontal and vertical extent of the release area. The assessment activities associated analytical soil sample results, the initial proposed remediation/reclamation activities for the impacted areas, and specifics regarding the groundwater determination borehole installation are detailed in the 2022 Work Plan submitted by Tetra Tech, Inc. to the NMOCD (see **Appendix D**).

Arcadis began additional soil assessment activities prior to excavation activities at the Site in May 2023. Chloride concentrations in soil were determined during assessment activities to be below the applicable screening limits of 10,000 mg/kg for chloride at depths of 4 ft bgs within the pad and the former tank battery area located on the south to southeast portion of the pad area.

3.2 Incident # nJMW1334648160

Tetra Tech completed the historical excavation activities at the Site in March 2014 and submitted the closure request report to the NMOCD following completion of those activities. The historical closure request report is included in **Appendix E**. A subsequent soil assessment was performed by Arcadis in May 2023 to determine the horizontal and vertical extent of the three areas (AH-1, AH-3, and AH-4) referenced in the correspondence between NMOCD and Tetra Tech in June 2014 with elevated chloride concentrations remaining in soil. Analytical results from those assessment activities are shown in **Table 1**.

4 Closure Criteria for Soils Impacted by a Release

The NMOCD classifies the Site to use the medium stringent regulatory limits due to depth to groundwater being greater than 51 feet bgs. Per Table I of New Mexico Administrative Code (NMAC) part 19.15.29.12, the following closure criteria apply to a Site with depth to ground water greater than 51 feet bgs, but less than 100 feet bgs:

Constituent	Limit (mg/kg)
Chloride	10,000 mg/kg
TPH – Gasoline Range Organics (GRO) Diesel Range Organics (DRO) and Oil Range Organics (ORO)	2,500 mg/kg
TPH – GRO and DRO	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

5 Remediation Activities Summary

5.1 Soil Removal

Prior to any intrusive activities, a NM One Call notification and a private utility locate (ground penetrating radar) were conducted to clear the area and identify underground utilities.

Soil remediation activities were performed by Arcadis and E-Tech from May 25 through June 9, 2023 for Incident #s nMLB1121352991 and nJMW1334648160. 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 releases. Horizontal and vertical delineation of the impacted soil requiring removal was based on samples collected from the perimeter and bottom of the release areas. Based on these results, it was determined that the Incident # nMLB1121352991 release covered an approximately 5,200 square foot area south to southeast of the pad, and the Incident # nJMW1334648160 release covered an approximately 2,800 square foot area west of the former wellhead on the north area of the pad. Soil analytical results are discussed in **Sections 5.3, 5.4,** and **5.5**.

Excavation activities were conducted to a maximum depth of approximately 4 feet bgs within the release areas. A total of approximately 1,920 total cubic yards of impacted soil were excavated from the release areas (Incident # nMLB1121352991 = approximately 1,248 cubic yards and Incident # nJMW1334648160 = approximately 672 cubic yards). The limits of both excavation areas (Area 1/Incident # nJMW1334648160 and Area 2/Incident # nMLB1121352991) are presented on **Figure 2**. Excavated soil was stockpiled on-site, adjacent to the release areas on 20 millimeter (mil) thick plastic sheeting and covered with 20 mil plastic sheeting during remediation activities.

The stockpiled soil from both excavated release areas was disposed offsite at the R360 Red Bluff Landfill facility located at 5053 US Hwy 285, in Orla, Texas as Class 2 non-hazardous material. E-Tech transported a total of 96 truckloads of soil directly to the landfill on May 30 through June 8, 2023. Copies of disposal manifests can be provided upon request. Photographic documentation of the excavation activities is attached in the **Photographic Log**.

5.2 Excavation Confirmation Sampling Activities

Arcadis personnel conducted excavation confirmation soil sampling activities on May 30 through June 8, 2023 for laboratory analyses. Following excavation of the impacted areas, confirmation soil samples were collected from the side walls and bottom of the excavations as needed to maintain an approximate 200 square foot sample spacing or less for both side walls and bases of the excavated areas. Sidewall confirmation sample locations are depicted in **Figures 3a** (Incident # nJMW1334648160) and **3b** (Incident # nMLB1121352991) and excavation base confirmation samples are depicted in **Figures 4a** (Incident # nJMW1334648160) and **4b** (Incident # nMLB1121352991).

The soil confirmation soil samples were collected in 4-oz jars provided by Eurofins Xenco Analytical Laboratory (Xenco) located in Midland, Texas, then placed on ice and shipped to Xenco for analysis of chloride by United States Environmental Protection Agency (USEPA) Method 300; TPH by Method 8015M for GRO, DRO, and ORO; and BTEX by USEPA Methods 8015/8021. Analytical results are shown in **Table 2** and **Table 3**. Laboratory analytical reports are included in **Appendix F**.

5.3 Chloride

All confirmation soil samples collected within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160 within the top 4 feet of soil were below the NMOCD reclamation limit of 600 mg/kg. All confirmation soil samples collected within the excavated areas associated with Incident #s nMLB1121352991 and nJMW1334648160 deeper than 4 feet bgs were below the NMAC closure criteria of 10,000 mg/kg.

5.4 TPH

TPH concentrations were reported below the NMOCD reclamation limit of 100 mg/kg at all sample locations for GRO, DRO, and ORO in all soil samples collected at depths less than 4 feet bgs within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160.

TPH concentrations were reported below the NMAC screening standard of 2,500 mg/kg at all sample locations for GRO, DRO, and ORO and below 1,000 mg/kg for GRO and DRO combined in all soil samples collected at depths greater than 4 feet bgs within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160.

5.5 BTEX

Benzene concentrations were reported below the NMAC standard of 10 mg/kg at all sample locations within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160. BTEX concentrations were reported below the NMAC standard of 50 mg/kg at all sample locations within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160.

6 Restoration, Reclamation, and Re-Vegetation Plan

Upon receiving laboratory analytical results from the excavation confirmation soil samples confirming impacted soil over the applicable restoration limits had been removed within the excavation areas associated with Incident

#s nMLB1121352991 and nJMW1334648160, excavated areas were backfilled with locally sourced, non-impacted "like" material placed at or near the original relative positions. The affected areas were contoured and/or compacted to achieve erosion control, stability, and preservation of surface water flow to the extent practicable. Excavated areas were topped with a topsoil similar to native the surrounding pasture material.

Arcadis will rip the land surface of the remediated areas and seed all disturbed areas with a New Mexico State Land Office (NMSLO) approved seed mixture recommended from the revegetation handbook prior to the next favorable growing season based upon the following soil types: Reagan-Upton association (46.5 %) - Alluvium and/or eolian deposits and Upton gravelly loam (68.6 %) – Residuum weathered from limestone, both soils are well drained.

7 Summary

Analytical results associated with historical remediation activities conducted in 2014 in conjunction with the recent remediation activities completed in 2023 for Incident #nJMW1334648160 indicate that the horizontal and vertical extent of chloride, TPH, and BTEX impact in soil above NMAC screening standards for a site with depth to groundwater greater than 51 feet bgs, but less than 100 feet bgs have been delineated both horizontally and vertically and excavated from the impacted area.

Remediation activities completed in 2023 for Incident # nMLB1121352991 indicate that the horizontal and vertical extent of chloride, TPH, and BTEX impact in soil above NMAC screening standards for a site with depth to groundwater greater than 51 feet bgs, but less than 100 feet bgs have been delineated both horizontally and vertically and excavated from the impacted area.

8 Soil Closure Request

Remediation activities were conducted in accordance with the NMOCD stipulations to sample 200 square foot composite areas within the excavation areas associated with Incident #s nMLB1121352991 and nJMW1334648160. 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 in each of the submitted soil samples for all remediated areas 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 for TPH, BTEX, or chloride impacts in soil at the Site.

Arcadis requests closure be granted to the SRO SWD #101 site for Incident ID #s nMLB1121352991 and nJMW1334648160. The Final C-141 Forms are included as **Appendix B.**

Tables

Table 1
2023 Soil Assessment Analytical Results
SRO SWD #101
Incident #nJMW1334648160
COG (ConocoPhillips)

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				BTEX Methods							TPH Methods				Cl Method
Sample ID	Date	Depth (ft)		Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	m-Xylene & p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)	Total BTEX (mg/kg)	GRO C6-C10 (mg/kg)	DRO C10-C28 (mg/kg)	ORO C28-C36 (mg/kg)	Total TPH (mg/kg)	Chloride, Dissolved (mg/kg)
AH1-1'-S-050323	05/03/2023	1	Removed	<0.000385	<0.000456	<0.000565	<0.00101	<0.000344	<0.00101	<0.00101	<15.0	240F1	<15.0	240	**8,100**
AH1-2'-S-050323	05/03/2023	2	Removed	<0.000382	<0.000452	<0.000561	<0.00100	0.000344J	<0.00100	<0.00100	<15.0	27.4J	<15.0	27.4J	**679**
AH1-4'-S-050323	05/03/2023	4	Removed	<0.000389	<0.000461	<0.000571	<0.00102	<0.000347	<0.00102	<0.00102	<15.0	18.8J	<15.0	18.8J	52.1
AH3-1'-S-050323	05/03/2023	1	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	<0.000345	<0.00101	<0.00101	15.0J	18.2J	<15.0	33.2J	66.3
AH3-2'-S-050323	05/03/2023	2	In-Situ	<0.000387	<0.000459	<0.000568	<0.00102	0.000355J	<0.00102	<0.00102	17.4J	17.2J	<14.9	34.6J	85.2
AH3-4'-S-050323	05/03/2023	4	In-Situ	<0.000389	<0.000461	<0.000571	<0.00102	0.000367J	<0.00102	<0.00102	<15.0	18.6J	<15.0	18.6J	63.0
AH4-1'-S-050323	05/03/2023	1	Removed	<0.000384	<0.000455	<0.000564	<0.00101	<0.000343	<0.00101	<0.00101	23.7J	16.2J	<15.0	39.9J	**1,590**
AH4-2'-S-050323	05/03/2023	2	Removed	<0.000384	<0.000455	<0.000564	<0.00101	<0.000343	<0.00101	<0.00101	<15.0	16.3J	<15.0	16.3J	**865**
AH4-4'-S-050323	05/03/2023	4	Removed	<0.000387	<0.000458	<0.000567	<0.00101	<0.000345	<0.00101	<0.00101	17.9J	16.1J	<15.0	34.0J	511
NMOCD Reclamation Standard				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**100**	**600**
NMOCD Closure Criteria				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**2,500**	**10,000**

Legend:
Analytes exceedng NMAC standards are indicated in **bold**
'<' 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
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
TPH ORO: Total Petroluem Hydrocarbons Oil Range Organics
" ' " : Indicates one foot
AH and B-Base sample
SW : Sidewall sample
Notes:
1. Chloride analyzed by EPA Method 300
2. TPH analyzed by EPA Method 8015 M
3. BTEX analyzed by EPA Method 8260B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)
NMOCD: New Mexico Oild Conservation Division
--: No individual standard

Table 2
2023 Soil Analytical Results
SRO SWD #101
Incident #nJMW1334648160
COG (ConocoPhillips)

ARCADIS

				BTEX Methods							TPH Methods				Cl Method
Sample ID	Date	Depth (ft)		Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	m-Xylene & p Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)	Total BTEX (mg/kg)	GRO C6-C10 (mg/kg)	DRO C10-C28 (mg/kg)	ORO C28-C36 (mg/kg)	Total TPH (mg/kg)	Chloride, Dissolved (mg/kg)
AH-1A-S-4'	06/05/2023	4	In-Situ	<0.000384	<0.000455	<0.000564	<0.00101	0.000386J	<0.00101	<0.00101	<15.0	18.4J *-	<15.0	18.4J	135
AH-4-S-4'	06/01/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	42.4J B	17.0J B	20.0J	79.4	1,290
AH-5-S-4'	06/01/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	44.0J	<15.0	18.2J	62.2	1,500
B-16-S-0-4'	06/01/2023	4	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	0.000873J	<0.00101	<0.00101	43.9J B	15.1J B	22.7J	81.7	1,530
B-17-S-4'	06/01/2023	4	In-Situ	<0.000384	0.000528J	<0.000564	<0.00101	0.000601J	<0.00101	0.00113J	20.3J B	<14.9	22.6J	42.9J	1,430
B-18-S-4'	06/01/2023	4	In-Situ	<0.000387	<0.000459	<0.000568	<0.00102	0.000647J	<0.00102	<0.00102	26.9J B	16.4J B	23.9J	67.2	1,740
B-19-S-4'	06/01/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	23.1J B	<15.0	21.7J	44.8J	183
B-20-S-4'	06/01/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	24.8J B	15.3J B	22.2J	62.3	1,540
B-21-S-4'	06/01/2023	4	In-Situ	<0.000385	<0.000456	<0.000565	<0.00101	<0.000344	<0.00101	<0.00101	30.6J B	<14.9	21.5J	52.1	153F1
B-22-S-4'	06/01/2023	4	In-Situ	<0.000389	<0.000461	<0.000571	<0.00102	<0.000347	<0.00102	<0.00102	24.3J B	<14.9	21.6J	45.9J	1,670
B-23-S-4'	06/01/2023	4	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	<0.000345	<0.00101	<0.00101	31.3J B	15.5J B	19.2J	66.0	1,840
B-24-S-4'	06/01/2023	4	In-Situ	<0.000388	<0.000460	<0.000570	<0.00102	<0.000347	<0.00102	<0.00102	23.1J B	15.2J B	20.6J	58.9	957
B-25-S-4'	06/01/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	23.0J B	<15.0	20.2J	43.2J	1,650
B-26-S-4'	06/01/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	20.4J B	<15.0	21.4J	41.8J	925
B-27-S-4'	06/01/2023	4	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	<0.000345	<0.00101	<0.00101	25.6J B	<14.9	20.1J	45.7J	1,630
B-28-S-4'	06/01/2023	4	In-Situ	<0.000389	<0.000461	<0.000571	<0.00102	<0.000347	<0.00102	<0.00102	21.2J B	15.1J B	19.8J	56.1	1,150
B-29-S-4'	06/01/2023	4	In-Situ	<0.000383	<0.000453	<0.000562	<0.00100	<0.000342	<0.00100	<0.00100	21.8J B	17.7J B	21.5J	61.0	119
SW-6-S-0-4'	06/01/2023	4	In-Situ	<0.000381	0.000539J	<0.000559	<0.00100	0.000382J	<0.00100	<0.00100	32.1J B	17.5J B	26.3J	75.9	232F1
SW-7-S-0-4'	06/01/2023	4	In-Situ	<0.000383	0.000712J	<0.000562	<0.00100	0.000481J	<0.00100	0.00119J	32.5J B	16.3J B	23.0J	71.8	304
SW-8-S-0-4'	06/01/2023	4	Removed	<0.000383	0.000628J	<0.000563	<0.00101	0.000555J	<0.00101	0.00118J	19.8J B	15.8J B	23.1J	58.7	**850**
SW-8A-S-0-4'	06/05/2023	4	In-Situ	<0.000385	<0.000456	<0.000565	<0.00101	<0.000344	<0.00101	<0.00101	<15.0	19.1J *-	<15.0	19.1J	66.4
SW-9-S-0-4'	06/01/2023	4	Removed	<0.000385	0.000815J	<0.000565	<0.00101	0.000861J	<0.00101	0.00168J	18.5J B	16.7J B	22.7J	57.9	**980**
SW-9A-S-0-4'	06/05/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	<15.0	18.5J *-	<15.0	18.5J	736
SW-9B-S-0-4'	06/08/2023	4	In-Situ	<0.000386	0.000596J F1	<0.000566	<0.00101	<0.000345	<0.00101	<0.00101	28.2J	17.4J	<15.0	45.6J	561
SW-10-S-0-4'	06/01/2023	4	Removed	<0.000382	<0.000452	<0.000561	<0.00100	<0.000341	<0.00100	<0.00100	26.2J B	15.4J B	24.7J	66.3	**789**
SW-10A-S-0-4'	06/05/2023	4	In-Situ	<0.000388	<0.000460	<0.000570	<0.00102	<0.000347	<0.00102	<0.00102	<15.0	17.8J *-	<15.0	17.8J	507
NMOCD Reclamation Standard				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**100**	**600**
NMOCD Closure Criteria				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**2,500**	**10,000**

Legend:
Analytes exceedng NMAC standards are indicated in **bold**
'<' 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
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
TPH ORO: Total Petroluem Hydrocarbons Oil Range Organics
" ' " : Indicates one foot
AH and B-Base sample
SW : Sidewall sample
Notes:
1. Chloride analyzed by EPA Method 300
2. TPH analyzed by EPA Method 8015 M
3. BTEX analyzed by EPA Method 8260B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)
NMOCD: New Mexico Oild Conservation Division
--: No individual standard

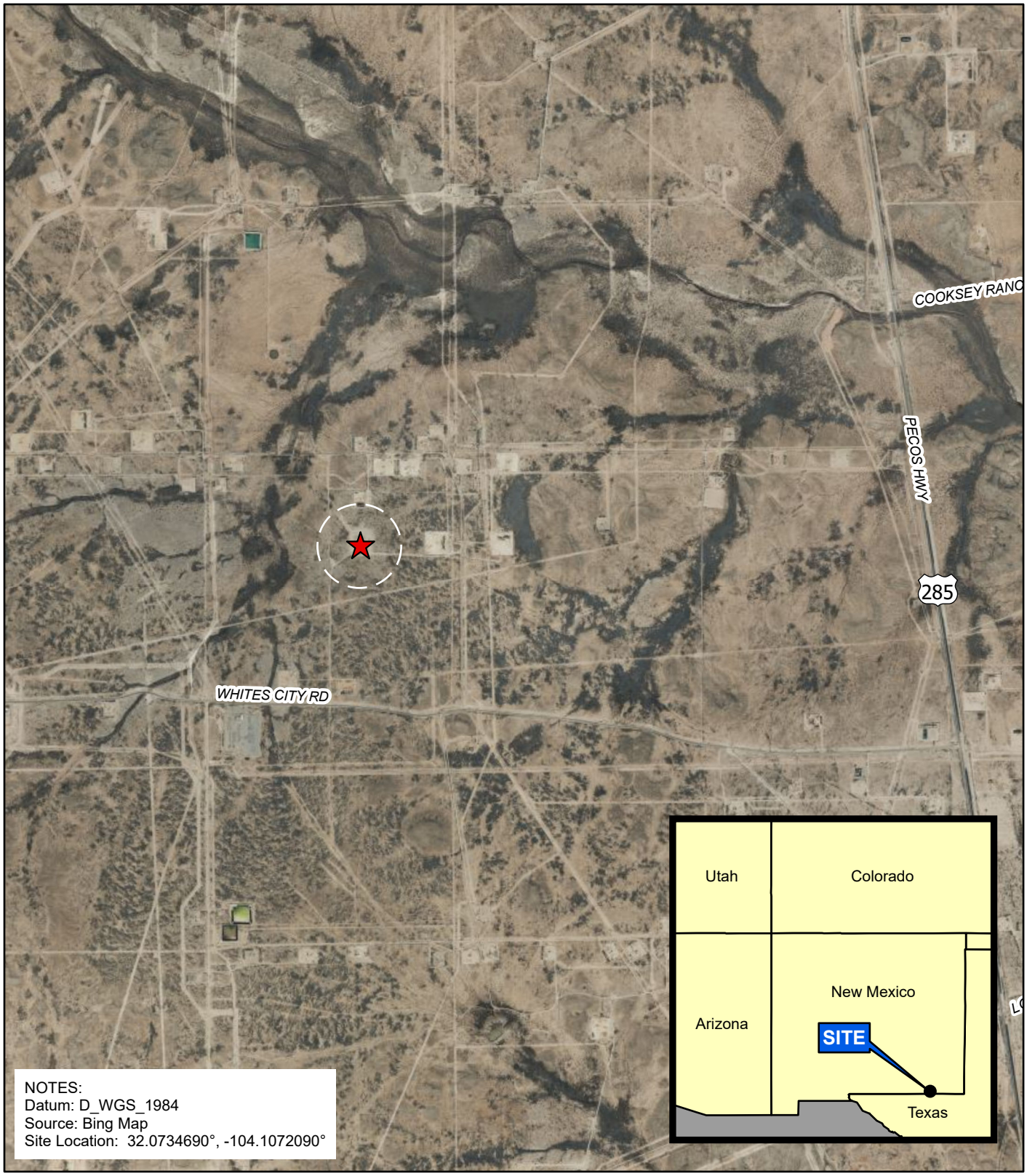
Table 3
2023 Soil Analytical Results
SRO SWD #101
Incident #nMLB1121352991
COG (ConocoPhillips)

ARCADIS

				BTEX Methods							TPH Methods				Cl Method
Sample ID	Date	Depth (ft)	Soil Status	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	m-Xylene & p-Xylene (mg/kg)	o-Xylene (mg/kg)	Xylenes, Total (mg/kg)	Total BTEX (mg/kg)	GRO C6-C10 (mg/kg	DRO C10-C28	ORO C28-C36	Total TPH (mg/kg)	Chloride, Dissolved (mg/kg)
AH-1-S-3'	05/30/2023	3	Removed	<0.000386	<0.000457	<0.000566	<0.00101	<0.000345	<0.00101	<0.00101	21.5J	<15.0	21.3J B	42.8J	**729**
B-1-S-3'	05/30/2023	3	In-Situ	<0.000387	<0.000459	<0.000568	<0.00102	<0.000346	<0.00102	<0.00102	6.8J F2	<15.0	17.7J B	44.5J	528
B-2-S-3'	05/30/2023	3	In-Situ	<0.000388	<0.000460	<0.000570	<0.00102	<0.000347	<0.00102	<0.00102	31.5J B	<14.9	19.2J B	50.7	189
B-3-S-4'	05/30/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	43.6J B	<14.9	18.0J B	61.6	72.9
B-4-S-4'	05/30/2023	4	In-Situ	<0.000384	<0.000455	<0.000564	<0.00101	<0.000343	<0.00101	<0.00101	33.9J B	<14.9	18.8J B	52.7	101
B-5-S-4'	05/30/2023	4	In-Situ	<0.000387	<0.000459	<0.000568	<0.00102	<0.000346	<0.00102	<0.00102	33.4J B	<15.0	18.2J B	51.6	964
B-6-S-4'	05/30/2023	4	In-Situ	<0.000389	<0.000461	<0.000571	<0.00102	<0.000347	<0.00102	<0.00102	37.4J B	<15.0	18.5J B	55.9	774
B-7-S-4'	05/30/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	32.4J B	<15.0	19.5J B	51.9	1,120
B-8-S-4'	05/30/2023	4	In-Situ	<0.000383	<0.000453	<0.000562	<0.00100	<0.000342	<0.00100	<0.00100	17.2J B	<15.0	19.6J B	36.8J	1,640
B-9-S-3'	05/30/2023	3	In-Situ	<0.000384	<0.000455	<0.000564	<0.00101	<0.000343	<0.00101	<0.00101	31.7J B	<15.0	19.9J B	51.6	515
B-10-S-3'	05/30/2023	3	Removed	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	18.7J B	<15.0	19.7J B	38.4J	**799**
B-10A-S-4'	06/05/2023	4	In-Situ	<0.000386	<0.000457	<0.000566	<0.00101	<0.000345	<0.00101	<0.00101	28.4J	<15.0	<15.0	28.4J	924
B-11-S-4'	05/30/2023	4	In-Situ	<0.000383	<0.000453	<0.000562	<0.00100	<0.000342	<0.00100	<0.00100	18.7J B	<15.0	19.7J B	38.4J	1,720
B-12-S-4'	05/30/2023	4	In-Situ	<0.000383	<0.000454	<0.000563	<0.00101	<0.000343	<0.00101	<0.00101	28.8J B	<15.0	20.1J B	48.9J	1,320
B-13-S-4'	05/30/2023	4	In-Situ	<0.000384	<0.000455	<0.000564	<0.00101	0.000563J	<0.00101	<0.00101	21.7J B	<14.9	19.7J B	41.4J	1,580
B-14-S-4'	05/30/2023	4	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	<0.000345	<0.00101	<0.00101	18.1J B	<15.0	19.9J B	38.0J	159
B-15-S-4'	05/30/2023	4	In-Situ	<0.000386	<0.000457	<0.000566	<0.00101	<0.000345	<0.00101	<0.00101	30.5J B	<15.0	19.7J B	50.2	973
B-30-S-4'	06/05/2023	4	In-Situ	<0.000387	<0.000459	<0.000568	<0.00102	0.000454J	<0.00102	<0.00102	18.8J	<15.0	<15.0	18.8J	70.6
B-31-S-4'	06/05/2023	4	In-Situ	<0.000386	<0.000457	0.000741J	<0.00101	<0.000345	<0.00101	<0.00101	21.4J	<14.9	<14.9	21.4J	126
B-32-S-4'	06/05/2023	4	In-Situ	<0.000384	<0.000455	0.000843J	<0.00101	<0.000343	<0.00101	<0.00101	21.5J	<14.9	<14.9	21.5J	316
B-33-S-4'	06/05/2023	4	In-Situ	<0.000385	<0.000456	0.000808J	<0.00101	<0.000344	<0.00101	<0.00101	19.9J	<15.0	<15.0	19.9J	544
B-34-S-4'	06/05/2023	4	In-Situ	<0.000381	<0.000451	0.000619J	<0.00100	<0.000341	<0.00100	<0.00100	21.4J	<15.0	<15.0	21.4J	1,020
B-35-S-4'	06/05/2023	4	In-Situ	<0.000387	<0.000459	0.000685J	<0.00102	0.000582J	<0.00102	0.00127J	19.2J	<15.0	<15.0	19.2J	1,550
B-36-S-4'	06/05/2023	4	In-Situ	<0.000386	<0.000457	0.000766J	<0.00101	0.000414J	<0.00101	0.00118J	21.2J	<14.9	<14.9	21.2J	1,690
B-37-S-4'	06/05/2023	4	In-Situ	<0.000383	0.000660J	<0.000563	<0.00101	0.000442J	<0.00101	0.00110J	19.4J	<14.9	<14.9	19.4J	845
B-38-S-4'	06/05/2023	4	In-Situ	<0.000385	0.000694J	<0.000565	<0.00101	<0.000344	<0.00101	<0.00101	27.8J	19.6J	<15.0	47.4J	778
B-39-S-4'	06/05/2023	4	In-Situ	<0.000387	0.000843J	<0.000568	<0.00102	<0.000346	<0.00102	<0.00102	28.7J	17.7J	<15.0	46.4J	594
B-40-S-4'	06/05/2023	4	In-Situ	<0.000381	0.000981J	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	21.7J	<15.0	<15.0	21.7J	98.1
SW-1-S-0-4'	05/30/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	<0.000341	<0.00100	<0.00100	30.9J B	<14.9	19.5J B	50.4	184
SW-2-S-0-4'	05/30/2023	4	Removed	<0.000383	<0.000454	<0.000563	<0.00101	0.000487J	<0.00101	<0.00101	45.8J B	19.8J B	21.6J B	87.2	**615**
SW-2A-S-0-4'	06/05/2023	4	In-Situ	<0.000385	<0.000456	<0.000565	<0.00101	<0.000344	<0.00101	<0.00101	33.0J	<15.0	<15.0	33.0J	46.5
SW-3-S-0-4'	05/30/2023	4	In-Situ	<0.000387	<0.000458	<0.000567	<0.00101	0.000394J	<0.00101	<0.00101	38.7J B	<15.0	21.1J B	59.8	173
SW-4-S-0-4'	05/30/2023	4	In-Situ	<0.000389	<0.000461	<0.000571	<0.00102	<0.000347	<0.00102	<0.00102	36.2J B	16.3J B	21.4J B	73.9	333
SW-5-S-0-4'	05/30/2023	4	In-Situ	<0.000382	<0.000452	<0.000561	<0.00100	<0.000341	<0.00100	<0.00100	20.1J B	<15.0	19.9J B	40.0J	148
SW-11-S-0-4'	06/05/2023	4	In-Situ	<0.000381	<0.000451	<0.000559	<0.00100	0.000394J	<0.00100	<0.00100	31.8J	18.9J	<15.0	50.7	52.7
SW-12-S-0-4'	06/05/2023	4	Removed	<0.000383	<0.000453	0.000594J	<0.00100	<0.000342	<0.00100	<0.00100	36.3J	<15.0	<15.0	36.3J	**825**
SW-12A-S-0-4'	06/08/2023	4	In-Situ	<0.000383	0.000865J	<0.000562	<0.00100	<0.000342	<0.00100	<0.00100	30.6J	<15.0	<15.0	30.6J	436
NMOCD Reclamation Standard				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**100**	**600**
NMOCD Closure Criteria				**10**	**- -**	**- -**	**- -**	**- -**	**- -**	**50**	**- -**	**- -**	**- -**	**2,500**	**10,000**

Legend:
Analytes exceedng NMAC standards are indicated in **bold**
'<' 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
TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics
TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics
TPH ORO: Total Petroluem Hydrocarbons Oil Range Organics
" ' " : Indicates one foot
AH and B-Base sample
SW : Sidewall sample
Notes:
1. Chloride analyzed by EPA Method 300
2. TPH analyzed by EPA Method 8015 M
3. BTEX analyzed by EPA Method 8260B
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)
NMOCD: New Mexico Oild Conservation Division
--: No individual standard

Figures



NOTES:
Datum: D_WGS_1984
Source: Bing Map
Site Location: 32.0734690°, -104.1072090°

LEGEND:

Site Location

0 3,000 6,000 Feet
GRAPHIC SCALE

COG (CONOCOPHILLIPS)
SRO SWD #101
Incident #'s nJMW1334648160 (W) & nMLB1121352991 (E)
EDDY COUNTY, NEW MEXICO

SITE LOCATION MAP

ARCADIS

FIGURE
1

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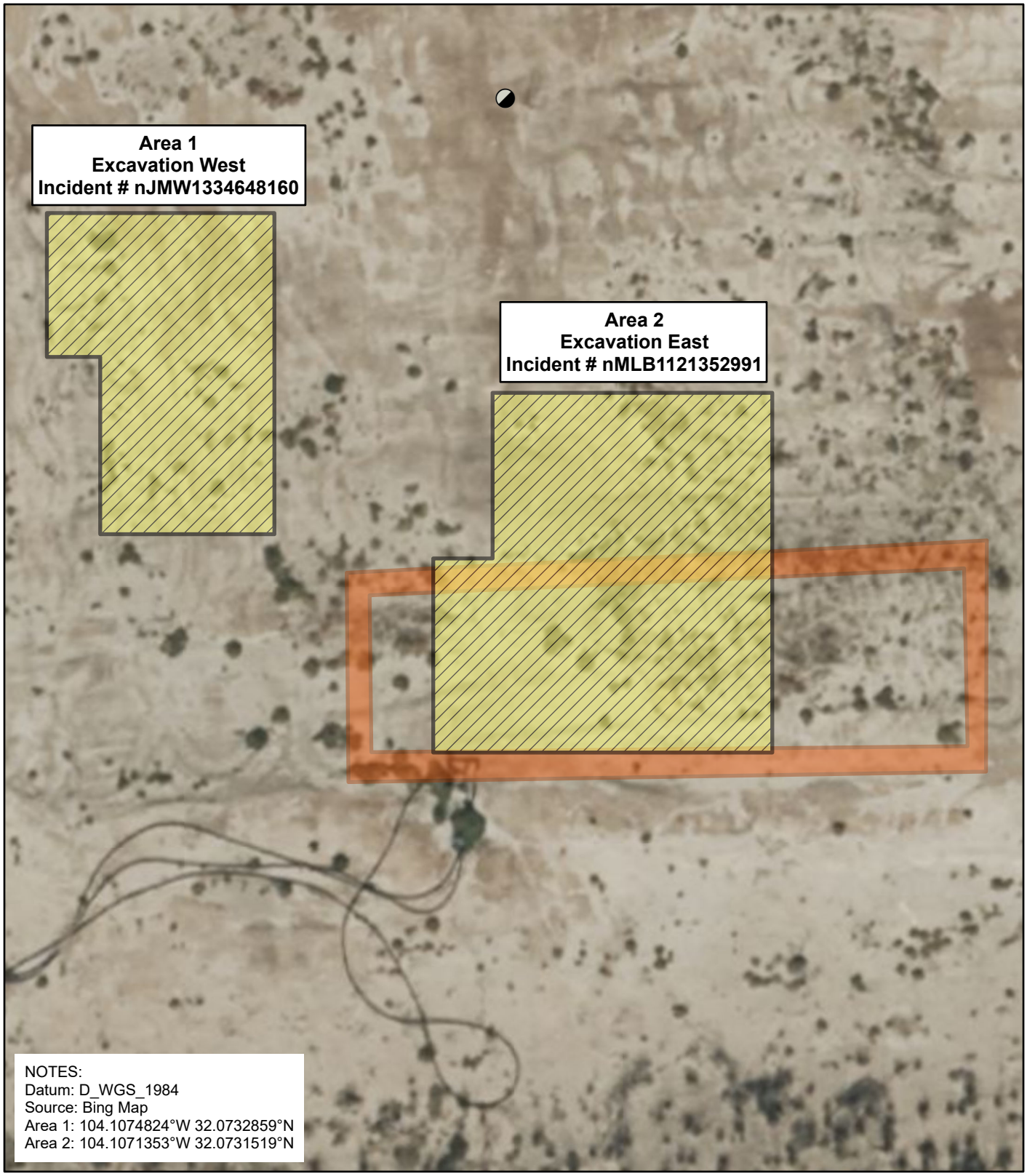


LEGEND:

- Plugged Well Marker
- Excavated Area
- Historical SWD Tank Battery Location

0 34 68 Feet
GRAPHIC SCALE

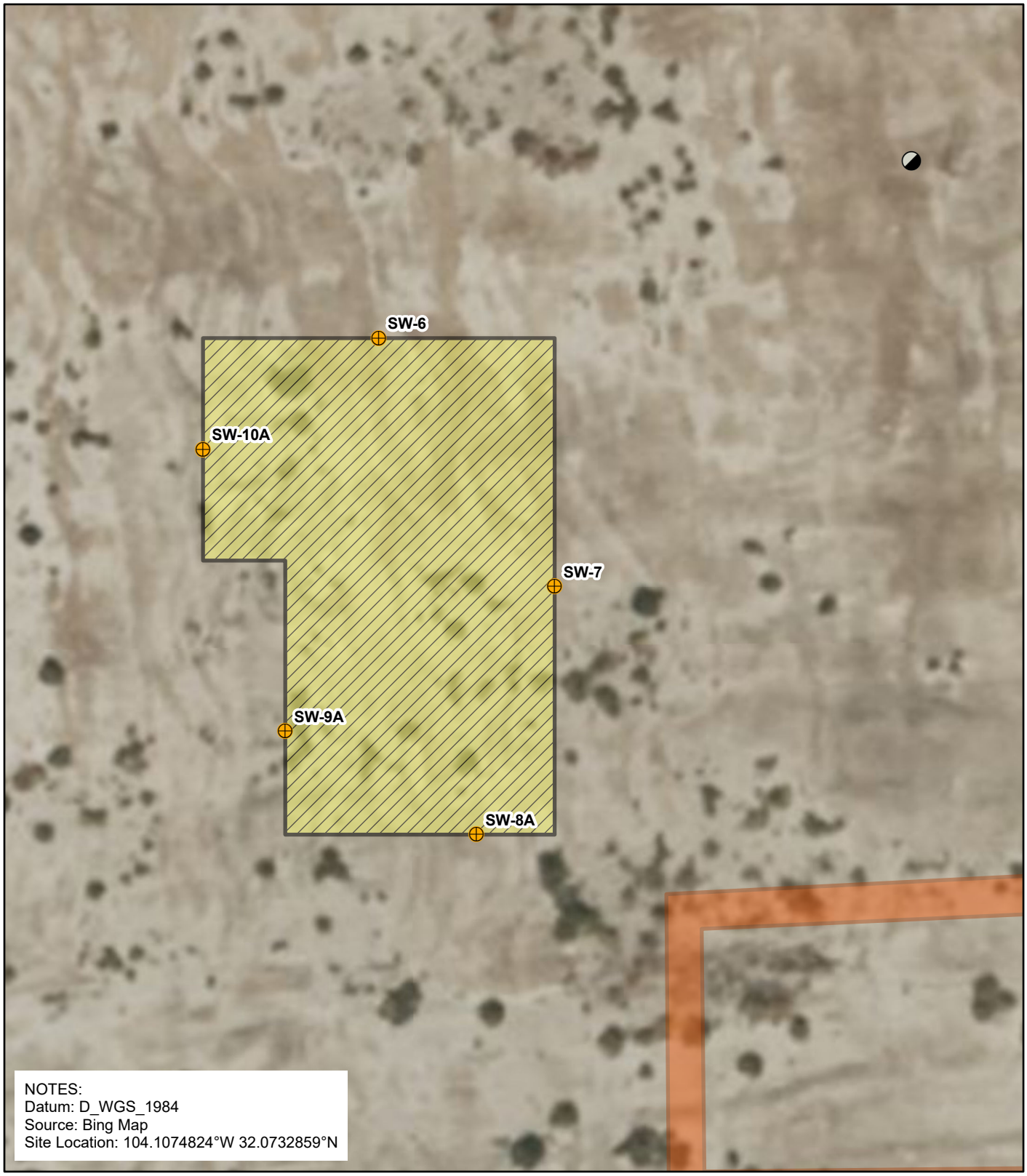
COG (CONOCOPHILLIPS)
SRO SWD #101
Incident #'s nJMW1334648160 (W) & nMLB1121352991 (E)
EDDY COUNTY, NEW MEXICO

EXCAVATION AREA MAP

ARCADIS

FIGURE
2

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #)
T:_EHSS\ArcGIS_Pro\Land\COG\NM\SRO_SWD_101\SRO_SWD_101_Conf_Sampling.aprx 7/5/2023 9:13 AM



NOTES:
Datum: D_WGS_1984
Source: Bing Map
Site Location: 104.1074824°W 32.0732859°N

LEGEND:

- Sidewall Sample
- Plugged Well Marker
- Excavated Area
- Historical SWD Tank Battery Location

0 22 44 Feet
GRAPHIC SCALE

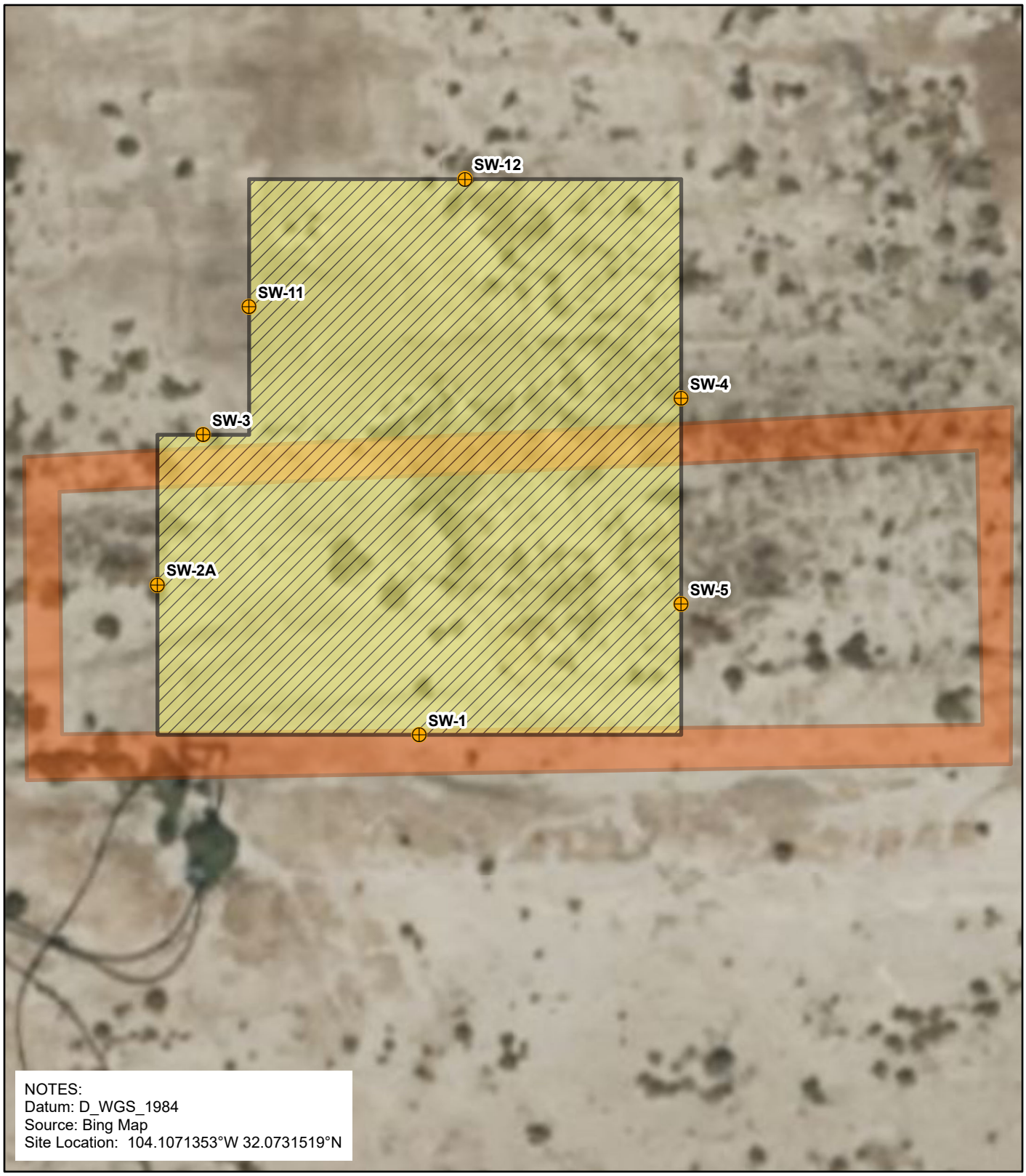
COG (CONOCOPHILLIPS)
SRO SWD #101
INCIDENT # nJMW1334648160 (W)
EDDY COUNTY, NEW MEXICO

AREA 1 EXCAVATION SIDEWALL SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
3a

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #)
T:_EHSS\ArcGIS_Pro\Land\COG\NM\SRO_SWD_101\SRO_SWD_101_Conf_Sampling.aprx 7/5/2023 9:13 AM



NOTES:
Datum: D_WGS_1984
Source: Bing Map
Site Location: 104.1071353°W 32.0731519°N

LEGEND:

- Sidewall Sample
- Excavated Area
- Historical SWD Tank Battery Location

0 22 44 Feet
GRAPHIC SCALE

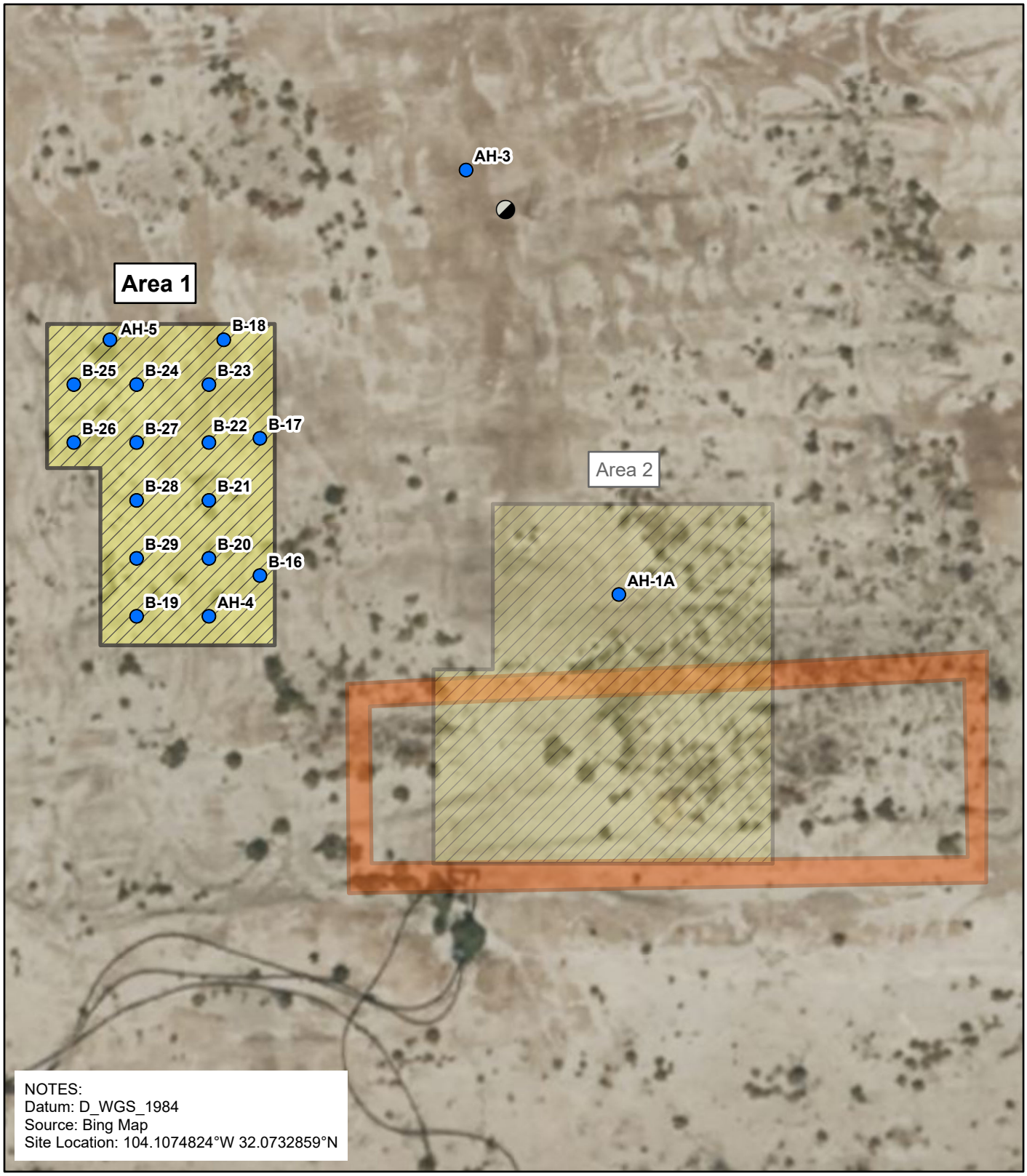
COG (CONOCOPHILLIPS)
SRO SWD #101
INCIDENT # nMLB1121352991 (E)
EDDY COUNTY, NEW MEXICO

AREA 2 EXCAVATION SIDEWALL SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
3b

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #)
T:_EHSS\ArcGIS_Pro\Land\COG\NM\SRO_SWD_101\SRO_SWD_101_Conf_Sampling.aprx 7/5/2023 9:13 AM



NOTES:
Datum: D_WGS_1984
Source: Bing Map
Site Location: 104.1074824°W 32.0732859°N

LEGEND:

- Base Sample (4' deep)
- Plugged Well Marker
- Excavated Area
- Historical SWD Tank Battery Location

0 34 68 Feet
GRAPHIC SCALE

COG (CONOCOPHILLIPS)
SRO SWD #101
INCIDENT # nJMW1334648160 (W)
EDDY COUNTY, NEW MEXICO

AREA 1 EXCAVATION BASE SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
4a

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #)
T:_EHSS\ArcGIS_Pro\Land\COG\NM\SRO_SWD_101\SRO_SWD_101_Conf_Sampling.aprx 7/5/2023 9:29 AM

NOTES:
Datum: D_WGS_1984
Source: Bing Map
Site Location: 104.1071353°W 32.0731519°N

LEGEND:

- Base Sample (3' deep)
- Base Sample (4' deep)
- Excavated Area
- Historical SWD Tank Battery Location

0 22 44 Feet
GRAPHIC SCALE

COG (CONOCOPHILLIPS)
SRO SWD #101
INCIDENT # nMLB1121352991 (E)
EDDY COUNTY, NEW MEXICO

AREA 2 EXCAVATION BASE SOIL SAMPLE LOCATIONS

ARCADIS

FIGURE
4b

City: Houston Div/Group: Remediation West -Air Group Created By: W Berry Last Saved By: wberry : Client (Project #)
T:_EHSS\ArcGIS_Pro\Land\COG\NM\SRO_SWD_101\SRO_SWD_101_Conf_Sampling.aprx 7/5/2023 9:13 AM

Photographic Logs

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nMLB1121352991 and nJMW1334648160

Photo No.	Date:
1	06/08/2023

Direction Photo Taken:

NE

Description:

Plugged well marker

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nJMW1334648160

Photo No.	Date:
2	06/05/2023

Direction Photo Taken:

NW

Description:

Excavated area

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nJMW1334648160

Photo No.	Date:
3	06/05/2023

Direction Photo Taken:

W

Description:

Excavated area

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nJMW1334648160

Photo No.	Date:
4	06/08/2023

Direction Photo Taken:

N

Description:

Backfilled area

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nMLB1121352991

Photo No.	Date:
5	06/05/2023

Direction Photo Taken:

SW

Description:

Excavated area

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nMLB1121352991

Photo No.	Date:
6	06/05/2023

Direction Photo Taken:

W

Description:

Excavated area

32.073164°, -104.107191

ARCADIS

PHOTOGRAPHIC LOG

Property Name:/	Location:	Case No.
SRO SWD #101 West	Eddy County, NM	nMLB1121352991

Photo No.	Date:
7	06/08/2023

Direction Photo Taken:

E

Description:

Backfilled area

32.073164°, -104.107191

Appendix A

Initial C-141 Forms - Incident #s nMLB1121352991 and nJMW1334648160

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

RECEIVED
JUL 05 2011
NMOCD ARTESIA

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

nMLB1121352991 229137

OPERATOR ☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	SRO SWD #101	Facility Type	Salt Water Disposal

Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	5	26S	28E					Eddy

Latitude 32 04.392 **Longitude** 104 06.434

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 40bbls	Volume Recovered 35bbls
Source of Release Water tank	Date and Hour of Occurrence 06/27/2011	Date and Hour of Discovery 06/27/2011 12:00 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher—OCD	
By Whom? Josh Russo	Date and Hour 06/27/2011 2:38 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The well was flowing back to the tanks due to a faulty check valve and ball valve at the wellhead. The well has been shut in and the appropriate repairs have been made.

Describe Area Affected and Cleanup Action Taken.*

Initially 40bbls of produced water was released from the water tank and we were able to recover 35bbls with a vacuum truck. The entire release was contained inside the berm walls of the facility and all free fluids have been recovered. The contaminated material will be removed and hauled to disposal. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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:	OIL CONSERVATION DIVISION
Printed Name: Josh Russo	Approved by District Supervisor: Signed By Mike Bratcher
Title: HSE Coordinator	Approval Date: 8/1/2011 Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: Attached ☐
Date: 07/05/2011 Phone: 432-212-2399	Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 9/1/2011

* Attach Additional Sheets If Necessary

2RP-805

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

RECEIVED
DEC 11 2013
NMOCD ARTESIA

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

nJMW1334648160

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC 229137	Contact	Robert McNeill
Address	600 West Illinois Avenue, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	SRO SWD #101	Facility Type	Tank Battery

Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	05	26S	28E					Eddy

Latitude 32.07351 **Longitude** 104.1067

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 85bbls	Volume Recovered 35bbls
Source of Release 3" steel line	Date and Hour of Occurrence 11-26-2013	Date and Hour of Discovery 11-26-2013 08:30am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Michelle Mullins	Date and Hour 11-27-2013 09:45am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A 3" steel line between the H-pump and the well head corroded due to corrosion.

Describe Area Affected and Cleanup Action Taken.*

Initially 85bbls of produced water were released from a steel line that had developed a hole going from the H- pump to the well. We were able to recover 35bbls with a vacuum truck. The release was contained on the location. All free fluids have been recovered. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for approval prior to any significant remediation work.

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:	OIL CONSERVATION DIVISION
Printed Name: Robert Grubbs Jr.	Approved by District Supervisor: Signed By Mike Bratcher
Title: Senior Environmental Coordinator	Approval Date: DEC 12 2013 Expiration Date:
E-mail Address: rgrubbs@concho.com	Conditions of Approval: Attached ☐
Date: 12-11-2013 Phone: 432-661-6601	Remediation per OCD Rule & Guidelines. SUBMIT REMEDIATION PROPOSAL NO LATER THAN: January 12, 2013

* Attach Additional Sheets If Necessary

2RP-2109

Bratcher, Mike, EMNRD

From:	Robert Grubbs <RGrubbs@concho.com>
Sent:	Wednesday, December 11, 2013 6:34 PM
To:	Bratcher, Mike, EMNRD
Cc:	Robert McNeill; Tavarez, Ike; Kujawski, Marcus (Marcus.Kujawski@tetratech.com)
Subject:	C-141 Initial Report - SRO SWD #101
Attachments:	SRO SWD #101 (TB) Date of Release -- 11-26-2013.pdf

Mr. Bratcher,

Please see attached the C-141 Initial Report for a release that occurred at our SRO SWD #101 (TB) on 11-26-2013 in Eddy County New Mexico.
We plan to assess the spill area timely.

Thank you,

Robert Grubbs Jr.
Sr. Environmental Coordinator
432.683.7443 (main)
432.818.2369 (direct)
432.661.6601 (cell)
rgrubbs@concho.com
Mailing Address:
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701
CONCHO

Bratcher, Mike, EMNRD

From: Michelle Mullins <MMullins@concho.com>
Sent: Wednesday, November 27, 2013 8:45 AM
To: Bratcher, Mike, EMNRD
Cc: Robert Grubbs
Subject: SRO 101 SWD-Immediate Notification

Mr. Bratcher:

At approximately 8:30 a.m. on 11/26/2013, a produced fluid release was discovered at the above-referenced facility. An estimated 85 barrels of produced fluid was released. The cause of the release is currently under investigation. We will follow up within 15 days with a C-141 Report. GPS coordinates, legal description and driving directions are below.

32.07843 104.10940

SRO 101 SWD
Unit G, Sec 5. T26S R28E
Eddy County, NM
API 30-015-26105

From Highway 285, travel south to mile marker 5 (White's City Road). Turn west and travel 1.5 miles. Turn north and battery is the first location on the east side of lease road.

Michelle Mullins
Environmental Coordinator
COG Operating, LLC
(432) 934-1052
mmullins@concho.com

CONFIDENTIALITY NOTICE: The information in this email may be confidential and/or privileged. If you are not the intended recipient or an authorized representative of the intended recipient, you are hereby notified that any review, dissemination or copying of this email and its attachments, if any, or the information contained herein, is prohibited. If you have received this email in error, please immediately notify the sender by return email and delete this email from your system. Thank you.

Appendix B

Final C-141 Forms - Incident #s nMLB1121352991 and nJMW1334648160

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nMLB1121352991
District RP	N/A
Facility ID	N/A
Application ID	N/A

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	55.0 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

State of New Mexico
Oil Conservation Division

Incident ID	nMLB1121352991
District RP	N/A
Facility ID	N/A
Application ID	N/A

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ____Ike Tavarez Title: _____Project Manager RM&R_____

Signature:_ _____ Date: __06/29/2023_____

email: ___ike.tavarez@conocophillips.com_____ Telephone: ___432-701-8630_____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nMLB1121352991
District RP	N/A
Facility ID	N/A
Application ID	N/A

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____Ike Tavarez_____ Title: _____Project Manager_____

Signature: _____ Date: ____06/29/2023_____

email: _____ike.tavarez@conocophillips.com_____ Telephone: ____432-701-8630_____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nJMW1334648160
District RP	N/A
Facility ID	N/A
Application ID	N/A

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	55.0 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

State of New Mexico
Oil Conservation Division

Incident ID	nJMW1334648160
District RP	N/A
Facility ID	N/A
Application ID	N/A

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ____Ike Tavarez Title: _____Project Manager RM&R_____

Signature:_ _____ Date: __06/29/2023_____

email: ___ike.tavarez@conocophillips.com_____ Telephone: ___432-701-8630_____

OCD Only

Received by: _____ Date: _____

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	nJMW1334648160
District RP	N/A
Facility ID	N/A
Application ID	N/A

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Ike Tavarez Title: Project Manager

Signature: Ike Tavarez Date: 06/29/2023

email: ike.tavarez@conocophillips.com Telephone: 432-701-8630

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Brittany Hall Date: 11/6/2023

Printed Name: Brittany Hall Title: Environmental Specialist

Appendix C

NMOCD Correspondence for Incident # nJMW1334648160

From: Patterson, Heather, EMNRD
To: "ike.tavarez@tetratech.com"; "rmcneil@conchoresources.com"
Cc: Bratcher, Mike, EMNRD
Subject: SRO SWD #101
Date: Wednesday, June 11, 2014 12:03:00 PM

RE: COG * SRO SWD #101 * 30-015-26105 * G-05-26s-28e * Eddy County, NM * NMOCD tracking number: 2RP-2109 * Date of release: 11/26/13

Gentlemen,

I am reviewing the closure report for the above site and have a few concerns. The body of the report references two background auger holes, one that had no significant chlorides and one from 2011 showing chlorides of 1,500 at 5'. In the table it shows a 2013 background auger hole with no significant chlorides and a 2014 background trench that has chloride levels of 2,640 at 10'. These appear to be three separate sampling events, but the site map only portrays two background samples, with no reference as to which of the sampling events they represent.

We are also concerned about the high levels of chlorides left in place throughout the release site, most especially in the areas of AH-1, AH-3, and AH-4.

If you have any questions or concerns, please contact me

Heather Patterson
Environmental Specialist
NMOCD District II
(575)748-1283 ext.101

From: Tavarez, Ike
To: Patterson, Heather, EMNRD; rmcneil@conchoresources.com
Cc: Bratcher, Mike, EMNRD; Robert Grubbs
Subject: RE: SRO SWD #101
Date: Thursday, June 12, 2014 3:27:29 PM
Attachments: COG - Information and Data .pdf

Heather,

The two backgrounds collected on 12/17/13 and 3/18/14 were all collected as part of the SRO 101 project, 11/26/13 spill release. The background sample collected on 9/19/11 was collected from a previous spill at the site. (spill date 1/22/11).

Based on the site setting, the background chloride concentrations in this area appears to vary near the natural drainage features (see attachments) in the area. We have seen higher background chloride concentrations in these areas. For example, one of the spill location (Honey Graham) showed a background high of approximately 7,000 mg/kg (0-1'), but averaged around 2,000 to 3,000 mg/kg at deeper depths. (see Table).

As discussed, the area of AH-3 was initially trenched (T-1) before excavating. Based on the trench field results, the area was excavated to approximately 1.5'. Once excavated, a sample (1.5') was collected and the field data showed a chloride of approximately 1,000 mg/kg. However, the sample was not submitted for analysis.

The areas of AH-1 and AH-4 were excavated to depths of approximately 2-2.5' and 3.0', respectively. Please call me if we need to discuss, thanks

Ike Tavarez, PG | **Senior Project Manager**
Main: 432.682.4559 | Fax: 432.682.3946 | Cell: 432.425.3878
Ike.Tavarez@tetratech.com
Tetra Tech | Complex World, Clear Solutions™
4000 North Big Spring, Suite 401 | Midland, TX 79705 | www.tetratech.com

---

From: Patterson, Heather, EMNRD [mailto:Heather.Patterson@state.nm.us]
Sent: Wednesday, June 11, 2014 1:03 PM
To: Tavarez, Ike; rmcneil@conchoresources.com
Cc: Bratcher, Mike, EMNRD
Subject: SRO SWD #101

RE: COG * SRO SWD #101 * 30-015-26105 * G-05-26s-28e * Eddy County, NM * NMOCD tracking number: 2RP-2109 * Date of release: 11/26/13

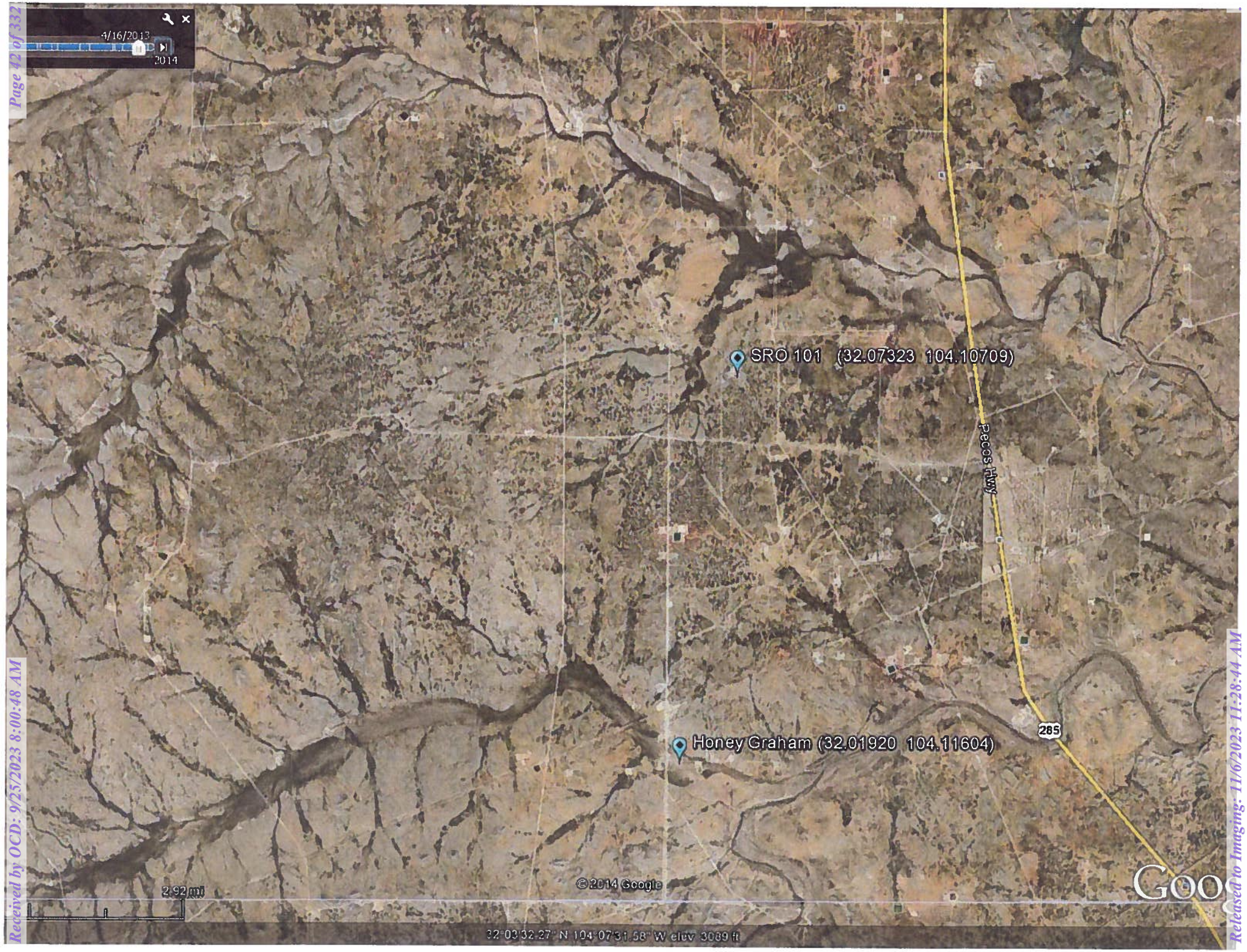
Gentlemen,

I am reviewing the closure report for the above site and have a few concerns. The body of the report references two background auger holes, one that had no significant chlorides and one from 2011 showing chlorides of 1,500 at 5'. In the table it shows a 2013 background auger hole with no significant chlorides and a 2014 background trench that has chloride levels of 2,640 at 10'. These appear to be three separate sampling events, but the site map only portrays two background samples, with no reference as to which of the sampling events they represent.

We are also concerned about the high levels of chlorides left in place throughout the release site, most especially in the areas of AH-1, AH-3, and AH-4.

If you have any questions or concerns, please contact me

Heather Patterson
Environmental Specialist
NMOCD District II
(575)748-1283 ext.101



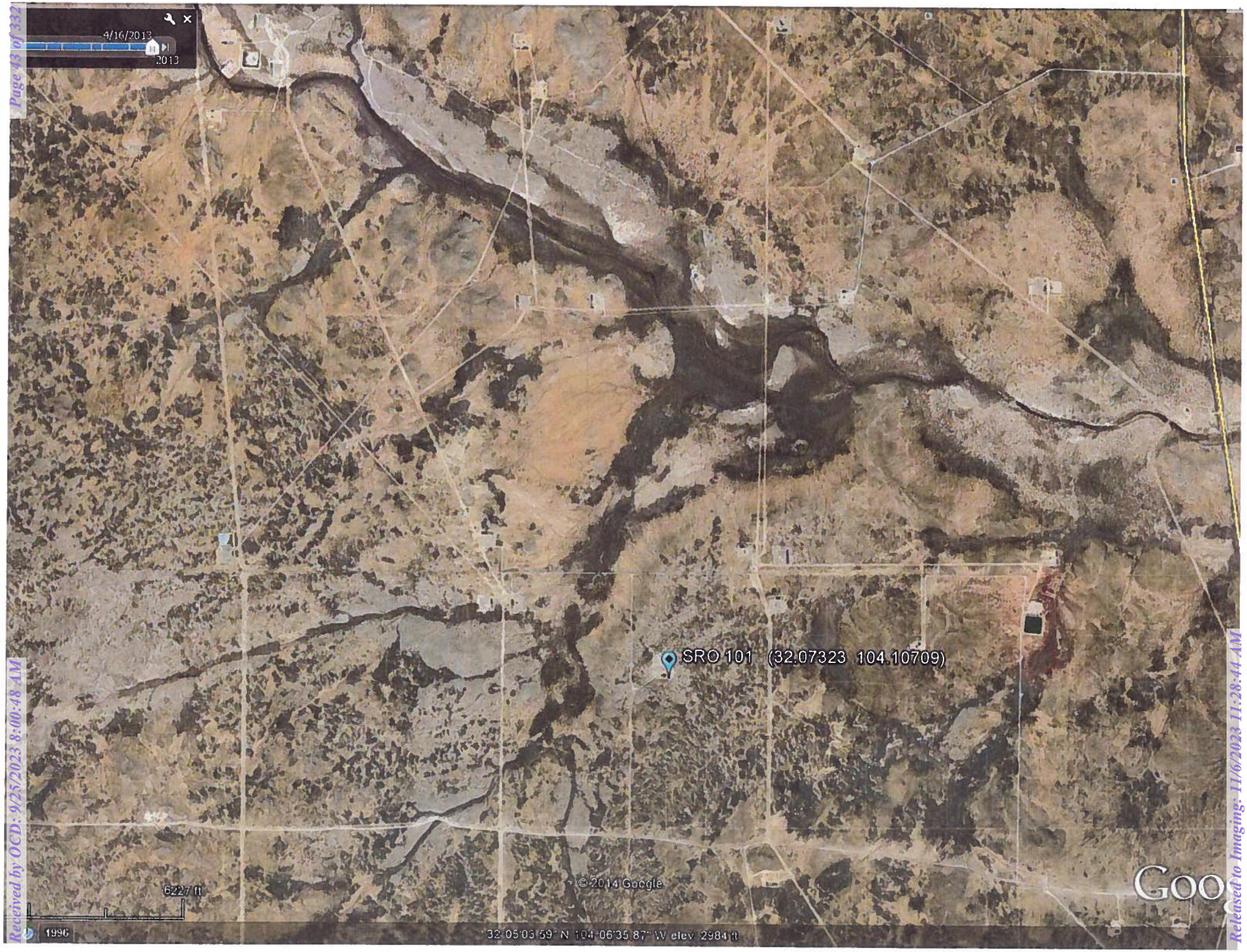


Table 1
COG Operating LLC.
Honey Graham/ Graham Nash
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Excavation Bottom Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
				In-Situ	Removed	GRO	DRO	Total						
Background 1	5/15/2013	0-1	0	X		-	-	-	-	-	-	-	-	7,380
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	3,420
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	2,710
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	2,610
	"	4-4.5	"	X		-	-	-	-	-	-	-	-	1,740
	"	5-5.5	"	X		-	-	-	-	-	-	-	-	1,110
	"	6-6.5	"	X		-	-	-	-	-	-	-	-	1,480
	"	7-7.5	"	X		-	-	-	-	-	-	-	-	2,540
Background 2	5/30/2013	0-1	0	X		-	-	-	-	-	-	-	-	3,770
	"	1-1.5	"	X		-	-	-	-	-	-	-	-	1,210
	"	2-2.5	"	X		-	-	-	-	-	-	-	-	2,920
	"	3-3.5	"	X		-	-	-	-	-	-	-	-	2,920
	"	4-4.5	"	X		-	-	-	-	-	-	-	-	3,460
	"	5-5.5	"	X		-	-	-	-	-	-	-	-	3,430
	"	6-6.5	"	X		-	-	-	-	-	-	-	-	3,100
	"	7-7.5	"	X		-	-	-	-	-	-	-	-	3,330

(-) Not Analyzed

(BEB) Below Excavation Bottom

Appendix D

Work Plan

TETRA TECH

April 15, 2022

Bradford Billings
Hydrologist/E.Spec.A
District 2 Artesia
1220 South St. Francis Drive
Oil Conservation Division
Santa Fe, NM 87505

Re: Release Characterization, Reclamation Work Plan, and Release Closure Request
ConocoPhillips
Heritage Concho
SRO SWD #101 Tank Release
Unit Letter G, Section 5, Township 26 South, Range 28 East
Eddy County, New Mexico
Incident ID# nMLB1121352991
2RP-805

Mr. Billings,

Tetra Tech, Inc. (Tetra Tech) was contacted by ConocoPhillips to assess a Heritage Concho release and subsequent remedial actions taken at the SRO SWD #101 Tank Release, which occurred at the former SRO SWD #101 well pad (API No. 30-015-26105). The release footprint is located in Public Land Survey System (PLSS) Unit Letter G, Section 5, Township 26 South, Range 28 East, in Eddy County, New Mexico (Site). The approximate release point occurred at coordinates 32.073164°, -104.107191°, as shown on Figures 1 and 2.

BACKGROUND

According to the State of New Mexico Oil Conservation Division (NMOCD) C-141 Initial Report, the release was discovered on June 27, 2011. The C-141 reports that the release was caused when a faulty check valve and ball valve at the wellhead caused produced water to flow back to the tanks. Approximately 40 barrels (bbls) of produced water were released and approximately 35 bbls of produced water were recovered. The release remained within the berm of the oil and gas lease pad, as indicated in Figure 3. The NMOCD approved the initial C-141 on July 7, 2011, and subsequently assigned the release the Incident ID nMLB1121352991 and the remediation permit (RP) number 2RP-805. The initial C-141 form is included in Appendix A.

VISUAL SITE INSPECTION

According to the NMOCD online well records, the SRO SWD #101 well (API No. 30-015-26105) was plugged on June 23, 2017 and a final inspection of the Site was conducted on May 31, 2019 following reclamation of the pad. Concho reported the Site was remediated per NMOCD regulations at the time of the pad reclamation. The final inspection was approved by NMOCD on May 31, 2019, and the well site is listed as released in the NMOCD online well records. The final inspection report is presented in Appendix B.

Tetra Tech personnel visited the site on September 22, 2021, to document current site conditions. At the time of the site visit, all equipment had been removed and the former pad had been reclaimed as reported.

Tetra Tech
901 West Wall St., Suite 100, Midland, TX 79701
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

No surface staining or odor was observed in the vicinity of the former tanks, and some vegetative growth was observed throughout the former pad extent. Photographic documentation of the visual inspection is presented in Appendix C.

FEBRUARY 2022 CLOSURE REQUEST

A Release Characterization, Reclamation Work Plan, and Closure Request (Closure Request) describing the Site history and visual inspection results was prepared by Tetra Tech on behalf of ConocoPhillips and submitted to the NMOCD via the online fee portal on February 18, 2022 under the PO Number PVARC-220218-C-1410. The Closure Request was rejected by Bradford Billings of the NMOCD via email on Monday, March 7, 2022. Regulatory correspondence is included in Appendix D.

The reason for the rejection was as follows:

- *"DTW not adequately defined. Can find no report by Concho detailing remedial efforts, despite on site closure by inspector.*
- *90 days from 3/7/22 are allowed to complete site investigation and submit closure or remedial plan"*

SITE CHARACTERIZATION

A site characterization was performed and no sinkholes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, playa lakes, stream bodies, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the distances specified in 19.15.29 New Mexico Administrative Code (NMAC). The Site is in an area of medium karst potential.

There are no water wells listed in the New Mexico Office of the State Engineer (NMOSE) database located within approximately ½ mile (800 meters) of the site. According to data from one (1) water well listed in the NMOSE database within approximately 1.86 miles (3,000 meters) of the site, the minimum depth to groundwater is 90 feet below ground surface (bgs).

To comply with the NMOCD directive presented in the March 7, 2022 email, a licensed well drilling subcontractor was onsite on March 15, 2022 to drill a groundwater determination borehole (DTW-1) to 55 feet bgs at the southeastern edge of the SRO 5 State CTB lease pad, located approximately ½ mile east of the release Site. The borehole location is indicated on Figure 3. The borehole was temporarily set and screened using 2-inch PVC well materials: 20 feet of blank casing and 35 feet of 0.010" slotted screen. The borehole was left for 72 hours and checked for the presence of groundwater. The borehole was dry upon drilling, and no water was present in the well after 72 hours. The well screen and casing were removed, and the borehole was plugged with 3/8-inch bentonite chips. The site characterization data, boring log, and temporary well diagram are presented in Appendix E.

REGULATORY FRAMEWORK

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

Based on the site characterization, established depth to groundwater, and in accordance with Table I of 19.15.29.12 NMAC, the RRALs for the Site are as follows:

Constituent	Site RRALs
Chloride	10,000 mg/kg
TPH	2,500 mg/kg
BTEX	50 mg/kg

Additionally, in accordance with the NMOCD guidance *Procedures for Implementation of the Spill Rule (19.15.29 NMAC)* (September 6, 2019), the following reclamation requirements for surface soils (0-4 ft bgs) outside of active oil and gas operations are as follows:

Constituent	Reclamation Requirements
Chloride	600 mg/kg
TPH	100 mg/kg
BTEX	50 mg/kg

SITE ASSESSMENT

Based on the directive provided by NMOCD, Tetra Tech returned to the Site on March 30, 2022 to conduct assessment activities on behalf of ConocoPhillips. Five assessment borings (BH-1 through BH-5) were installed using an air rotary drill rig to complete delineation of the release. Boring BH-1 was installed to 30 feet bgs in the footprint of the former tank battery to achieve vertical delineation of the release. Borings BH-2 through BH-5 were installed to the north, east, south, and west of the former tank battery location to achieve horizontal delineation of the release. Additionally, one background boring location (BG-1) was installed in the pasture approximately 210 feet south of the former tank battery location to establish background chloride concentrations.

A total of thirty-six (36) samples were collected from the five assessment borings and one background boring and submitted to Cardinal Laboratories in Hobbs, New Mexico to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by method SM4500Cl-B. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix F. The sample locations are shown on Figure 4.

SUMMARY OF RESULTS

The laboratory analytical results from the March 2022 assessment are summarized in Table 1. Analytical results associated with the 0-1 ft bgs sample interval at BH-1 and the 0-1 ft bgs and 2-3 ft bgs sample intervals at BH-2 exceeded the Site reclamation limit for chloride (600 mg/kg). There were no other analytical results which exceeded the applicable Site reclamation limits or RRALs for any of the analyzed constituents. The area was vertically delineated to the background chloride levels, as indicated by the analytical results for BG-1.

SITE RECLAMATION AND RESTORATION PLAN

The analytical results indicate that remediation of the documented release was previously conducted at the Site, and that the chloride levels present in surface soils at boring locations BH-1 and BH-2 are related to the former pad material and general operations. However, given that surface soils in the former pad area exceed the Site reclamation limit of 600 mg/kg for chloride, further reclamation work is warranted to meet the Site reclamation limits and establish uniform vegetative cover that reflects a 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.

ConocoPhillips proposes to remove the impacted material as shown in Figure 5. The area around boring BH-1 will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a depth of 2 feet and the area around BH-2 will be excavated to a depth of 3 feet below the surrounding surface. Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility and the excavation will be backfilled with clean material to surface grade. The estimated volume of material to be excavated for reclamation purposes is 1,600 cubic yards.

Re-seeding of the Site is recommended to aid in revegetation. Coordination with the New Mexico State Land Office (NMSLO) as the landowner will be conducted prior to commencement of the proposed Site restoration activities. The backfilled and otherwise unvegetated areas of the lease pad will be ripped (once each way), seeded, and the dozer track imprinted to aid in revegetation. Areas of the pad exhibiting

recolonization and a self-sustaining plant community will be left undisturbed. Based on soils at the Site, NMSLO Loam (L) Sites Seed Mixture will be used for seeding and will be planted in the amount specified in the pounds pure live seed (PLS) per acre. The seed mixture will be spread by a drill equipped with a depth regulator or a hand-held broadcaster and raked. If a hand-held broadcaster is used for dispersal, the pounds pure live seed per acre will be doubled.

Site inspections will be performed to assess the revegetation progress and evaluate the site for the presence of primary or secondary noxious weeds. If noxious weeds are identified, the NMSLO will be contacted to determine an effective method for eradication. If the site does not show revegetation after one growing season, the area will be reseeded as appropriate. The NMSLO seed mixture details and corresponding pounds pure live seed per acre are included in Appendix G.

CONCLUSION

Based on the results of the March 2022 soil assessment results, ConocoPhillips respectfully requests closure of the SRO SWD #101 Tank Release (nMLB1121352991; 2RP-805). With concurrent approval to be obtained from the NMSLO, ConocoPhillips proposes to begin the additional proposed site restoration activities in the first favorable growing season following NMOCD and NMSLO approval.

If you have any questions concerning the requested release closure or the proposed additional site restoration activities for the Site, please call me at (512) 739-7874 or Christian at (512) 338-2861.

Sincerely,
Tetra Tech, Inc.

Samantha K. Abbott, P.G.
Project Geologist

Christian M. Llull, P.G.
Program Manager

cc:
Mr. Charles Beauvais, BU – ConocoPhillips
Mr. Ryan Mann, District Resource Manager – New Mexico State Land Office

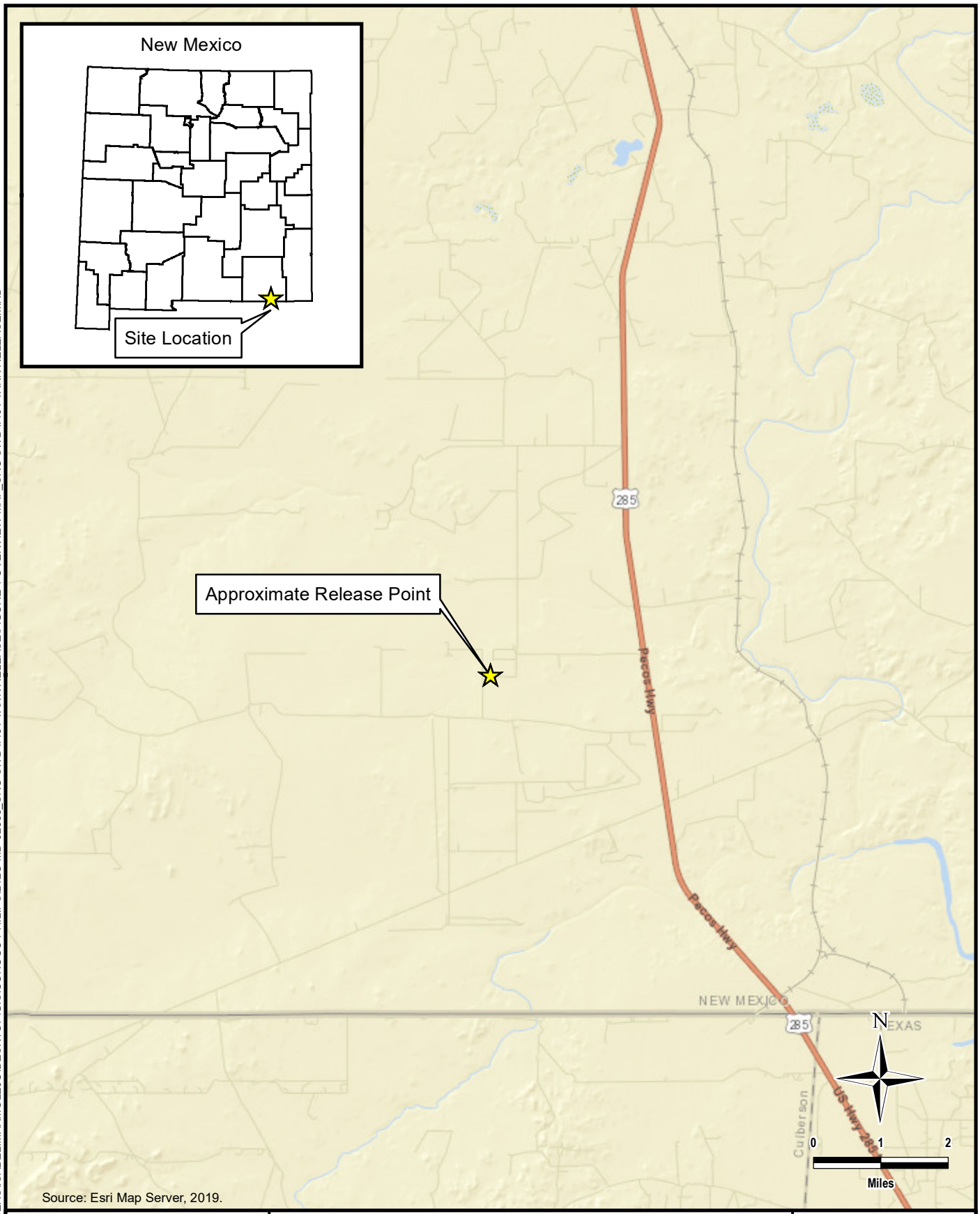
LIST OF ATTACHMENTS

Figures:

Tables:

Appendices:

FIGURES



Source: Esri Map Server, 2019.

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\CONOCO PHILIPS\212C-MD-02660_SRO SWD #101 TANK RELEASE\FIGURE 1 OVERVIEW MAP_SRO SWD #101 TANK RELEASE.MXD

TETRA TECH
www.tetratech.com
901 West Wall Street, Suite 100
Midland, Texas 79701
Phone: (432) 682-4559
Fax: (432) 682-3946

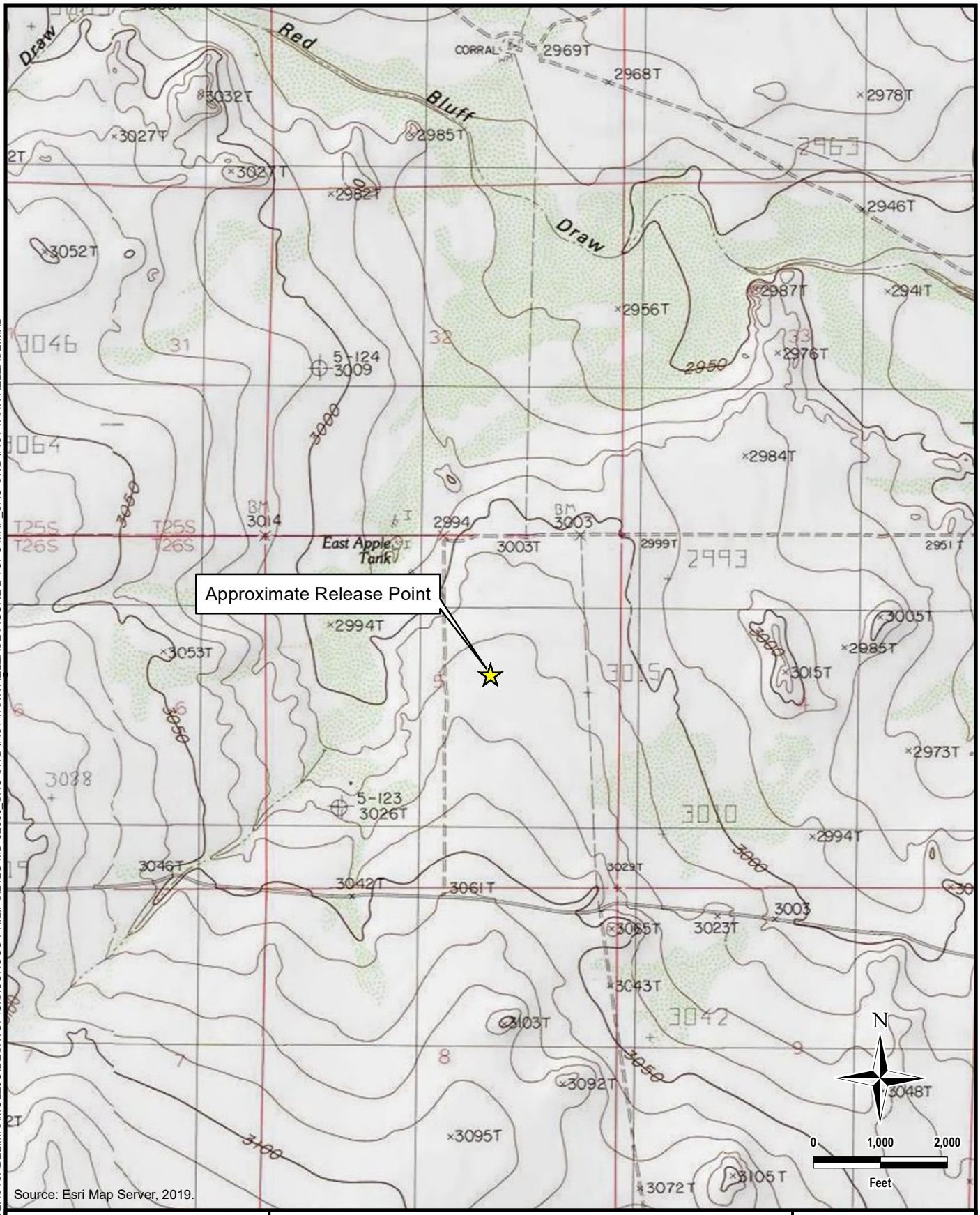
CONOCOPHILLIPS

NMLB1121352991 / DATE OF RELEASE: JUNE 27, 2011
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
OVERVIEW MAP

PROJECT NO.:	212C-MD-02660
DATE:	FEBRUARY 15, 2022
DESIGNED BY:	IM

Figure No.
1



Source: Esri Map Server, 2019.

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\CONOCO PHILIPS\212C-MD-02660_SRO SWD #101 TANK RELEASE\FIGURE 2 TOPO MAP_SRO SWD #101 TANK RELEASE.MXD

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CONOCOPHILLIPS

NMLB1121352991 / DATE OF RELEASE: JUNE 27, 2011
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
TOPOGRAPHIC MAP

PROJECT NO.:	212C-MD-02660
DATE:	FEBRUARY 15, 2022
DESIGNED BY:	IM

Figure No.
2

DOCUMENT PATH: C:\USERS\ISABEL.MARMOLEJO\DESKTOP\GIS\CONOCO PHILIPS\212C-MD-02660_SRO SWD #101 TANK RELEASE\FIGURE 3 SITE LOCATION – 2013 AERIAL IMAGE_SRO SWD #101 TANK RELEASE.MXD

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NMLB1121352991 / DATE OF RELEASE: JUNE 27, 2011
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
SITE LOCATION MAP – 2013 AERIAL IMAGE

PROJECT NO.:	212C-MD-02660
DATE:	FEBRUARY 15, 2022
DESIGNED BY:	IM

Figure No.
3

DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\SRO_SWD\FIGURE 4 SITE VICINITY_SRO SWD 101.MXD

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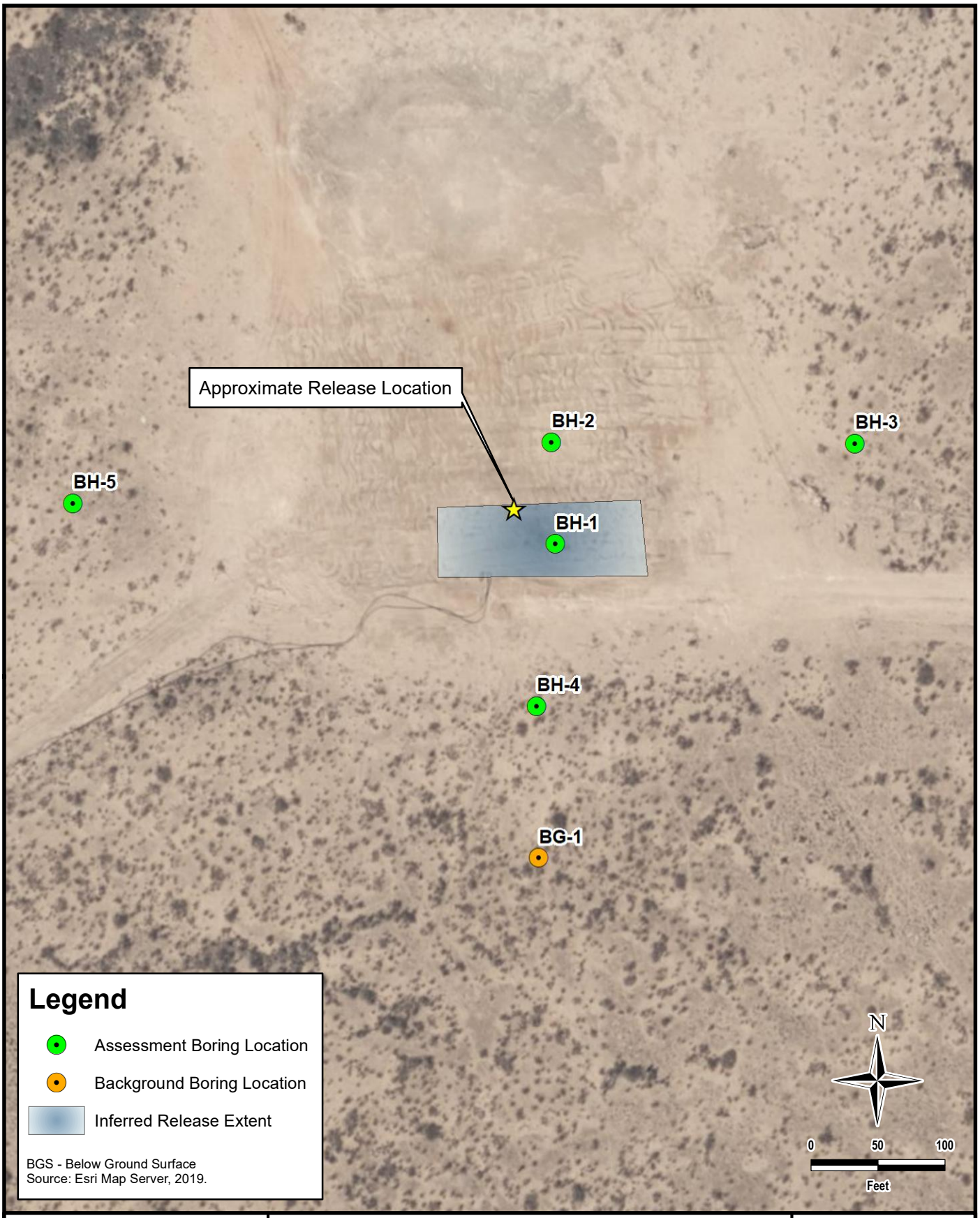
CONOCOPHILLIPS

NMLB1121352991
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
SITE VICINITY MAP

PROJECT NO.:	212C-MD-02725
DATE:	APRIL 11, 2022
DESIGNED BY:	AAM

Figure No.
4



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\SRO_SWD\FIGURE 5 ASSESSMENT_SRO SWD 101.MXD

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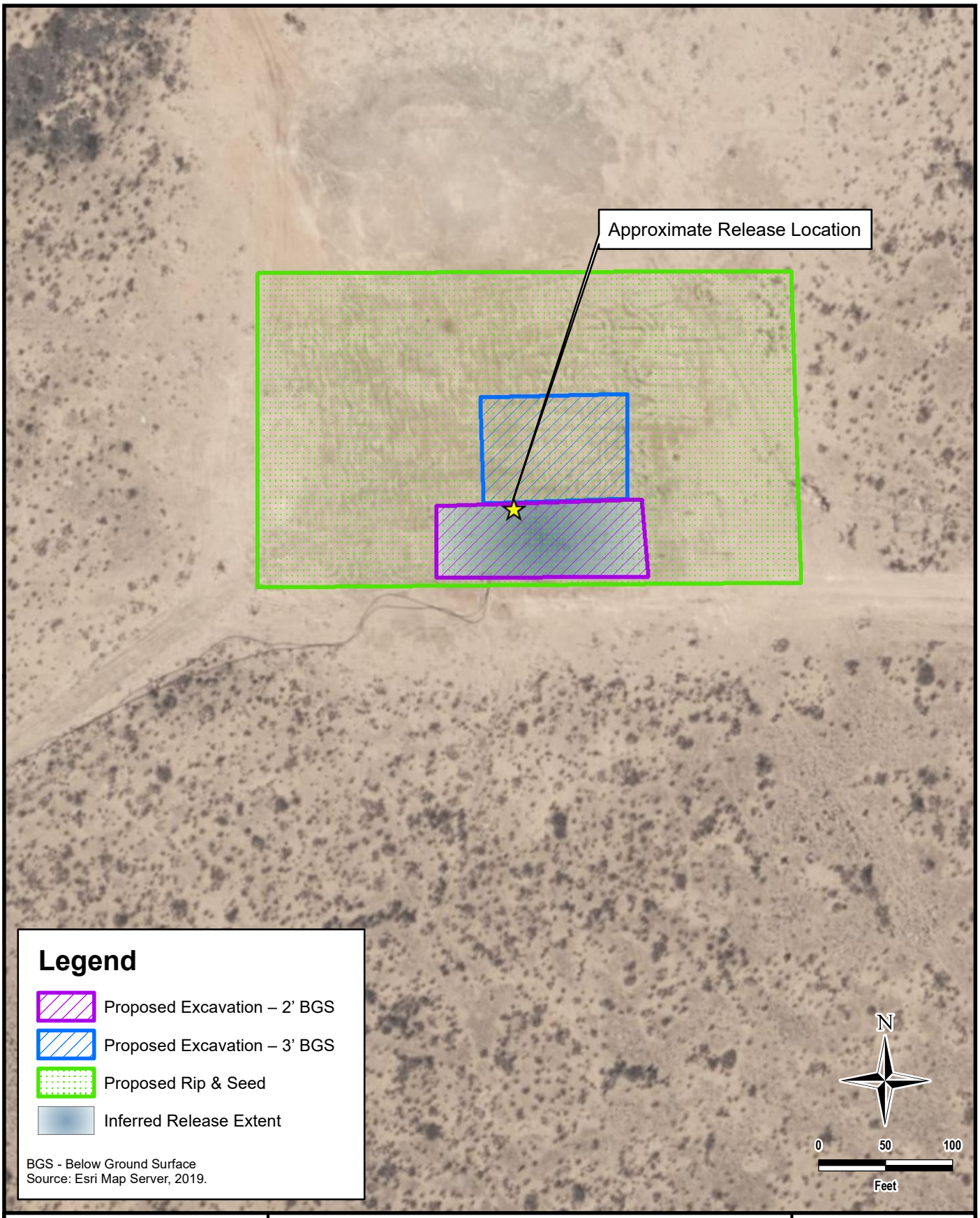
CONOCOPHILLIPS

NMLB1121352991
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
INFERRED RELEASE EXTENT AND RELEASE ASSESSMENT MAP

PROJECT NO.:	212C-MD-02725
DATE:	APRIL 11, 2022
DESIGNED BY:	AAM

Figure No.
5



DOCUMENT PATH: D:\CONOCOPHILLIPS\MXD\SRO_SWD\FIGURE 6 REMEDIAL_SRO SWD 101.MXD

TETRA TECH
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CONOCOPHILLIPS

NMLB1121352991
(32.073164°, -104.107191°)
EDDY COUNTY, NEW MEXICO

SRO SWD #101 TANK RELEASE
PROPOSED RECLAMATION EXTENT

PROJECT NO.:	212C-MD-02725
DATE:	APRIL 11, 2022
DESIGNED BY:	AAM

Figure No.
6

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
SOIL ASSESSMENT- NMLB1121352991/2RP-805
HERITAGE CONCHO
SRO SWD #101 TANK RELEASE ASSESSMENT
EDDY COUNTY, NM

Sample ID	Sample Date	Sample Depth	Field Screening Results		Chloride[1]		BTEX[2]										TPH[3]						
			Chloride	PID			Benzene		Toluene		Ethylbenzene		Total Xylenes		Total BTEX		GRO		DRO		EXT DRO		Total TPH
																	C_6 - C_{10}		> C_{10} - C_{28}		> C_{28} - C_{36}		(GRO+DRO+EXT DRO)
		ft. bgs	ppm		mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg	Q	mg/kg
BH-1	3/30/2022	0-1	1,510	-	***720***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		45.8		20.9		66.7
		1-2	959	-	192		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	1,190	-	144		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		3-4	1,130	-	144		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		5-6	1,290	-	224		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		7-8	1,520	-	160		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	1,500	-	224		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		14-15	1,610	-	1,070		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		19-20	2,060	-	1,710		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		24-25	2,350	-	1,200		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		29-30	1,880	-	1,680		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-2	3/30/2022	0-1	1,910	-	***912***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	2,120	-	***1,150***		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		4-5	1,750	-	624		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	1,490	-	576		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	1,510	-	576		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-3	3/30/2022	0-1	987	-	48.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	1,260	-	176		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		4-5	1,310	-	432		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	2,010	-	1,010		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	2,480	-	1,630		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-4	3/30/2022	0-1	1,020	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	989	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		4-5	1,380	-	944		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	2,250	-	1,760		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	2,440	-	2,110		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BH-5	3/30/2022	0-1	1,750	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	1,020	-	128		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		4-5	1,330	-	400		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	1,880	-	640		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	1,710	-	576		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
BG-1	3/30/2022	0-1	536	-	80.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		2-3	1,100	-	112		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		4-5	1,040	-	96.0		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		6-7	1,560	-	720		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-
		9-10	1,940	-	1,070		< 0.050		< 0.050		< 0.050		< 0.150		< 0.300		< 10.0		< 10.0		< 10.0		-

NOTES:

ft. Feet
bgs Below ground surface
mg/kg Milligrams per kilogram
TPH Total Petroleum Hydrocarbons
GRO Gasoline range organics
DRO Diesel range organics
1 Method SM4500Cl-B
2 Method 8021B
3 Method 8015M

Bold and italicized values indicate exceedance of proposed Remediation RRALs and Reclamation Requirements.

Shaded rows indicate intervals proposed for excavation.

QUALIFIERS:

APPENDIX A
C-141 Forms

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

RECEIVED
JUL 05 2011
NMOCD ARTESIA

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

nMLB1121352991 229137

OPERATOR ☒ Initial Report ☐ Final Report

Name of Company	COG OPERATING LLC	Contact	Pat Ellis
Address	550 W. Texas, Suite 100, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	SRO SWD #101	Facility Type	Salt Water Disposal

Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	5	26S	28E					Eddy

Latitude 32 04.392 **Longitude** 104 06.434

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 40bbls	Volume Recovered 35bbls
Source of Release Water tank	Date and Hour of Occurrence 06/27/2011	Date and Hour of Discovery 06/27/2011 12:00 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher—OCD	
By Whom? Josh Russo	Date and Hour 06/27/2011 2:38 p.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The well was flowing back to the tanks due to a faulty check valve and ball valve at the wellhead. The well has been shut in and the appropriate repairs have been made.

Describe Area Affected and Cleanup Action Taken.*

Initially 40bbls of produced water was released from the water tank and we were able to recover 35bbls with a vacuum truck. The entire release was contained inside the berm walls of the facility and all free fluids have been recovered. The contaminated material will be removed and hauled to disposal. Tetra Tech will sample the spill site area to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.

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:	OIL CONSERVATION DIVISION
Printed Name: Josh Russo	Approved by District Supervisor: Signed By Mike Bratcher
Title: HSE Coordinator	Approval Date: 8/1/2011 Expiration Date:
E-mail Address: jrusso@conchoresources.com	Conditions of Approval: Attached ☐
Date: 07/05/2011 Phone: 432-212-2399	Remediation per OCD Rules & Guidelines. SUBMIT REMEDIATION PROPOSAL NOT LATER THAN: 9/1/2011

* Attach Additional Sheets If Necessary

2RP-805

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☐ Depth to water determination
- ☐ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: Charles R. Beauvais II Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

APPENDIX B
NMOCD Final Inspection Report

Submit One Copy To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED MAY 30 2019 DISTRICT II-ARTESIA O.C.D.

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised November 3, 2011

	WELL API NO. 30-015-26105
	5. Indicate Type of Lease STATE ☒ FEE ☐
	6. State Oil & Gas Lease No.
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: ☐ Oil Well ☐ Gas Well ☒ Other **SWD**	7. Lease Name or Unit Agreement Name SRO SWD
	8. Well Number 101
2. Name of Operator COG Operating LLC	9. OGRID Number 229137
3. Address of Operator 2208 W Main Artesia NM 88210	10. Pool name or Wildcat SWD; Delaware

4. Well Location
Unit Letter G : 1980 feet from the North line and 1980 feet from the East line
Section 5 Township 26S Range 28E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3026' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER:			☐	☒ **Location is ready for OCD inspection after P&A**			

☒ All pits have been remediated in compliance with OCD rules and the terms of the Operator's pit permit and closure plan.
☒ Rat hole and cellar have been filled and leveled. Cathodic protection holes have been properly abandoned.
☒ A steel marker at least 4" in diameter and at least 4' above ground level has been set in concrete. It shows the

OPERATOR NAME, LEASE NAME, WELL NUMBER, API NUMBER, QUARTER/QUARTER LOCATION OR UNIT LETTER, SECTION, TOWNSHIP, AND RANGE. All INFORMATION HAS BEEN WELDED OR PERMANENTLY STAMPED ON THE MARKER'S SURFACE.

☒ The location has been leveled as nearly as possible to original ground contour and has been cleared of all junk, trash, flow lines and other production equipment.
☒ Anchors, dead men, tie downs and risers have been cut off at least two feet below ground level.
☒ If this is a one-well lease or last remaining well on lease, the battery and pit location(s) have been remediated in compliance with OCD rules and the terms of the Operator's pit permit and closure plan. All flow lines, production equipment and junk have been removed from lease and well location.
☒ All metal bolts and other materials have been removed. Portable bases have been removed. (Poured onsite concrete bases do not have to be removed.)
☒ All other environmental concerns have been addressed as per OCD rules.
☒ Pipelines and flow lines have been abandoned in accordance with 19.15.35.10 NMAC. All fluids have been removed from non-retrieved flow lines and pipelines.
☒ If this is a one-well lease or last remaining well on lease: all electrical service poles and lines have been removed from lease and well location, except for utility's distribution infrastructure.

When all work has been completed, return this form to the appropriate District office to schedule an inspection.

SIGNATURE: _____ TITLE: Regulatory Technician DATE: 5/28/2019

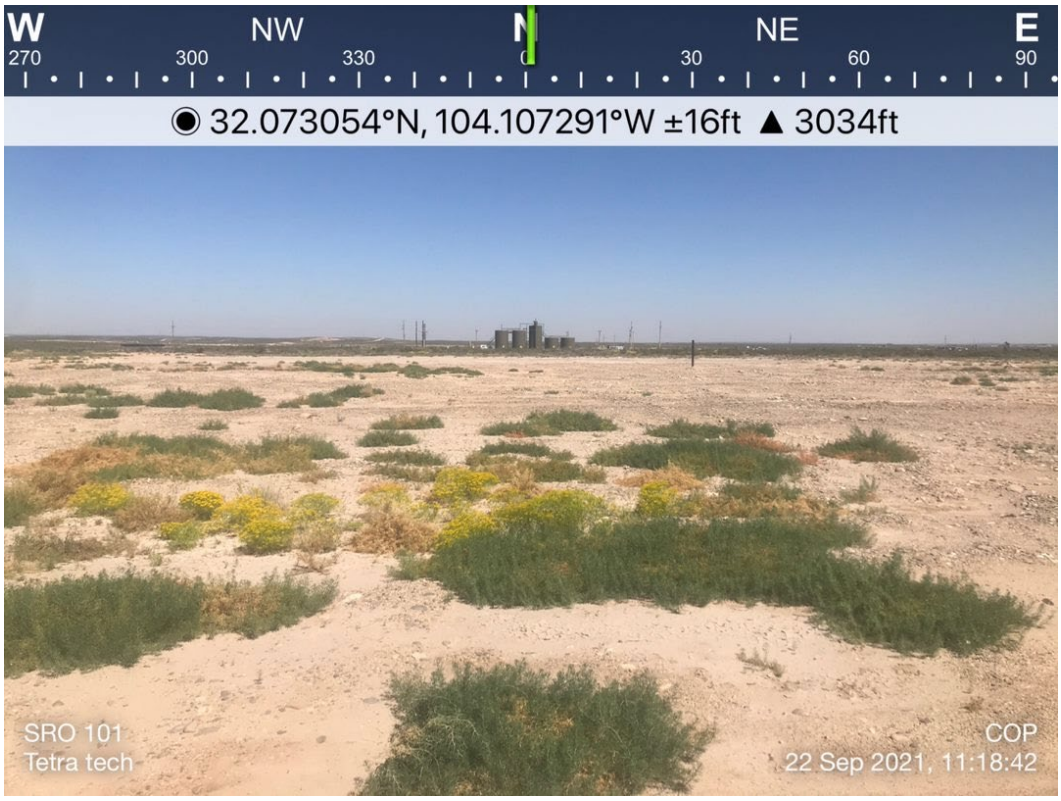
TYPE OR PRINT NAME: Delilah Flores E-MAIL: dflores2@concho.com PHONE: 575-748-6946

For State Use Only

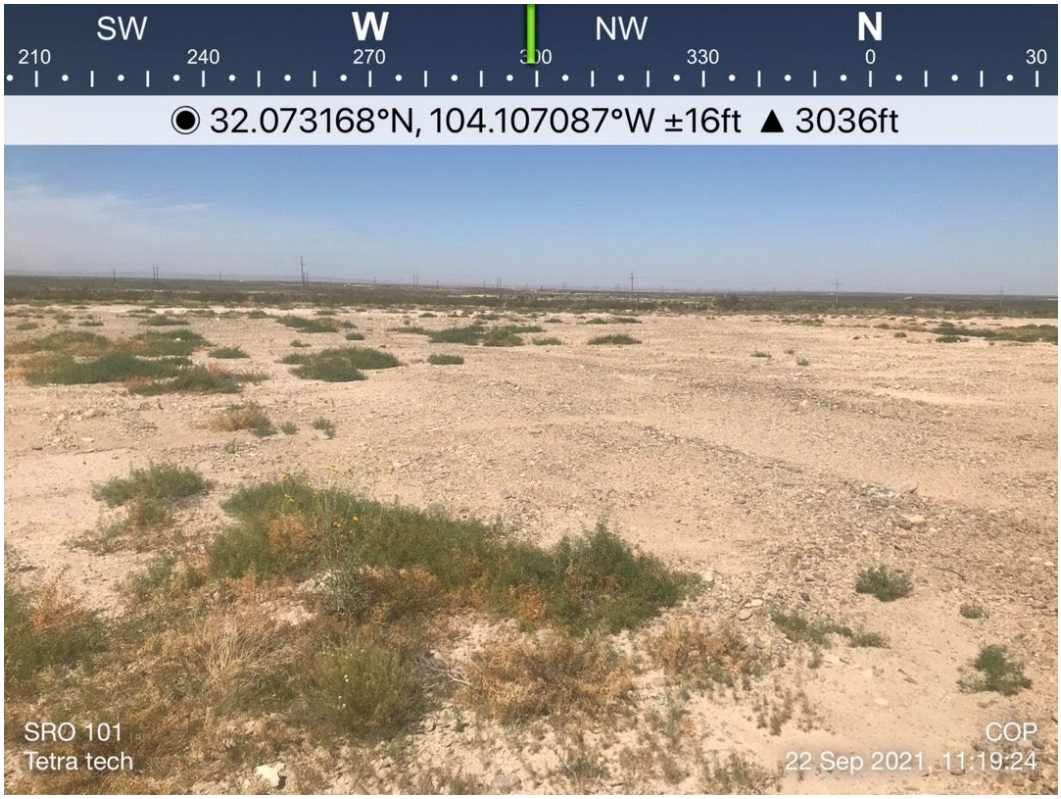
APPROVED BY: _____ TITLE Staff Mgr DATE 5/31/19

Conditions of Approval (if any):

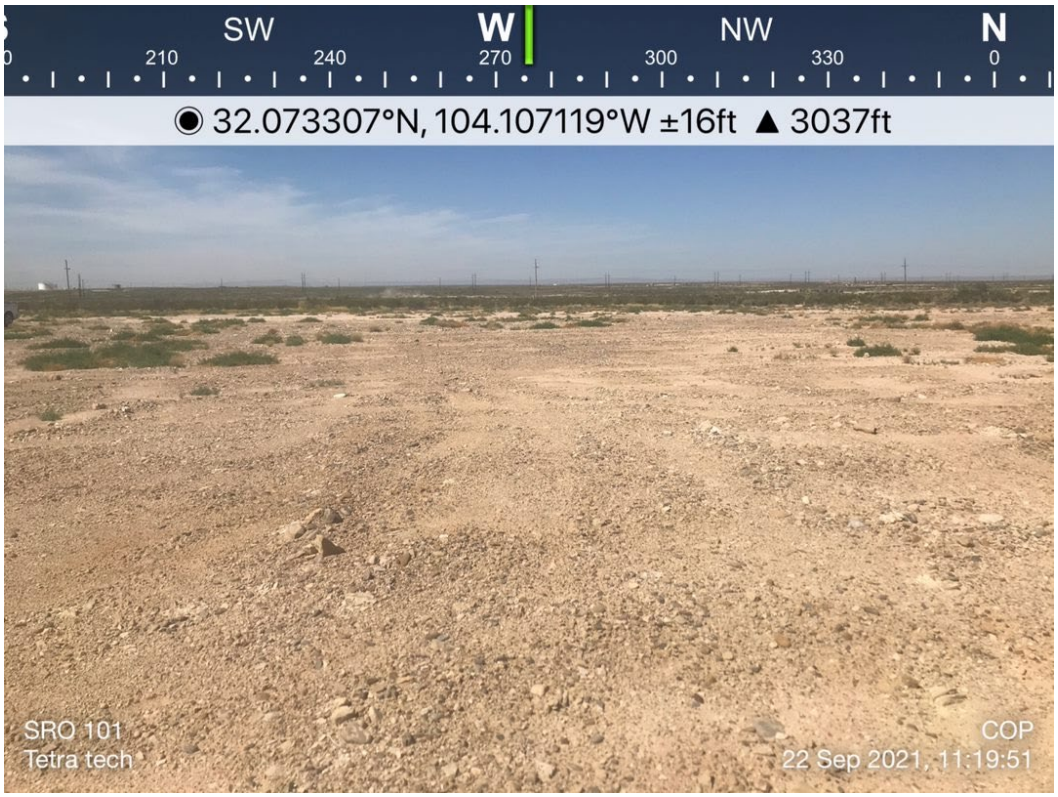
APPENDIX C
Photographic Documentation



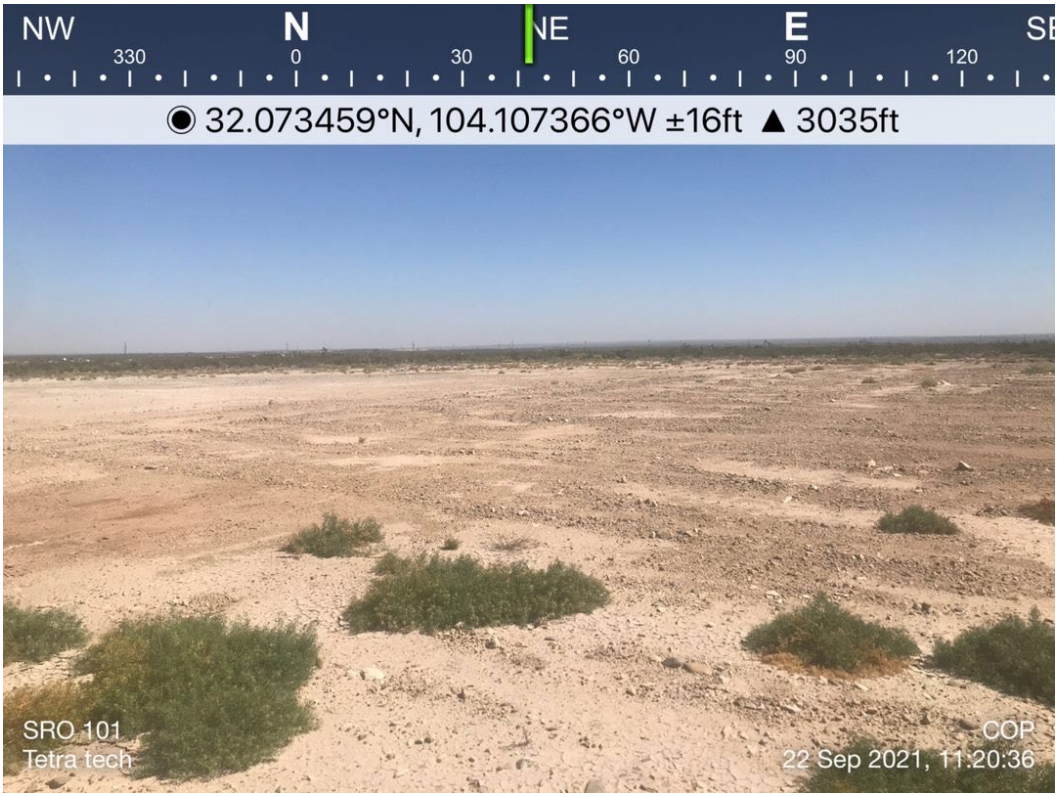
TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View north of the release area.	1
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View northwest of the release area.	2
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021

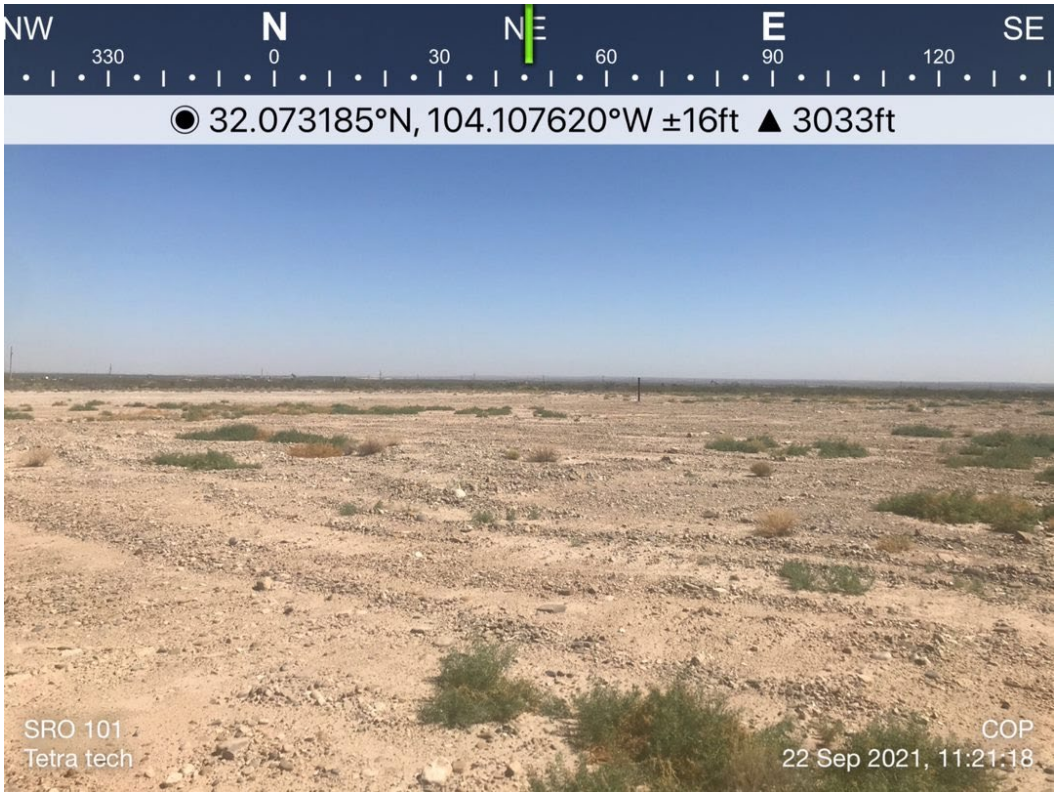


TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View west of the release area.	3
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021



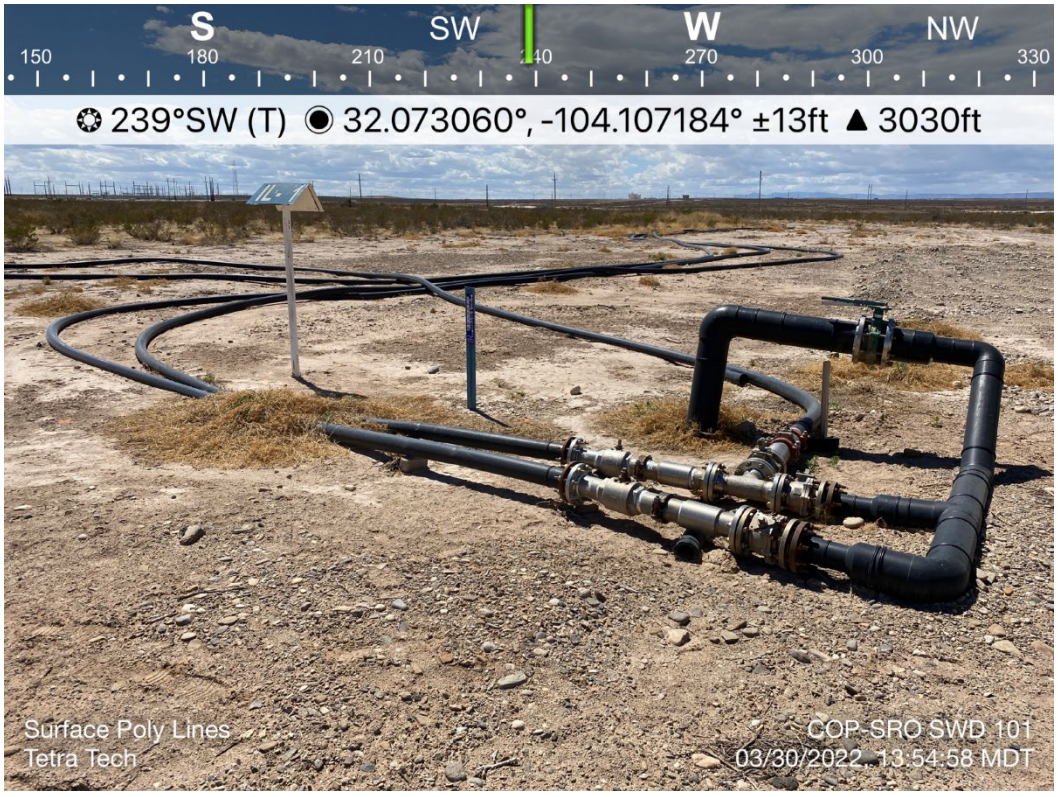
TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View northeast of the release area.	4
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View east southeast of the release area.	5
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021



TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View northeast of the release area.	6
	SITE NAME	HConcho - SRO SWD #101 (P&A)	9/22/2021

TETRA TECH, INC. PROJECT NO. 212C-MD-02725	DESCRIPTION	View north of surface poly lines in the southern portion of the release area.	7
	SITE NAME	HConcho - SRO SWD #101 (P&A)	3/30/2022



TETRA TECH, INC. PROJECT NO. 212C-MD-02578	DESCRIPTION	View southwest of surface poly lines in the southern portion of the release area.	8
	SITE NAME	HConcho - SRO SWD #101 (P&A)	3/30/2022

APPENDIX D
Regulatory Correspondence

From: OCDOnline@state.nm.us
To: Llull, Christian
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 82711
Date: Monday, March 7, 2022 2:54:25 PM

CAUTION: This email originated from an external sender. Verify the source before opening links or attachments.

To whom it may concern (c/o Christian Llull for COG OPERATING LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nMLB1121352991,
for the following reasons:

- **DTW not adequately defined. Can find no report by Concho detailing remedial efforts, despite on site closure by inspector.**
- **90 days from 3/7/22 are allowed to complete site investigation and submit closure or remdial plan**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 82711.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Bradford Billings
Hydrologist/E.Spec.A
505-670-6549
bradford.billings@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

APPENDIX E
Site Characterization Data

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02478		CUB	ED	2	1		05	26S	28E	583848	3549325*	599	100		

Average Depth to Water: --

Minimum Depth: --

Maximum Depth: --

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 584265 **Northing (Y):** 3548894 **Radius:** 800

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 02478		CUB	ED	2	1		05	26S	28E	583848	3549325*	599	100		
C 02477		CUB	ED	1	1		03	26S	28E	586687	3549347*	2463	150		
C 01278		C	ED	4	3		28	25S	28E	585470	3551338*	2724	205	90	115

Average Depth to Water: **90 feet**

Minimum Depth: **90 feet**

Maximum Depth: **90 feet**

Record Count: 3

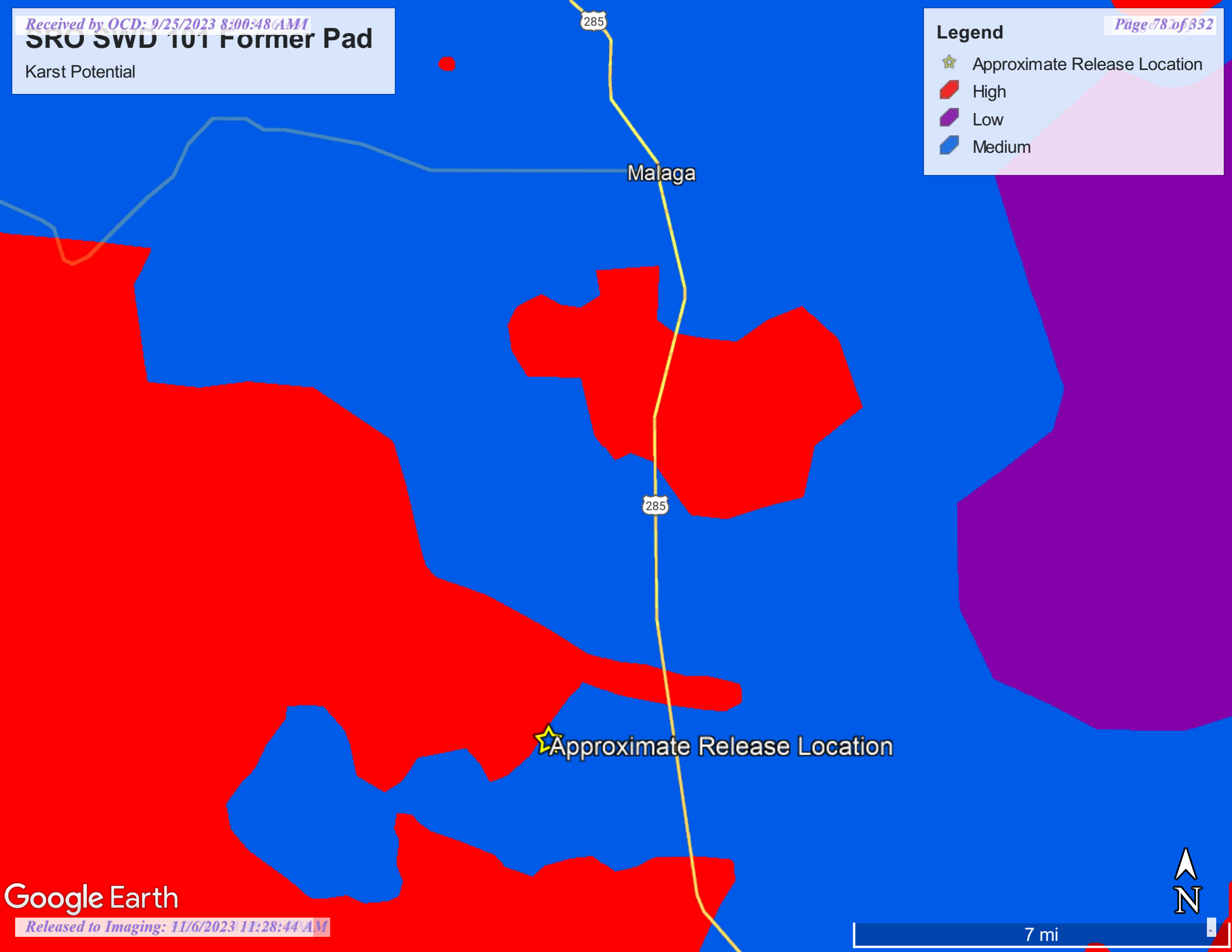
UTMNAD83 Radius Search (in meters):

Easting (X): 584265 **Northing (Y):** 3548894 **Radius:** 3000

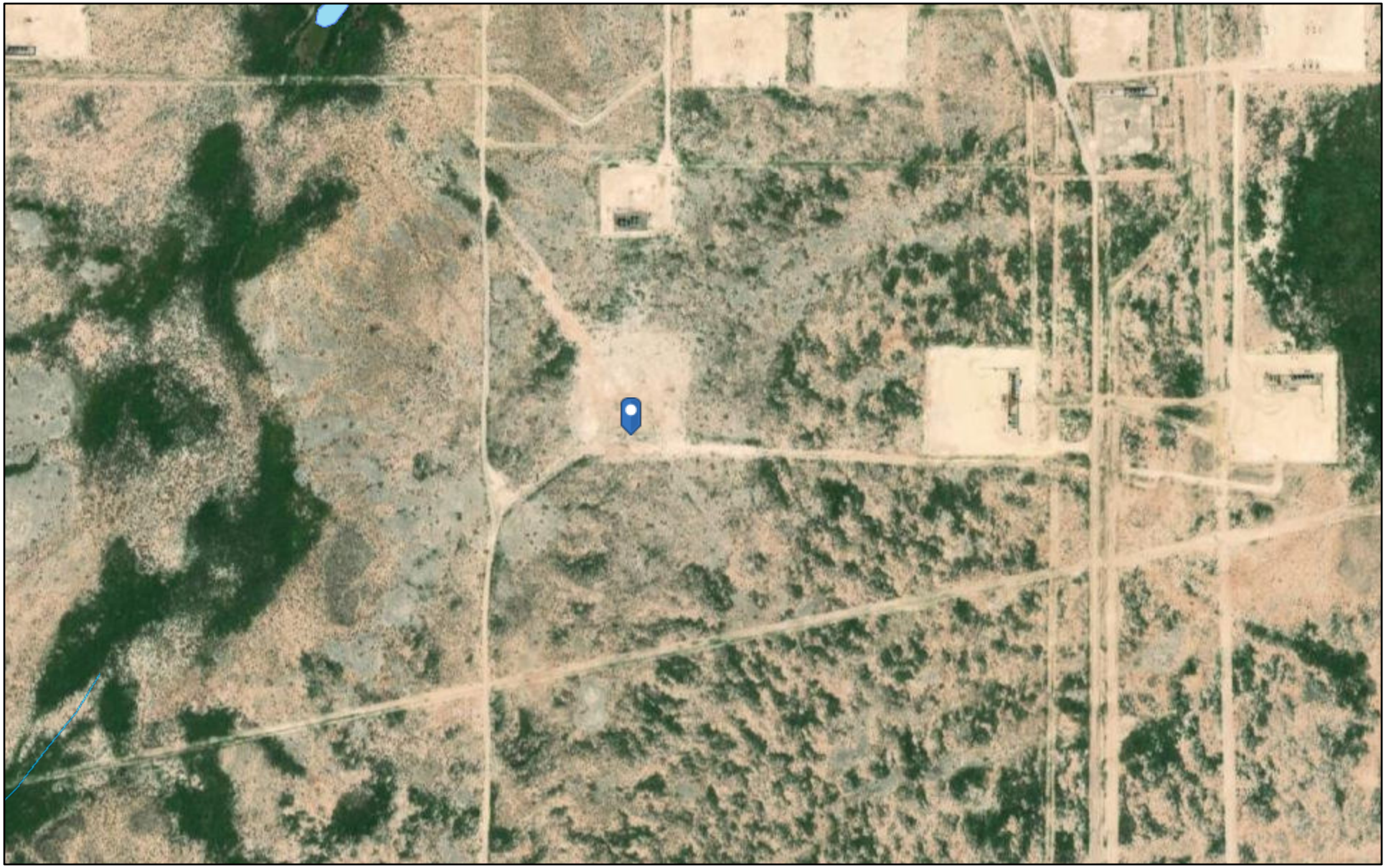
***UTM location was derived from PLSS - see Help**

SRO SWD 101 Former Pad

Karst Potential



OCD Water Bodies



1/11/2022, 1:06:19 PM

1:9,028

0 0.05 0.1 0.2 mi

0 0.1 0.2 0.4 km

OCD, Maxar

- OCD District Offices
- PLJV Probable Playas
- OSE Water-bodies
- OSE Streams

New Mexico Oil Conservation Division

NM OCD Oil and Gas Map. http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=4d017f2306164de29fd2fb9f8f35ca75: New Mexico Oil Conservation Division

212C-MD-02660 | TETRA TECH

LOG OF BORING DTW-1

Page 1 of 1

Project Name: SRO SWD #101

Borehole Location: GPS: 32.072938°, -104.101518°

Surface Elevation (ft): 3009

Borehole Number: DTW-1

Borehole Diameter (in.): 3

Date Started: 3/15/2022

Date Finished: 3/15/2022

WATER LEVEL OBSERVATIONS

While Drilling DRY ft

24 Hours After Completion of Drilling DRY ft

Remarks:

DEPTH (ft)	OPERATION TYPES	SAMPLE	STANDARD PENETRATION TEST SPT	PID (ppm)	SAMPLE RECOVERY (%)	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	LIQUID LIMIT LL	PLASTICITY INDEX PI	MINUS NO. 200 (%)	GRAPHIC LOG	MATERIAL DESCRIPTION	DEPTH (ft)	WELL DIAGRAM
												-SM- SILTY SAND: Pale Brown, dry	1	
												-SM- SILTY SAND: Pale Brown, with angular to subangular Gravel, dry.	2	
5												**-SM-** SILTY SAND: Light Reddish Brown, dry.	3	
												-SM- SILTY SAND: Light Reddish Brown, with angular to subangular Gravel, dry.	4	
												-SM- SILTY SAND: Reddish Brown, with angular to subangular Gravel, dry.		
10														4" Schedule 40 PVC Casing
15													15	
												-CL- CLAY: Brown, trace Sand, dry to moist.		
20													20	
												-CL- CLAY: Grayish Brown, trace Sand, dry to moist.		
25													25	
												-SANDSTONE- SANDSTONE: Gray, fine to medium grained, weakly to moderately cemented, dry.		
30														
35														
40														4" Schedule 40 PVC Slotted Screen (0.010")
45														
50														
55													55	

Bottom of borehole at 55.0 feet.

Sampler Types: Split Spoon, Acetate Liner, Shelby, Vane Shear, Bulk Sample, California, Grab Sample, Sonic

Operation Types: Auger, Mud Rotary, Air Rotary, Continuous Flight Auger, Direct Push, Hollow Stem Auger, HSA

Notes: Surface elevation is an estimated value based on Google Earth data.

Logger: Nicholas Poole

Drilling Equipment: Air Rotary

Driller: Scarborough Drilling

APPENDIX G
NMSLO Seed Mix Details

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for

Eddy Area, New Mexico

February 1, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

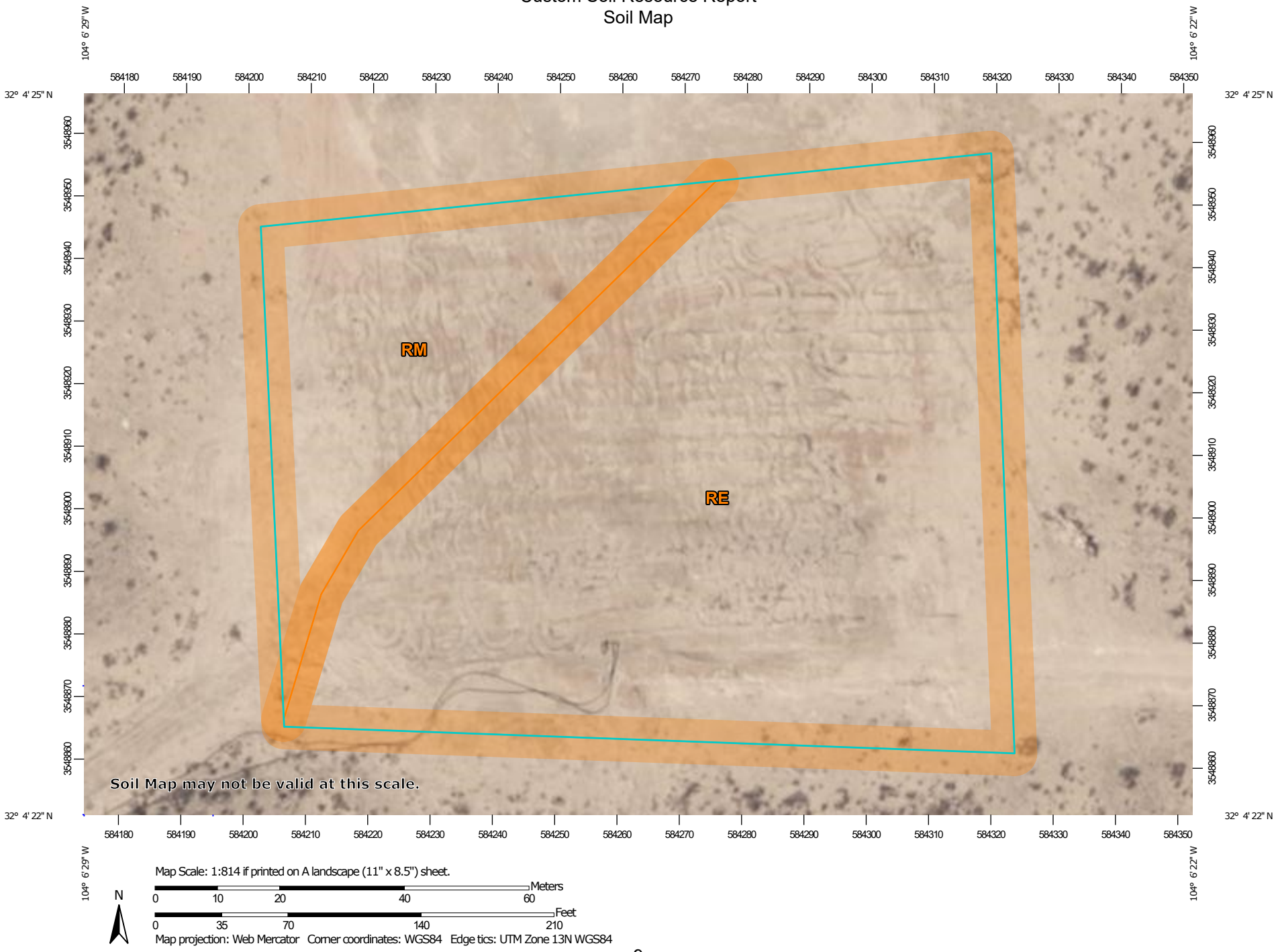
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 17, Sep 12, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RE	Reagan-Upton association, 0 to 9 percent slopes	2.0	77.4%
RM	Reeves-Reagan loams, 0 to 3 percent slopes	0.6	22.6%
Totals for Area of Interest		**2.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Eddy Area, New Mexico

RE—Reagan-Upton association, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w5d
Elevation: 1,100 to 5,400 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 60 to 64 degrees F
Frost-free period: 180 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 70 percent
Upton and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R070DY153NM - Loamy
Hydric soil rating: No

Description of Upton

Setting

Landform: Ridges, fans
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam
H2 - 9 to 13 inches: gravelly loam
H3 - 13 to 21 inches: cemented
H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R070DY159NM - Shallow Loamy
Hydric soil rating: No

Minor Components

Atoka

Percent of map unit: 3 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Pima

Percent of map unit: 2 percent
Ecological site: R042XC017NM - Bottomland
Hydric soil rating: No

RM—Reeves-Reagan loams, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5g
Elevation: 1,100 to 4,400 feet
Mean annual precipitation: 7 to 25 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 50 percent
Reagan and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves

Setting

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, crest, nose slope, head slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 30 inches: loam
H3 - 30 to 82 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

Gypsum land

Percent of map unit: 5 percent
Hydric soil rating: No

Upton

Percent of map unit: 5 percent
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Cottonwood

Percent of map unit: 5 percent
Ecological site: R042XC006NM - Gyp Upland
Hydric soil rating: No

1 REVEGETATION PLANS

The following Revegetation Plans were developed for revegetation of sites in southeastern New Mexico. To determine which revegetation plan is appropriate follow procedures in the section titled Determining the Revegetation Plan.

Revegetation Plans contain seed mixtures, as well as seed bed preparation and planting requirements. The detailed instructions for seedbed preparation and planting can be found in the section Revegetation Techniques.

Table 3 - Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico

REVEGTATION PLANS	CODE	SOIL TEXTURES
Clay	C	Clay, Silty Clay, Stony Silty Clay, Clay Loam, Silty Clay Loam (including saline and sodic Clay soils)
Loam	L	Silty Loam, Cobbly Silt Loam, Stony Silt Loam, Silt, Loam, Sandy, Clay Loam
Sandy Loam	SL	Very Fine Sandy Loam, Fine Sandy Loam, Cobbly Fine Sandy Loam, Sandy Loam, Cobbly Sandy Loam, Gravelly Fine Sandy Loam, Very Gravelly Fine Sand Loam, Stony Fine Sandy Loam, Stony Sandy Loam
Shallow	SH	Rocky Loam, Cobbly Loam
Course	CS	Gravelly Loam, very Gravelly Loam, Gravelly Sandy Loam, Very Gravelly Sandy Loam, Stony Loam, Stony Sandy Loam
Sandy	S	Loamy Fine Sand, Loam Sand, Very Gravelly Loamy Fine Sand
Blow Sand	BS	Fine Sand, Sand, Coarse Sand
Mountain Meadow	MM	Clay, Loam
Mountain Upland	MU	Clay Loam, Loam

NMSLO Seed Mix Loamy (L)

LOAMY (L) SITES SEED MIXTURE:

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
Grasses:			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
Forbs:			
Firewheel (*Gaillardia*)	VNS, Southern	1.0	D
Shrubs:			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
	Total PLS/acre	18.0	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box
VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at http://plants.usda.gov.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 98930

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 98930
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	- The NMOCD approves the workplan to remove the impacted material as shown in Figure 5. The area around boring BH-1 will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a depth of 2 feet and the area around BH-2 will be excavated to a depth of 3 feet below the surrounding surface.	9/2/2022

Appendix E

Historical Closure Report Incident # nJMW1334648160

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

Depth to GW = <50'

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **COG Operating LLC**	Contact **Robert McNeil**
Address **600West Illinois Avenue Midland, Texas 79701**	Telephone No. **(432) 230-0077**
Facility Name SRO SWD #101	Facility Type **Tank Battery**

Surface Owner: State	Mineral Owner	Lease No. (API #) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	05	26S	28E					Eddy

Latitude N 32.07351° **Longitude** W 104.1067°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 85 bbls	Volume Recovered 35 bbls
Source of Release: Equalizer	Date and Hour of Occurrence 11/26/2013	Date and Hour of Discovery 11/26/2013 08:30 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom? **Mike Bratcher- NMOCD**	
By Whom? Michelle Mullins	Date and Hour 11-27-2013 09:45 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 04 2014
RECEIVED

Describe Cause of Problem and Remedial Action Taken.*

A 3" steel line between the H-pump and the well head corroded.

Describe Area Affected and Cleanup Action Taken.*

Initially 85 bbls of produced water were released from a steel line that had developed a hole going from the H-pump to the well. We were able to recover 35 bbls with a vacuum truck. All free fluids have been recovered. Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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:	OIL CONSERVATION DIVISION
Printed Name: Ike Tavarez (Agent for COG)	Approved by District Supervisor: Accepted For Record 7/16/15 - HMP
Title: Project Manager	Approval Date: — Expiration Date: —
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval: Shallow GW + elevated chlorides on Pad - leave open until abandonment
Date: 5-14-14 Phone: (432) 682-4559	Attached ☐

2RP-2109

Attach Additional Sheets If Necessary

SITE INFORMATION

Report Type: Closure Report

General Site Information:						
Site:	SRO SWD #101					
Company:	COG Operating LLC					
Section, Township and Range	Sec 05	T26S	R28E			
Lease Number:	API-30-015-26105					
County:	Eddy County					
GPS:	32.073517° N			104.1067 ° W		
Surface Owner:	State					
Mineral Owner:						
Directions:	From the intersection of Hwy 285 and Whites City Rd (C.R. 724) travel West on Whites City road for approximately 2.6 miles, turn North onto lease road and continue for approximately .6 miles, turn East onto lease road for 0.1 miles to location					

Release Data:	
Date Released:	11/26/2013
Type Release:	Produced Water
Source of Contamination:	Steel Line Corrosion
Fluid Released:	85 bbls
Fluids Recovered:	35 bbls

Official Communication:			
Name:	Robert McNeil		Ike Tavarez
Company:	COG Operating, LLC		Tetra Tech
Address:	One Concho Center		4000 N. Big Spring
	600 W. Illinois Ave.		Ste 401
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 686-3023		(432) 687-8110
Fax:	(432) 684-7137		
Email:	rmcneil@conchoresources.com		Ike.Tavarez@tetratech.com

Ranking Criteria		
Depth to Groundwater:	***Ranking Score***	***Site Data***
<50 ft	20	
50-99 ft	10	
>100 ft.	0	
WellHead Protection:	***Ranking Score***	***Site Data***
Water Source <1,000 ft., Private <200 ft.	*20*	
Water Source >1,000 ft., Private >200 ft.	***0***	*0*
Surface Body of Water:	***Ranking Score***	***Site Data***
<200 ft.	*20*	
200 ft - 1,000 ft.	10	
>1,000 ft.	**0**	0
Total Ranking Score:	**20**	

Acceptable Soil RRAL (mg/kg)		
Benzene	***Total BTEX***	***TPH***
10	50	100

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 0 4 2014
RECEIVED

TETRA TECH

May 6, 2014

Mr. Mike Bratcher
Environmental Engineer Specialist
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

Re: Closure Report for the COG Operating LLC., SRO SWD #101, Unit G, Section 05, Township 26 South, Range 28 East, Eddy County, New Mexico.

Mr. Bratcher:

Tetra Tech, Inc. (Tetra Tech) was contacted by COG Operating LLC. (COG) to assess a spill from the SRO SWD #101, Unit G, Section 05, Township 26 South, Range 28 East, Eddy County, New Mexico (Site). The spill site coordinates are N 32.07351°, W 104.1067°. The site location is shown on Figures 1 and 2.

Background

According to the State of New Mexico C-141 Initial Report, the leak was discovered on November 26, 2013, and released approximately eighty five (85) barrels of produced water from a 3" steel line. Thirty five (35) barrels of standing fluids were recovered. The spill initiated north of the tank battery affecting an area 190' X 160' on the pad as well as an area northwest of the pad measuring 40' x 560' in the pasture. The initial C-141 form is enclosed in Appendix A.

Groundwater

No water wells were listed within Section 05. According to the NMOCD groundwater map, the average depth to groundwater in this area is less than 50' below surface. The groundwater data is shown in Appendix B.

Regulatory

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as

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TETRA TECH

BTEX) and total petroleum hydrocarbons (TPH) in soil.
The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 100 mg/kg.

Soil Assessment and Analytical Results

On December 17, 2013, Tetra Tech personnel inspected and sampled the spill area. Fifteen (15) auger holes (AH-1 through AH-15) as well as one background auger hole were installed using a stainless steel hand auger to assess the impacted soils. Selected samples were analyzed for TPH analysis by EPA method 8015 modified, BTEX by EPA Method 8021B and chloride by EPA method 300.0. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The sampling results are summarized in Table 1. The auger hole locations are shown on Figure 3.

Referring to Table 1, none of the samples exceeded the TPH or BTEX RRAL's. Tetra Tech installed one background auger hole to evaluate the chloride concentrations and showed no significant chlorides for the area. However, a background auger hole was installed during as previous assessment in September 2011 and showed a chloride high of 1,500 mg/kg at 5.0' below surface. The background results are summarized in Table 1.

Elevated chloride concentrations were detected in all of the auger holes, except for AH-11. On the pad, auger holes (AH-1 through AH-5) showed elevated chloride concentrations at 0-0.5' of 8,910 mg/kg, 4,060 mg/kg, 13,400 mg/kg, 5,570 mg/kg, and 6,240 mg/kg, respectively. In these areas, the chloride impact soils were not vertically defined. Deeper samples were not collected due to the dense formation.

Auger holes (AH-6, AH-7, AH-8, AH-9, AH-10 and AH-13) showed a shallow chloride impact to the soils and vertically defined at depths of 1.0' to 4.0' below surface to background concentrations. The areas of auger holes (AH-12, AH-14, and AH-15) showed a deeper impact to the subsurface soils and were not vertically defined with chloride highs of 11,200 mg/kg at 0'-1', 15,800 mg/kg at 1'-1.5', and 10,000 mg/kg at 0'-1' below surface, respectively. The area of auger hole (AH-11) did not show significant chloride concentrations.

Remedial Activities

On March 12, 2014, Tetra Tech began supervising the excavation of impacted materials as highlighted (green) on Table 1 and shown on Figure 4. Prior to excavating, trenches (T-1 through T-8) were installed to evaluate and define the chloride concentrations for the areas of auger holes (AH-1, AH-2, AH-3, AH-4, AH-5, AH-12, AH-14, and AH-15).

TETRA TECH

A background trench was also installed, which showed chloride concentrations increasing with depth to 1,260 mg/kg at 6.0', 1,730 mg/kg at 8.0', and 2,640 mg/kg at 10.0' below surface.

Based on the results of the backhoe trenches, the impacted areas showed chloride bottom holes at 10.0' below surface of 1,350 mg/kg at T-1, 255 mg/kg at T-2, 1,500 mg/kg at T-3, 742 mg/kg at T-4, 755 mg/kg at T-5, 991 mg/kg at T-6, 522 mg/kg at T-7, and 665 mg/kg at T-8.

The areas of AH-2 and AH-3 were excavated to a depth of approximately 0.5 - 1.0' below surface. The areas of AH-1, AH-5, AH-6, AH-7, AH-9, AH-10, and AH-13 were excavated to a depth of approximately 2.0' below surface. The areas of AH-4, AH-8, and AH-14 were excavated to a depth of approximately 3.0' below surface. The area of AH-15 was excavated to a depth of approximately 4.0' below surface, and the area of AH-12 was excavated to a depth of approximately 6.0' below surface.

Approximately 3,700 yards of excavated soil was transported offsite for proper disposal and the areas will be backfilled with clean material to surface grade.

Conclusion

Based on the remedial actions taken, COG requests closure of the site. The Final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or the remediation activities for this site, please call me at (432) 682-4559.

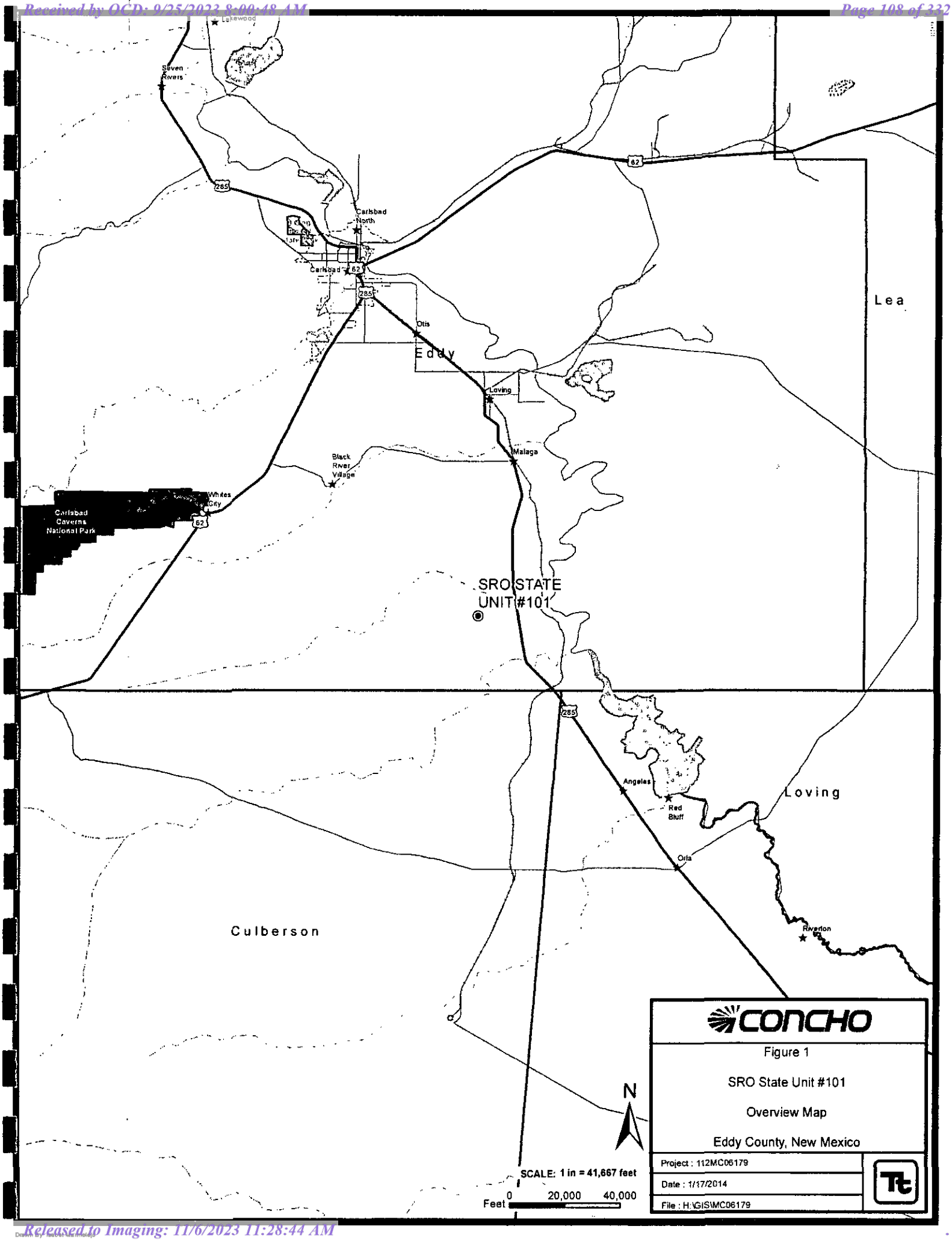
Respectfully submitted,
TETRA TECH

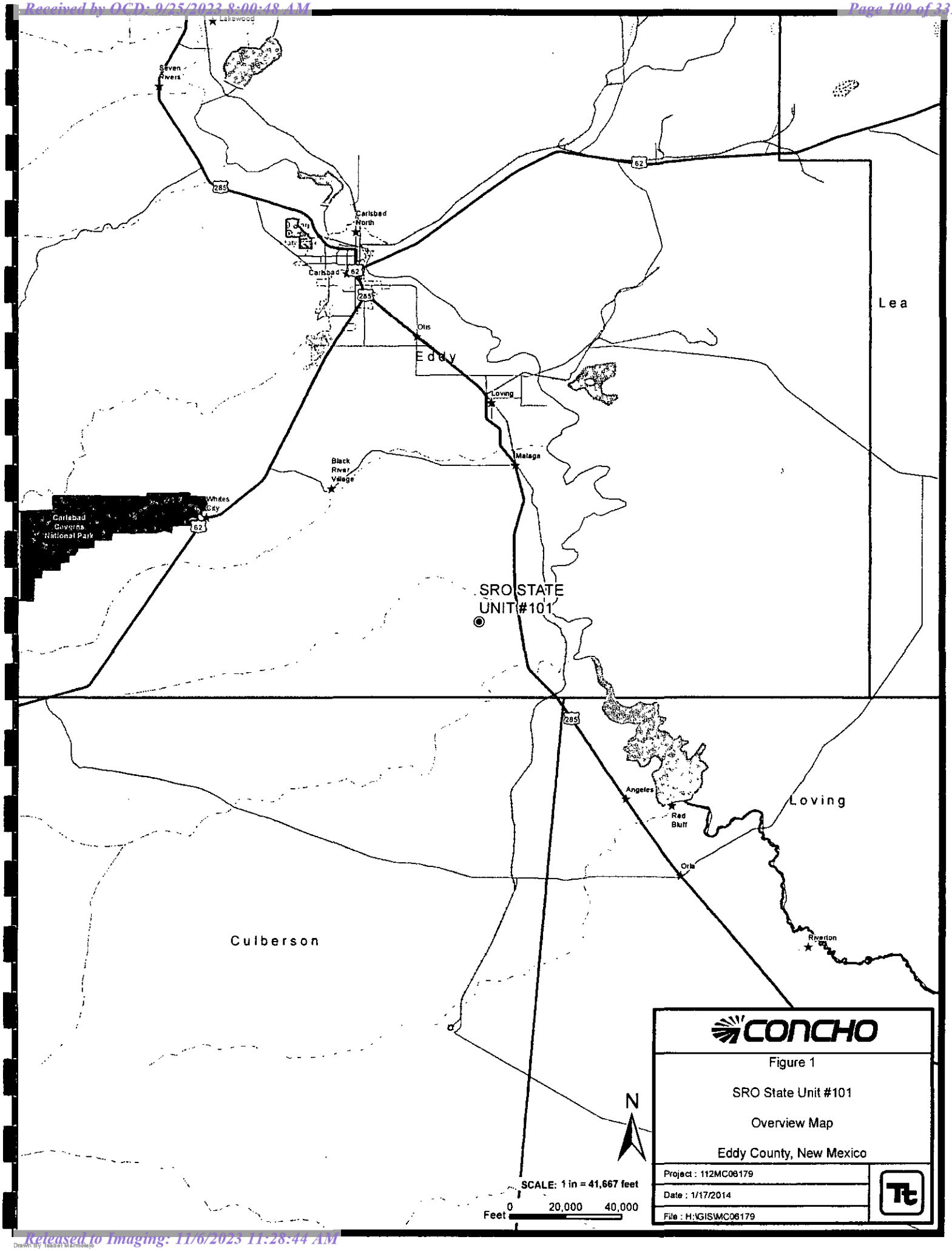
Clair Gonzales

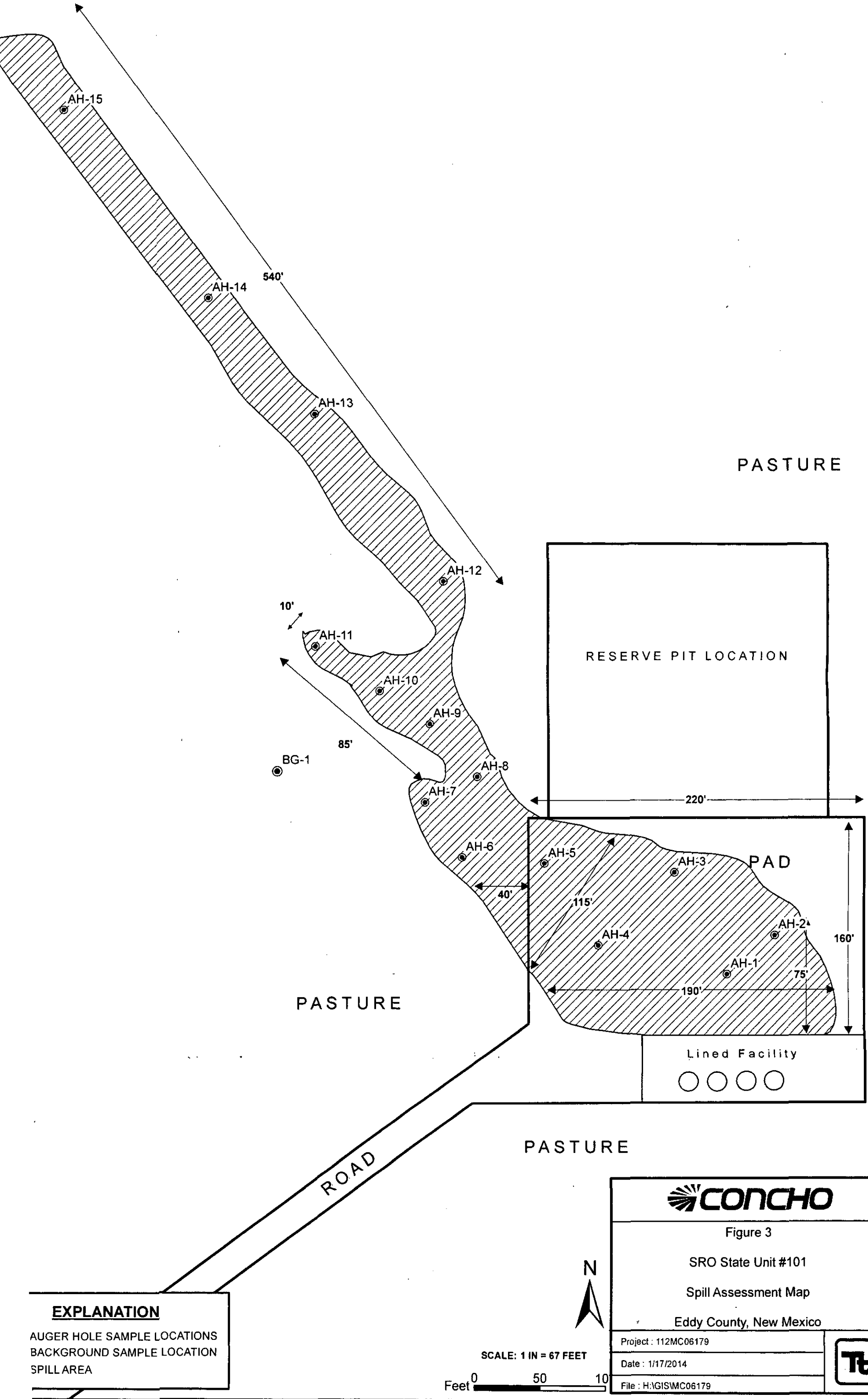
Clair Gonzales,
Geologist

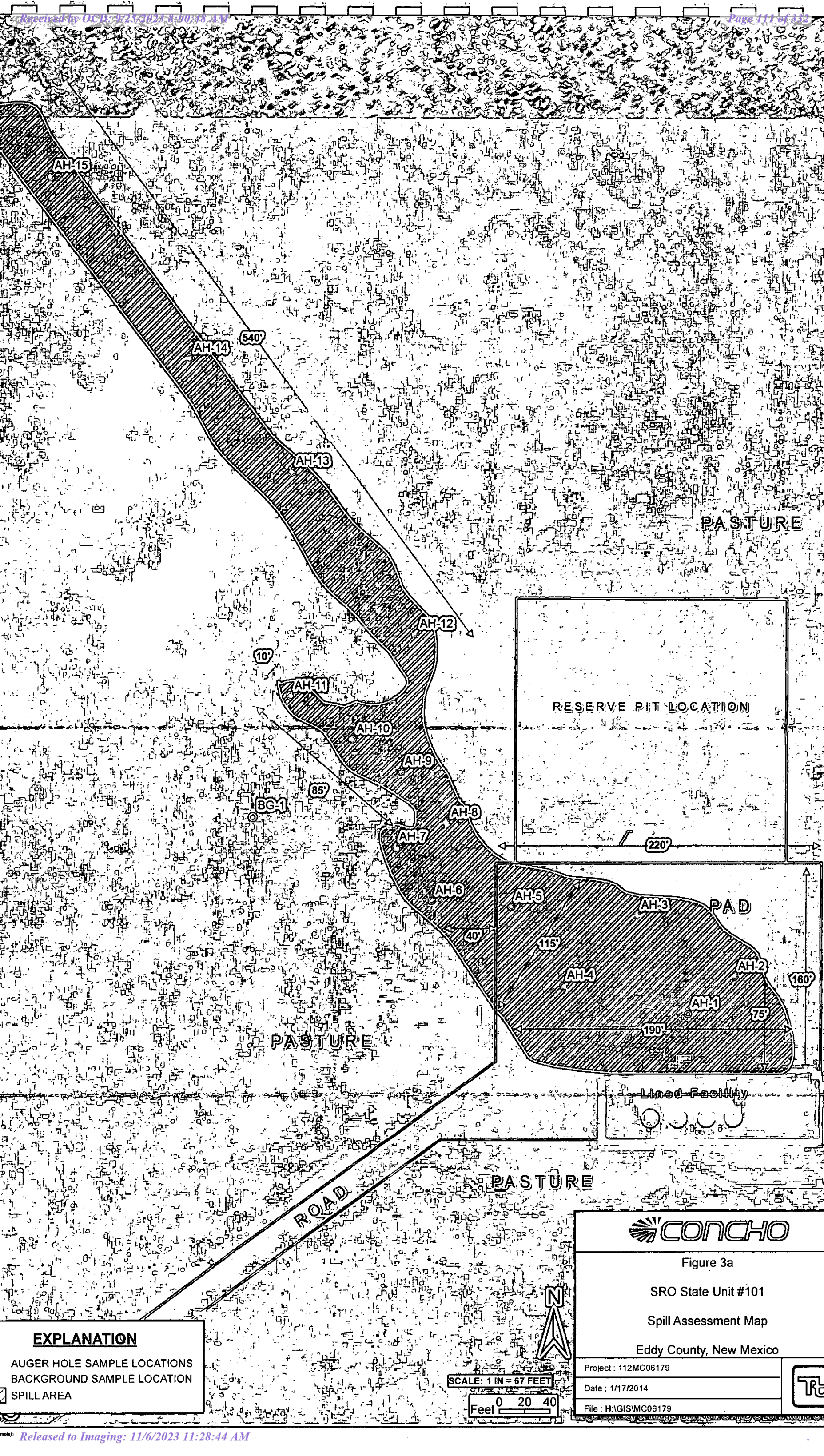
cc: Robert McNeill – COG

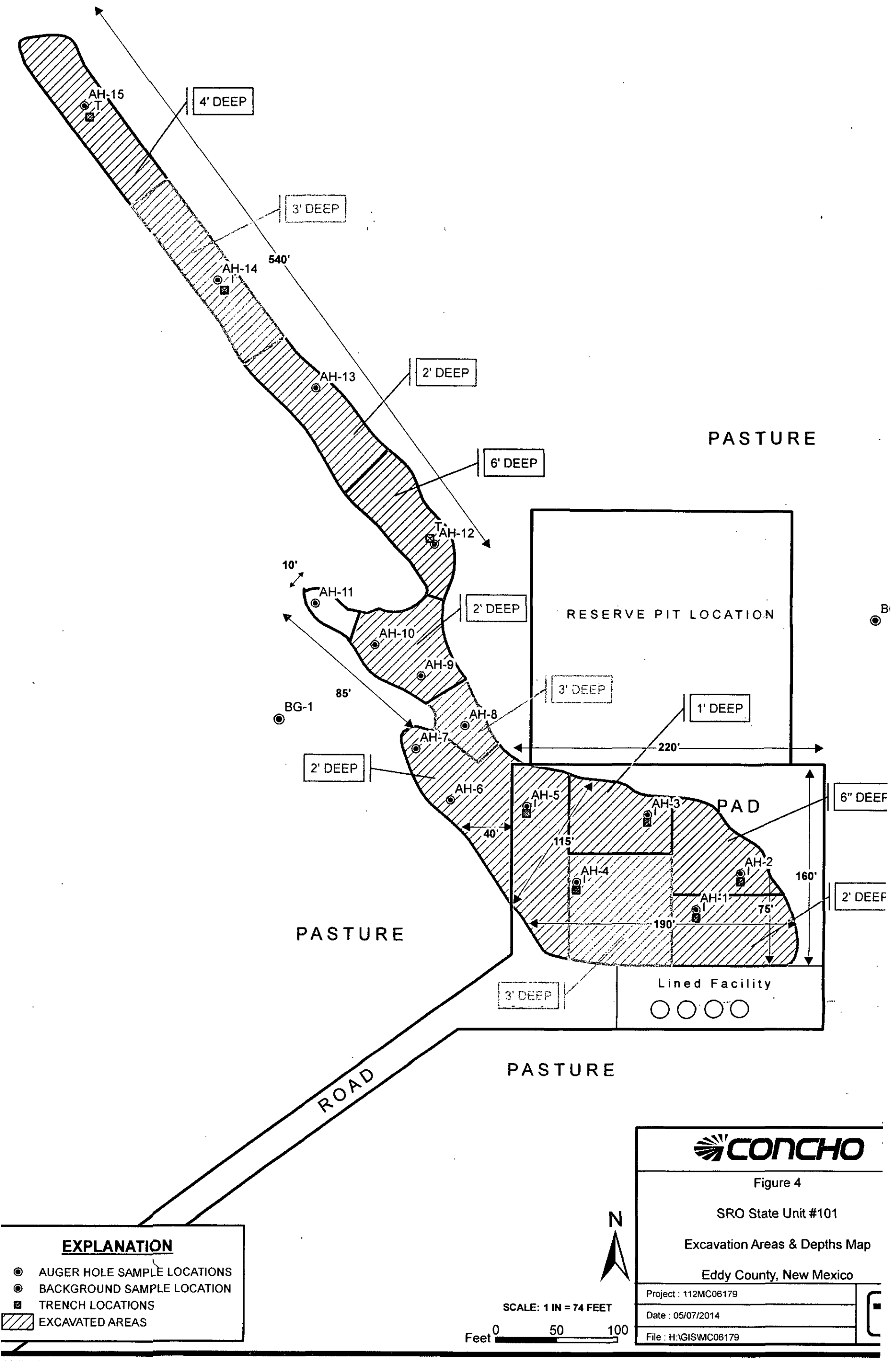
Figures


Lakewood
Seven Rivers
285
Carlsbad North
Carlsbad
62
285
Otis
Eddy
Loving
Malaga
Black River Village
Whites City
Carlsbad Caverns National Park
62
Lea
SRO STATE UNIT #101
285
Angeles
Red Bluff
Loving
Orla
Culberson
Riverton
N
SCALE: 1 in = 41,667 feet
Feet 0 20,000 40,000
CONCHO
Figure 1
SRO State Unit #1 01
Overview Map
Eddy County, New Mexico
Project : 112MC06179
Date : 1/17/2014
File : H:\GIS\MC06179


Lakewood
Seven Rivers
285
62
Carlsbad North
Carlsbad
Otis
Eddy
Lea
Loving
Malaga
Black River Village
Whites City
Carlsbad Caverns National Park
SRO STATE UNIT #101
Angeles
Red Bluff
Orla
Loving
Culberson
Riverton
N
SCALE: 1 in = 41,667 feet
Feet 0 20,000 40,000
CONCHO
Figure 1
SRO State Unit #101
Overview Map
Eddy County, New Mexico
Project : 112MC06179
Date : 1/17/2014
File : H:\GIS\MC06179


AH-15
AH-14
540'
AH-13
PASTURE
AH-12
10'
AH-11
AH-10
AH-9
85'
BG-1
AH-8
AH-7
RESERVE PIT LOCATION
220'
AH-6
AH-5
AH-3
PAD
40'
115'
AH-4
AH-2
160'
AH-1
75'
190'
PASTURE
Lined Facility
PASTURE
ROAD
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
BACKGROUND SAMPLE LOCATION
SPILL AREA
N
SCALE: 1 IN = 67 FEET
Feet 0 50 10
CONCHO
Figure 3
SRO State Unit #101
Spill Assessment Map
Eddy County, New Mexico
Project : 112MC06179
Date : 1/17/2014
File : H:\GIS\MC06179

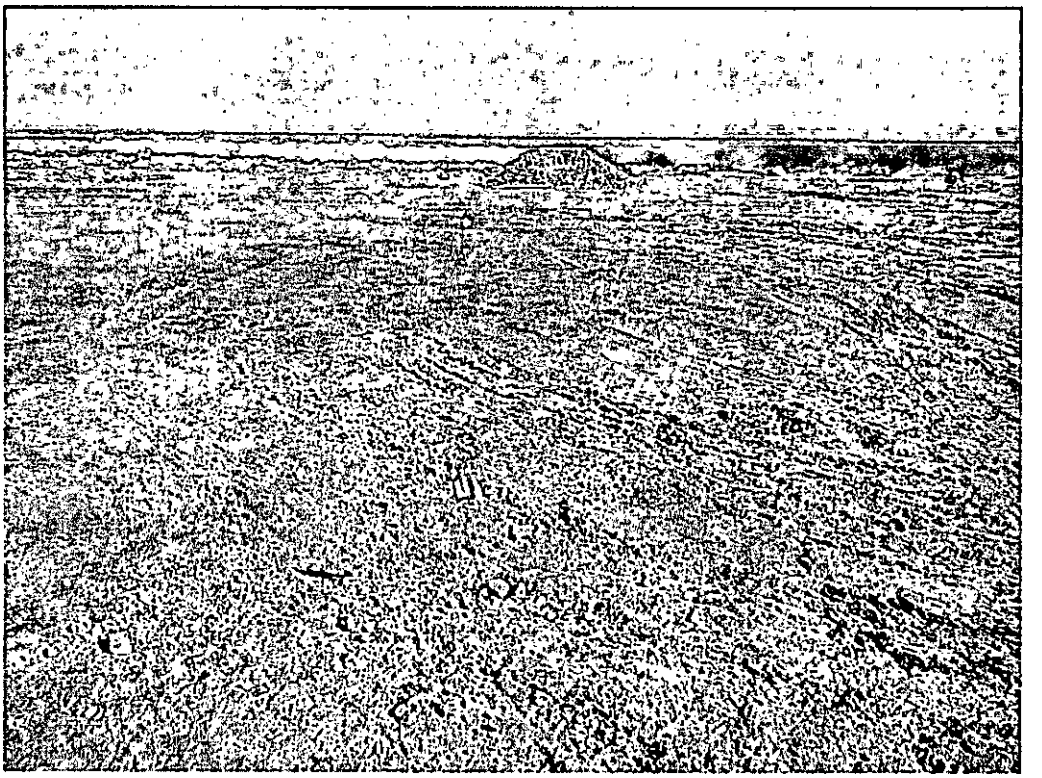

AH-15
AH-14
540'
AH-13
AH-12
10'
AH-11
AH-10
AH-9
85'
BG-1
AH-8
AH-7
AH-6
40'
PASTURE
RESERVE PIT LOCATION
220'
AH-5
AH-3
PAD
115'
AH-4
AH-2
160'
AH-1
75'
190'
Lined Facility
PASTURE
ROAD
PASTURE
N
SCALE: 1 IN = 67 FEET
Feet 0 20 40
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
BACKGROUND SAMPLE LOCATION
SPILL AREA
CONCHO
Figure 3a
SRO State Unit #101
Spill Assessment Map
Eddy County, New Mexico
Project : 112MC06179
Date : 1/17/2014
File : H:\GIS\MC06179


AH-15
T
4' DEEP
3' DEEP
540'
AH-14
I
AH-13
2' DEEP
PASTURE
6' DEEP
T
AH-12
10'
AH-11
2' DEEP
RESERVE PIT LOCATION
AH-10
AH-9
3' DEEP
85'
BG-1
AH-8
1' DEEP
AH-7
220'
2' DEEP
AH-6
AH-5
AH-3
PAD
6" DEEP
40'
115'
AH-4
AH-2
160'
AH-1
2' DEEP
75'
190'
PASTURE
Lined Facility
3' DEEP
PASTURE
ROAD
EXPLANATION
AUGER HOLE SAMPLE LOCATIONS
BACKGROUND SAMPLE LOCATION
TRENCH LOCATIONS
EXCAVATED AREAS
N
SCALE: 1 IN = 74 FEET
Feet 0 50 100
CONCHO
Figure 4
SRO State Unit #101
Excavation Areas & Depths Map
Eddy County, New Mexico
Project : 112MC06179
Date : 05/07/2014
File : H:\GIS\MC06179

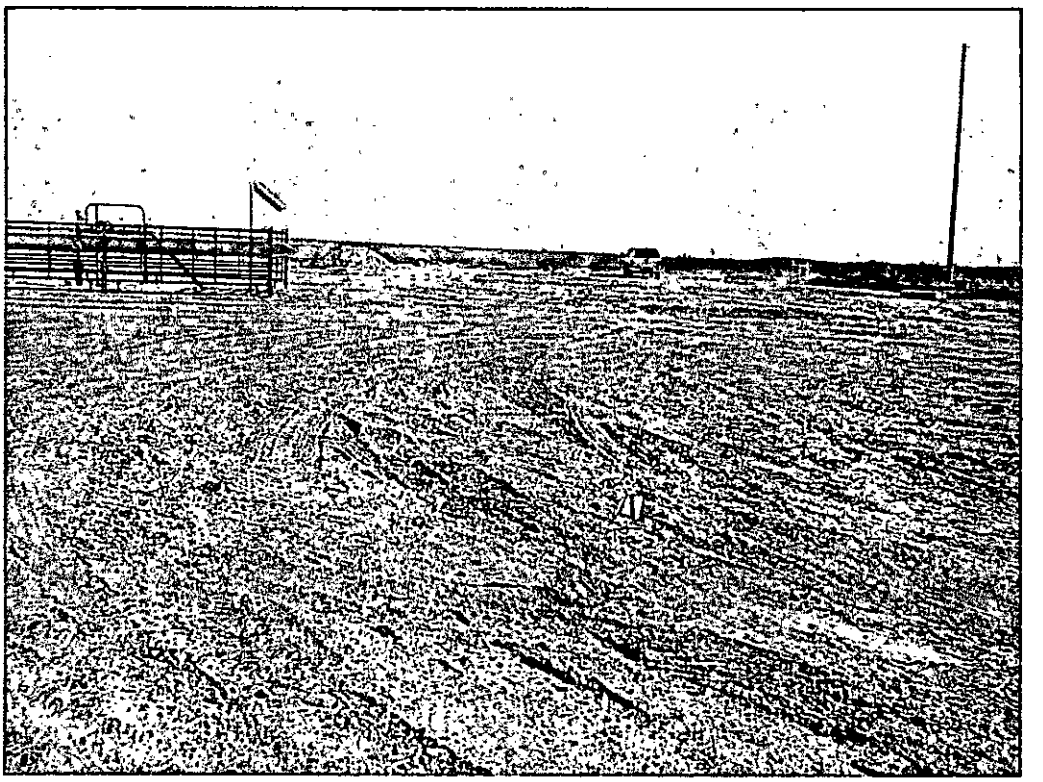
Photos

COG Operating LLC
SRO SWD #101
Eddy County, New Mexico

TETRA TECH



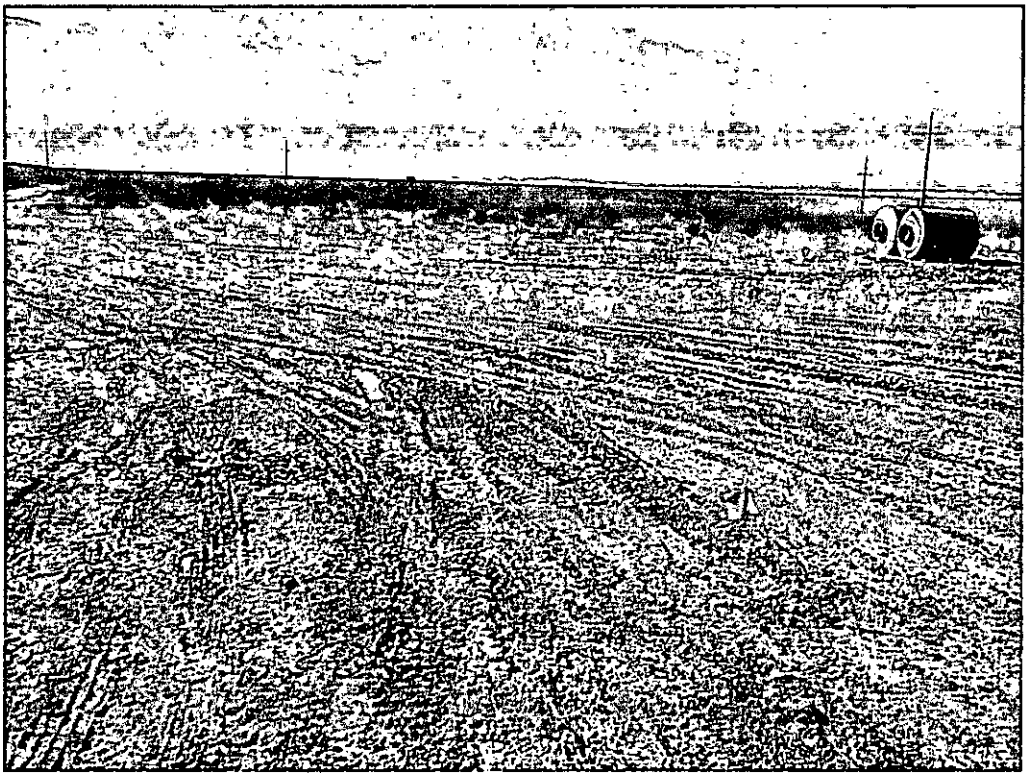
View Northeast –Area of AH-1 and AH-2



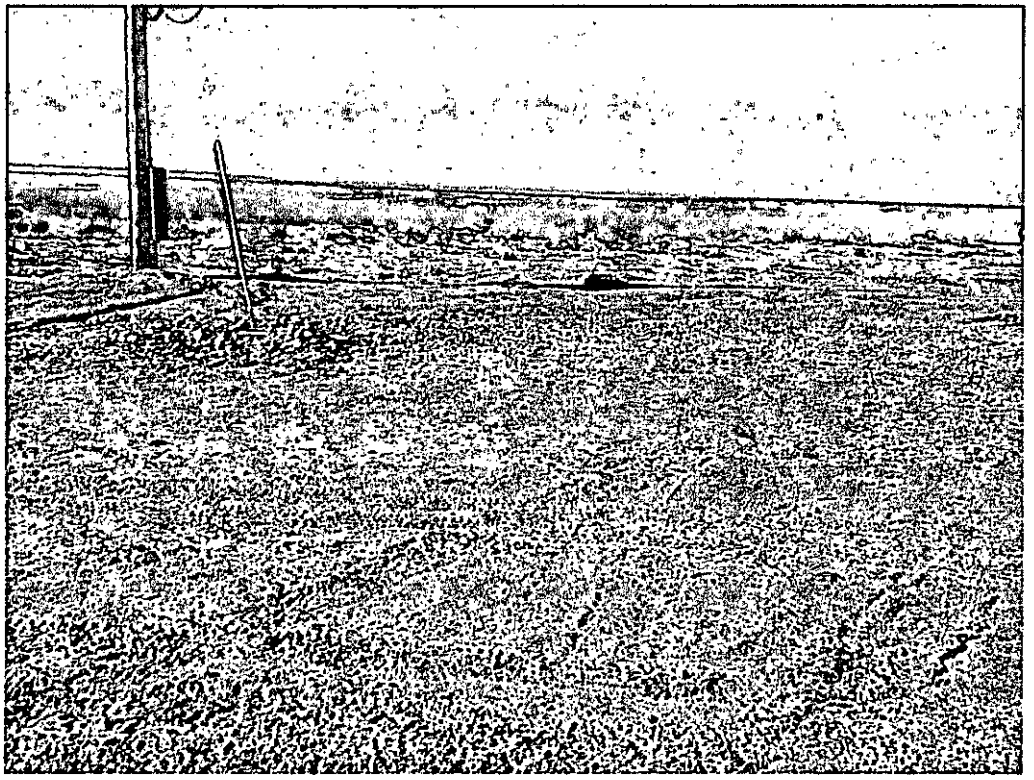
View East – Area of AH-3

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



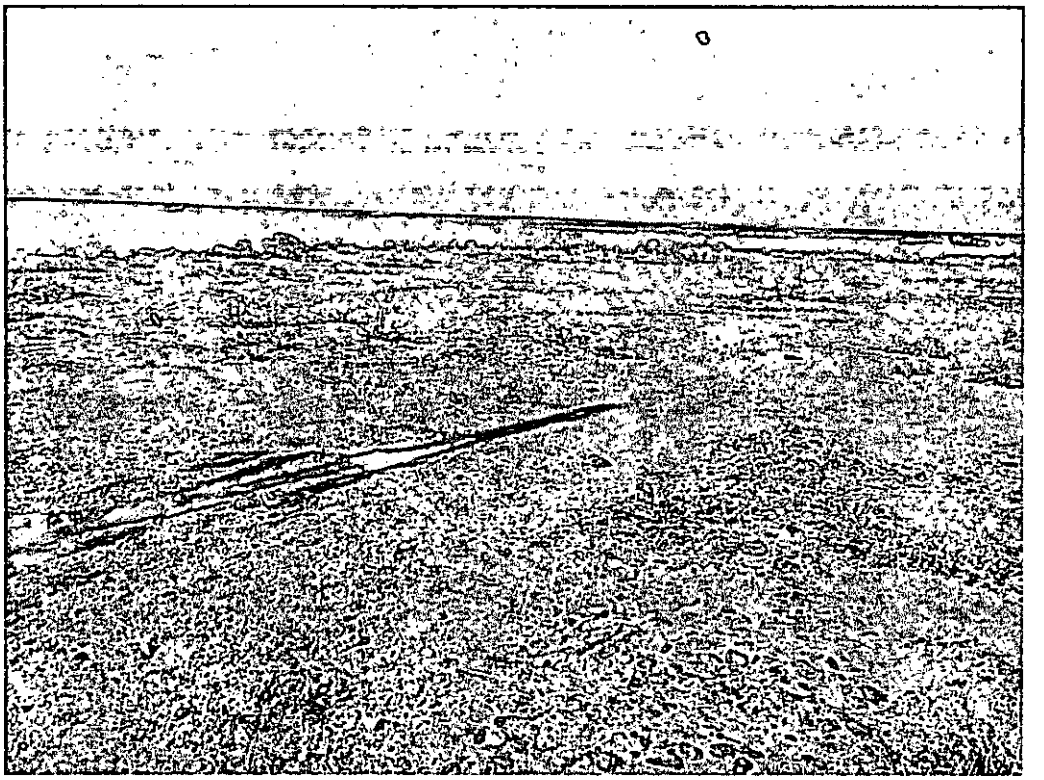
View West - Area of AH-4



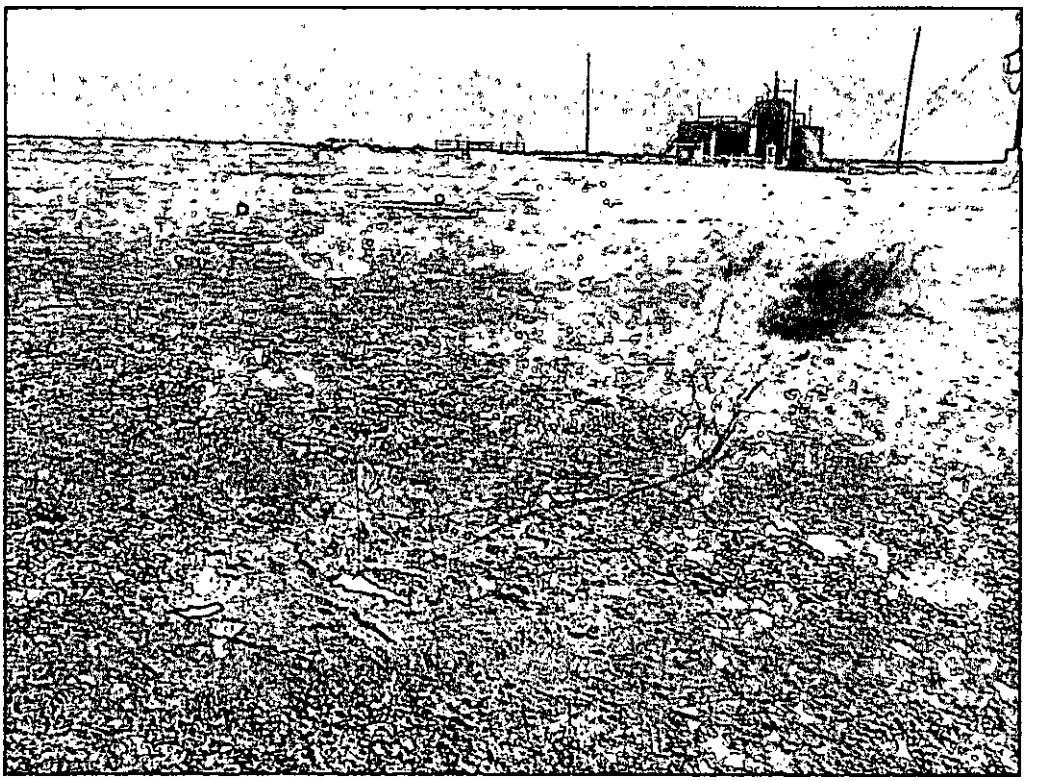
View West – Area of AH-5

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



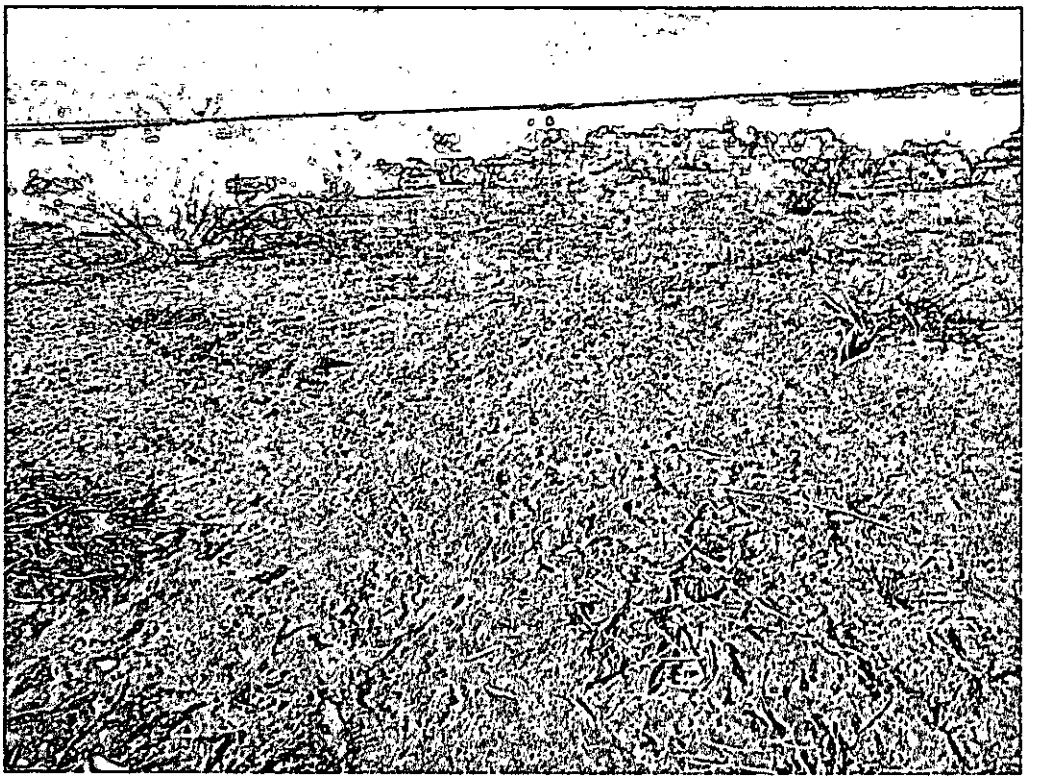
View West – Area of AH-6, AH-7, and AH-8



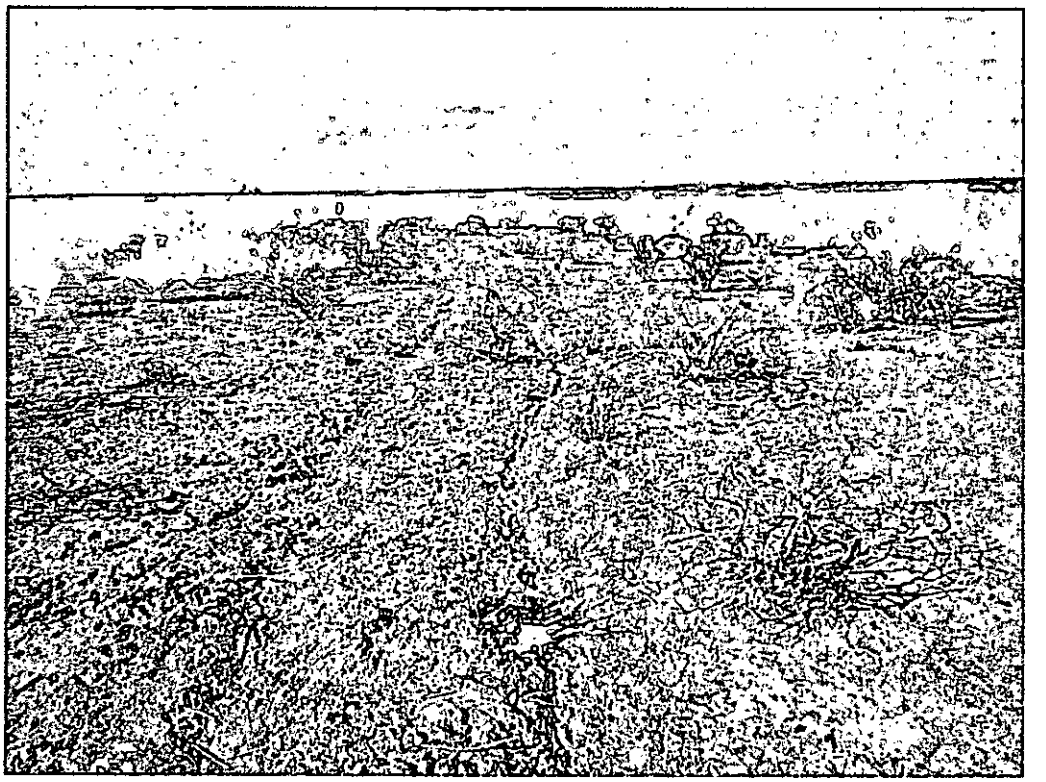
View Southeast – Area of AH-9, AH-10, and AH-11

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



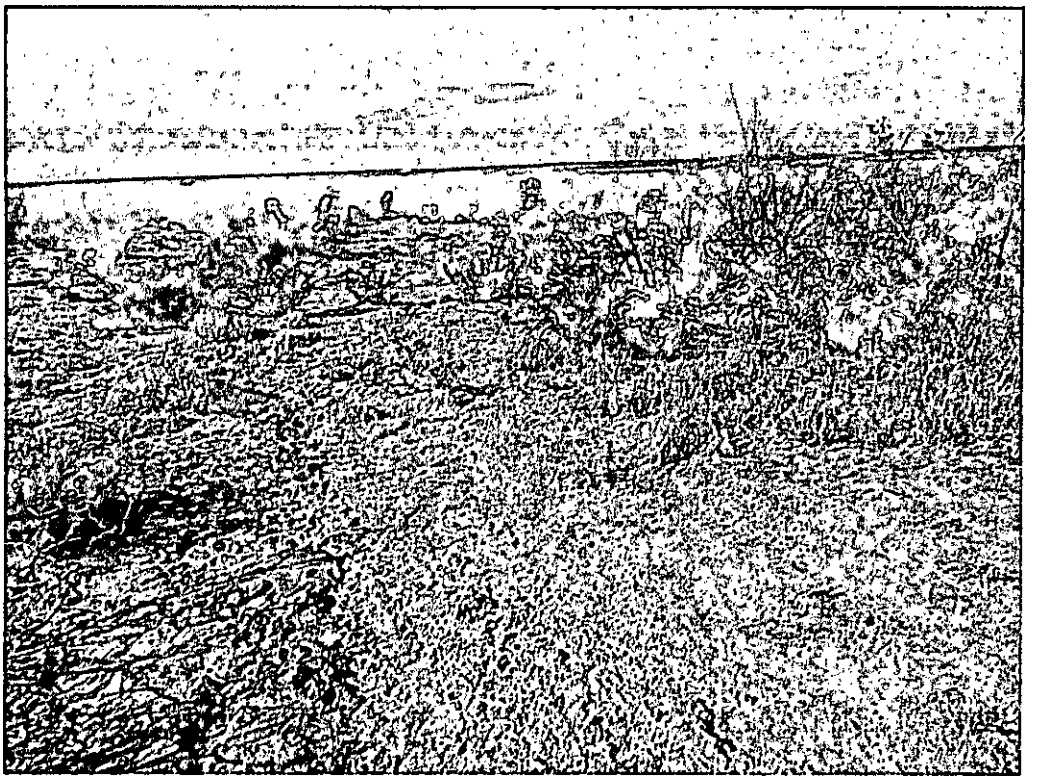
View North – Area of AH-12



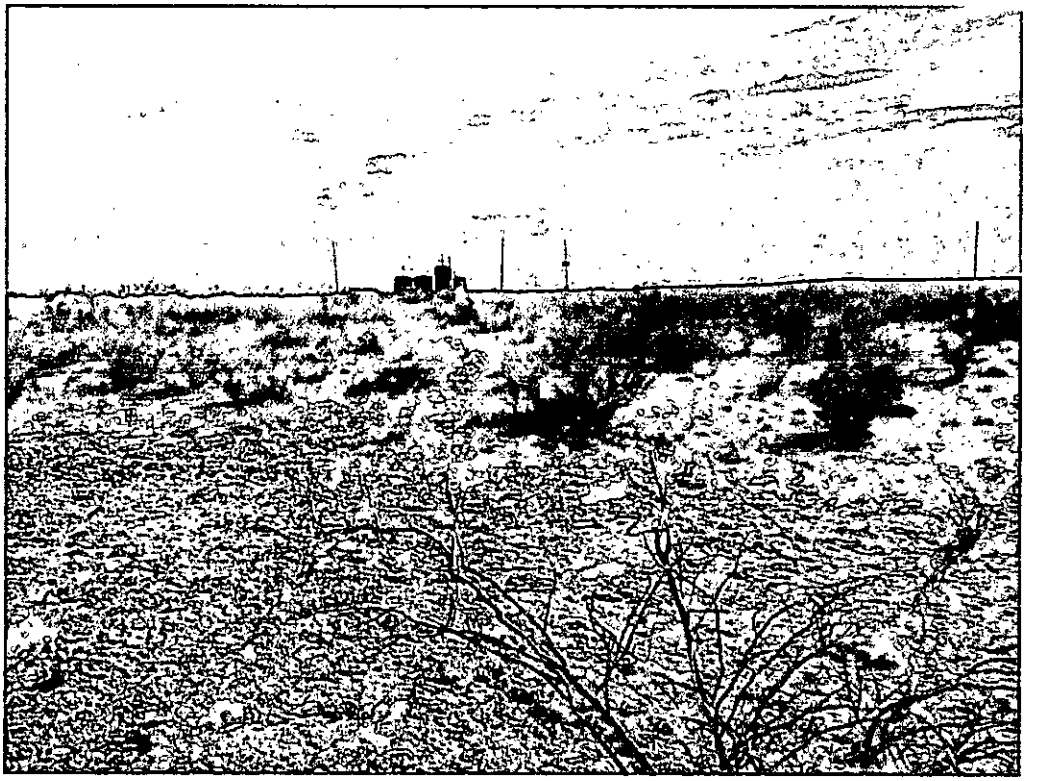
View North – Area of AH-13

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



View North – Area of AH-14

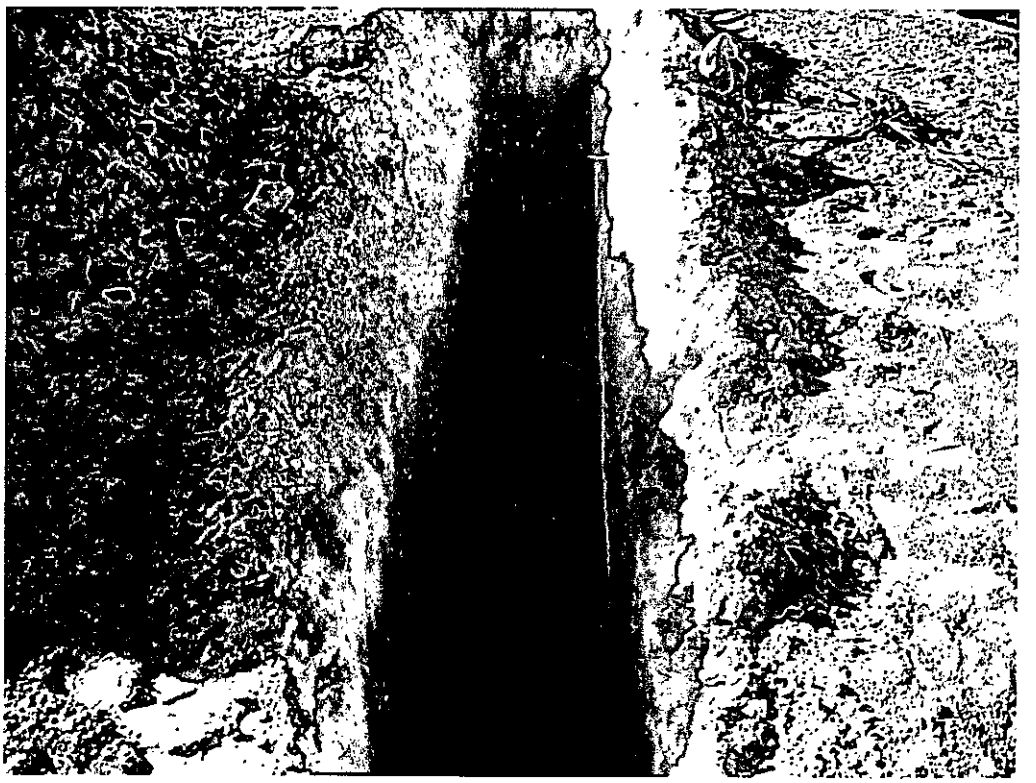


View South – Area of AH-15

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH

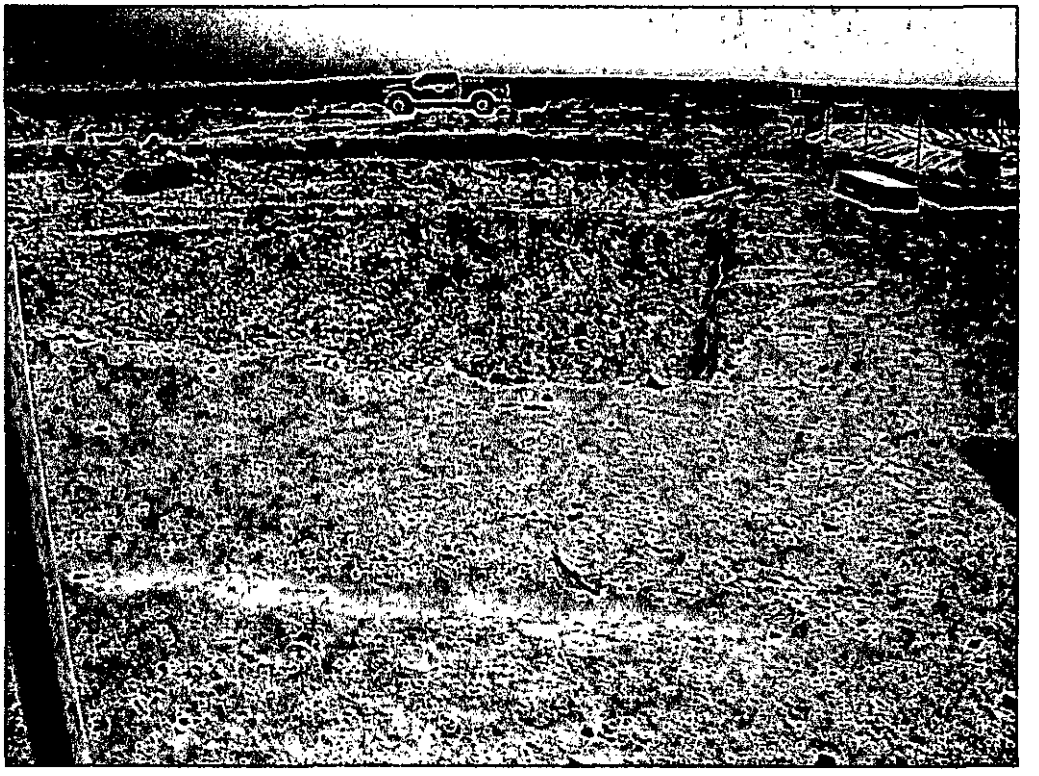
Typical Backhoe Trench



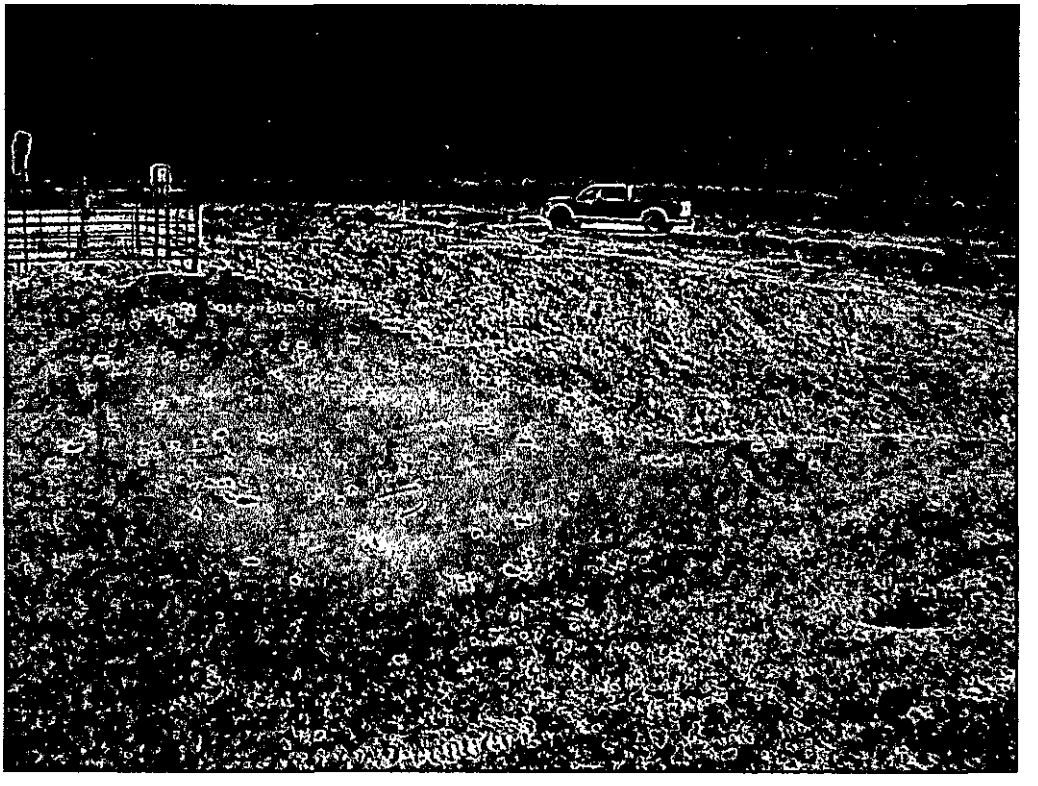
Typical Backhoe Trench

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



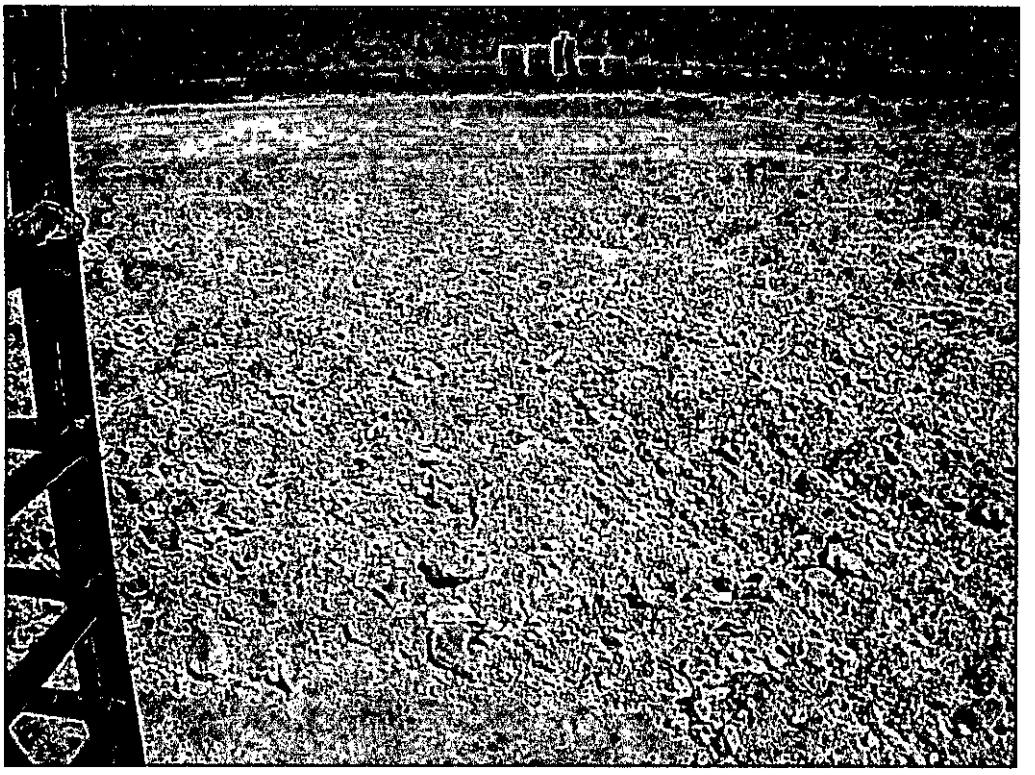
View East – Excavation area of AH-1 and AH-4



View Northeast – Excavation area of AH-4 and AH-2

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH

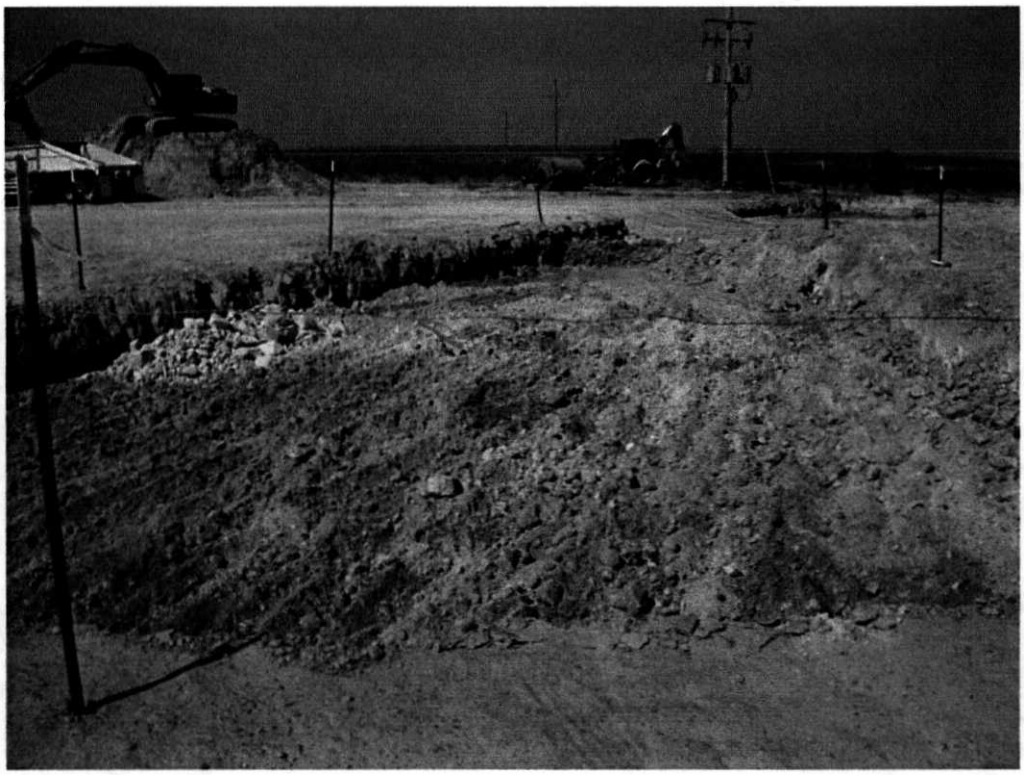


View Northeast – Excavation area of AH-3

View Northwest – Excavation area of AH-6 and AH-7

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH

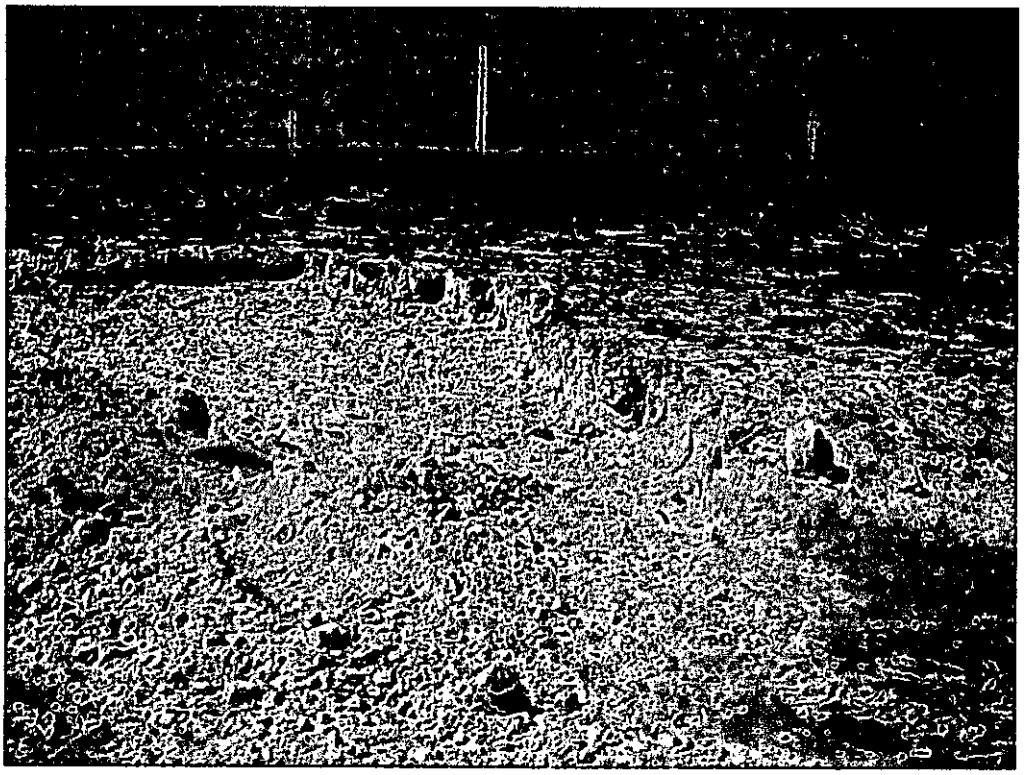


View North – Excavation area of AH-5

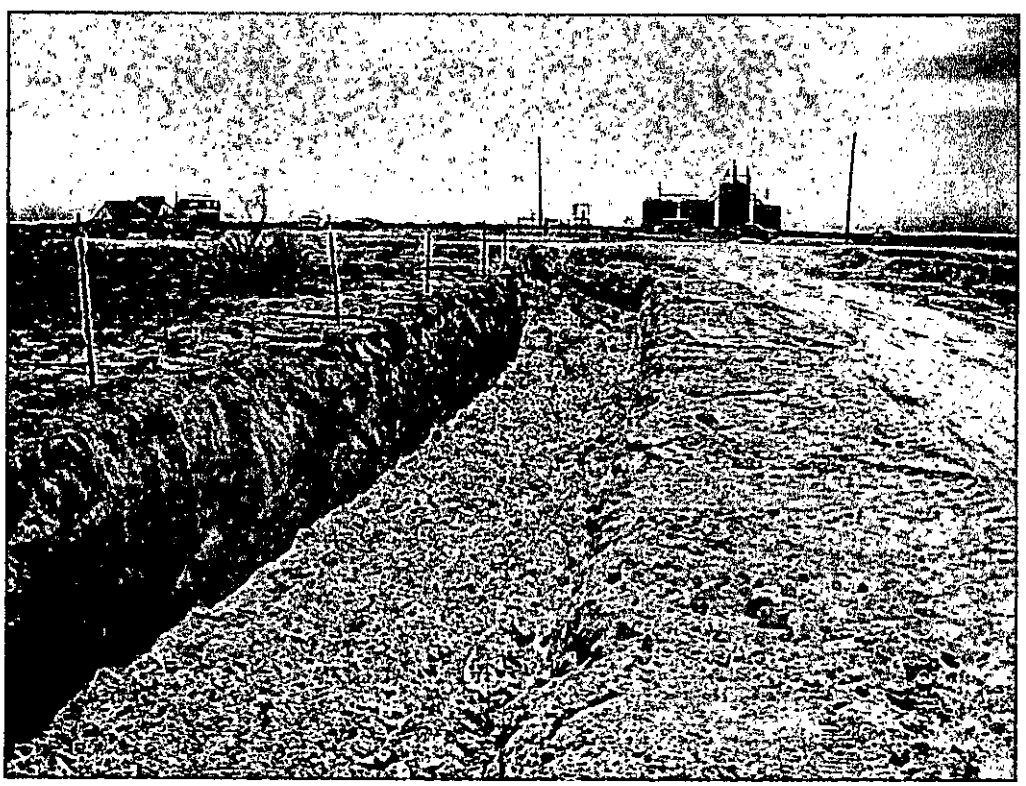
View Northwest – Excavation area of AH-8

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



View South – Excavation area of AH-9 and AH-10

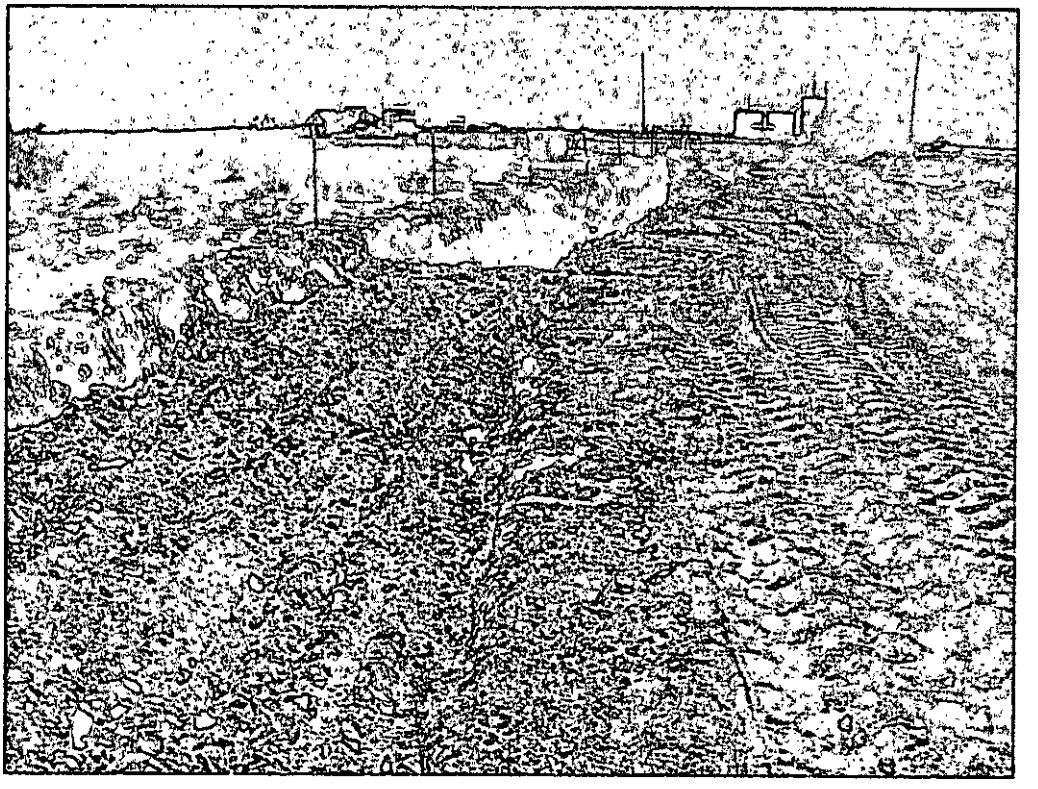


View Southeast – Excavation area of AH-12

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH

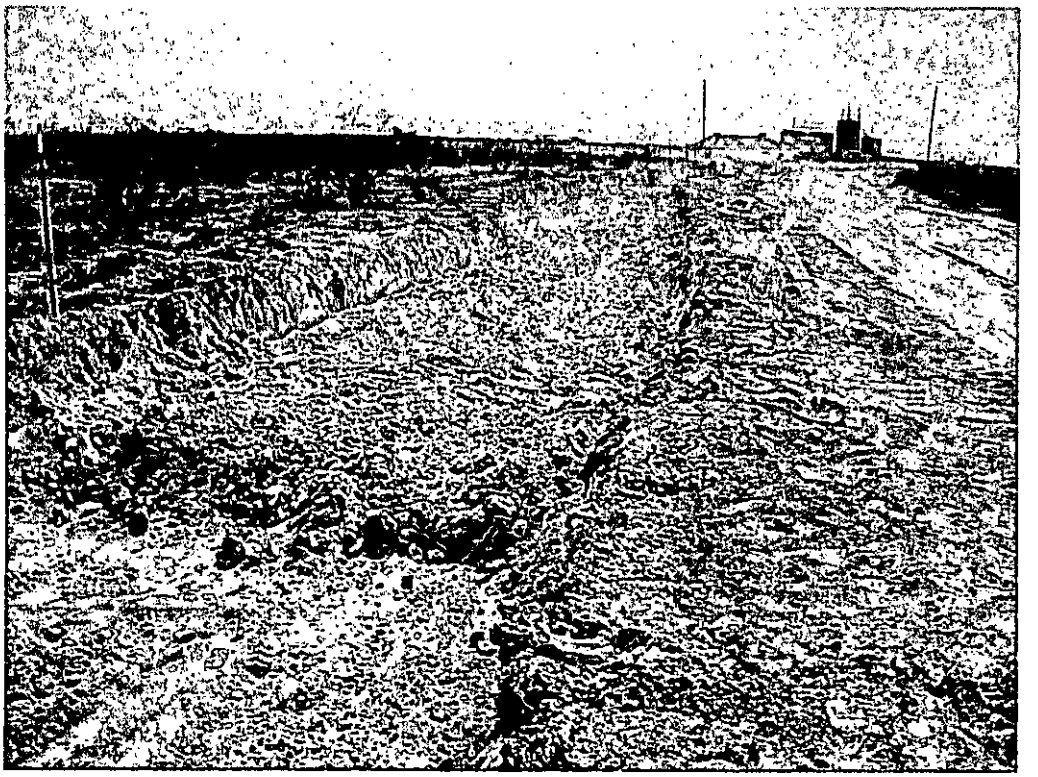
View North – Excavation area of AH-13



View Southeast –Excavation area of AH-14

COG Operating LLC
SRO SWD #1
Eddy County, New Mexico

TETRA TECH



View Southeast – Excavation area of AH-15

Tables

Table 1
COG Operating LLC.
SRO SWD #101
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-1	12/17/2013	0-.5		X	26.5	<50.0	26.5	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	8,910
T-1	3/14/2014	0		X	-	-	-	-	-	-	-	-	1,360
	"	2		X	-	-	-	-	-	-	-	-	2,290
	"	4	X		-	-	-	-	-	-	-	-	2,600
	"	6	x		-	-	-	-	-	-	-	-	2,380
	"	8	X		-	-	-	-	-	-	-	-	2,070
	"	10	X		-	-	-	-	-	-	-	-	1,350
AH-2	12/17/2013	0-.5		X	7.77	<50.0	7.77	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	4,060
T-2	3/14/2014	0		X	-	-	-	-	-	-	-	-	1,340
	"	2	X		-	-	-	-	-	-	-	-	736
	"	4	X		-	-	-	-	-	-	-	-	147
	"	6	x		-	-	-	-	-	-	-	-	58.9
	"	8	X		-	-	-	-	-	-	-	-	49.1
	"	10	X		-	-	-	-	-	-	-	-	255
AH-3	12/17/2013	0-.5	X	X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	13,400
T-3	3/14/2014	0	X	X	-	-	-	-	-	-	-	-	2,340
	"	2	X		-	-	-	-	-	-	-	-	4,580
	"	4	X		-	-	-	-	-	-	-	-	1,220
	"	6	x		-	-	-	-	-	-	-	-	1,420
	"	8	X		-	-	-	-	-	-	-	-	1,630
	"	10	X		-	-	-	-	-	-	-	-	1,500

Table 1
COG Operating LLC.
SRO SWD #101
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-4	12/17/2013	0-.5		X	8.16	<50.0	8.16	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**5,570**
T-4	3/14/2014	0		X	-	-	-	-	-	-	-	-	**1,950**
	"	2		X	-	-	-	-	-	-	-	-	**4,470**
	"	4	X		-	-	-	-	-	-	-	-	**2,210**
	"	6	x		-	-	-	-	-	-	-	-	**1,310**
	"	8	X		-	-	-	-	-	-	-	-	**1,530**
	"	10	X		-	-	-	-	-	-	-	-	742
AH-5	12/17/2013	0-.5		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**6,240**
T-5	3/14/2014	0		X	-	-	-	-	-	-	-	-	**1,850**
	"	2		X	-	-	-	-	-	-	-	-	**5,110**
	"	4	X		-	-	-	-	-	-	-	-	**1,960**
	"	6	x		-	-	-	-	-	-	-	-	**1,230**
	"	8	X		-	-	-	-	-	-	-	-	**2,290**
	"	10	X		-	-	-	-	-	-	-	-	775
AH-6	12/17/2013	0-0.5		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**6,520**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**3,970**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**1,360**
	"	3-3.5	x		-	-	-	-	-	-	-	-	**1,710**
	"	4-4.5	X		-	-	-	-	-	-	-	-	**1,570**
AH-7	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**7,940**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**2,560**
	"	2-2.5		X	-	-	-	-	-	-	-	-	725
	"	3-3.5	x		-	-	-	-	-	-	-	-	853
	"	4-4.5	X		-	-	-	-	-	-	-	-	**1,450**

Table 1
COG Operating LLC.
SRO SWD #101
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-8	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**10,600**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**1,390**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**2,300**
	"	3-3.5		X	-	-	-	-	-	-	-	-	**2,020**
	"	4-4.5	X		-	-	-	-	-	-	-	-	**1,310**
AH-9	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**2,420**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**1,330**
	"	2-2.5		X	-	-	-	-	-	-	-	-	982
	"	3-3.5	x		-	-	-	-	-	-	-	-	**1,090**
	"	4-4.5	X		-	-	-	-	-	-	-	-	912
AH-10	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**6,490**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**3,700**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**1,590**
	"	3-3.5	x		-	-	-	-	-	-	-	-	**1,170**
	"	3.5-4	X		-	-	-	-	-	-	-	-	**1,250**
AH-11	12/17/2013	0-1	X		<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	417
	"	1-1.5	X		-	-	-	-	-	-	-	-	**1,110**
	"	2-2.5	X		-	-	-	-	-	-	-	-	973
	"	3-3.5	x		-	-	-	-	-	-	-	-	879
	"	4-4.5	X		-	-	-	-	-	-	-	-	591

Table 1
COG Operating LLC.
SRO SWD #101
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-12	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**11,200**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**8,200**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**7,360**
	"	3-3.5		X	-	-	-	-	-	-	-	-	**2,910**
	"	4-4.5		X	-	-	-	-	-	-	-	-	**2,270**
T-6	3/14/2014	0		X	-	-	-	-	-	-	-	-	**15,800**
	"	2		X	-	-	-	-	-	-	-	-	**4,960**
	"	4		X	-	-	-	-	-	-	-	-	**2,250**
	"	6		X	-	-	-	-	-	-	-	-	**1,320**
	"	8	X		-	-	-	-	-	-	-	-	981
	"	10	X		-	-	-	-	-	-	-	-	991
AH-13	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**13,300**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**4,500**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**3,160**
	"	3-3.5	x		-	-	-	-	-	-	-	-	**1,220**
	"	4-4.5	X		-	-	-	-	-	-	-	-	914
AH-14	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**14,500**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**15,800**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**10,400**
	"	3-3.5		X	-	-	-	-	-	-	-	-	**8,450**
T-7	3/14/2014	0		X	-	-	-	-	-	-	-	-	**2,770**
	"	2		X	-	-	-	-	-	-	-	-	**2,260**
	"	4	X		-	-	-	-	-	-	-	-	416
	"	6	x		-	-	-	-	-	-	-	-	261
	"	8	X		-	-	-	-	-	-	-	-	426
	"	10	X		-	-	-	-	-	-	-	-	522

Table 1
COG Operating LLC.
SRO SWD #101
Eddy County, New Mexico

Sample ID	Sample Date	BEB Sample Depth (ft)	Soil Status		TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
			In-Situ	Removed	GRO	DRO	Total						
AH-15	12/17/2013	0-1		X	<4.00	<50.0	<50.0	<0.0200	<0.0200	<0.0200	<0.0200	<0.0200	**10,000**
	"	1-1.5		X	-	-	-	-	-	-	-	-	**6,410**
	"	2-2.5		X	-	-	-	-	-	-	-	-	**1,770**
	"	3-3.5		X	-	-	-	-	-	-	-	-	**1,040**
	"	4-4.5		X	-	-	-	-	-	-	-	-	**7,280**
T-8	3/14/2014	0		X	-	-	-	-	-	-	-	-	**14,800**
	"	2		X	-	-	-	-	-	-	-	-	**5,460**
	"	4		X	-	-	-	-	-	-	-	-	870
	"	6	x		-	-	-	-	-	-	-	-	861
	"	8	X		-	-	-	-	-	-	-	-	532
	"	10	X		-	-	-	-	-	-	-	-	665
Background	12/17/2013	0-1	X		-	-	-	-	-	-	-	-	<20.0
	"	1-1.5	X		-	-	-	-	-	-	-	-	<20.0
	"	2-2.5	X		-	-	-	-	-	-	-	-	<20.0
	"	3-3.5	x		-	-	-	-	-	-	-	-	65.0
Background Trench	3/18/2014	0	X		-	-	-	-	-	-	-	-	<16.0
	"	2	X		-	-	-	-	-	-	-	-	224
	"	4	X		-	-	-	-	-	-	-	-	816
	"	6	x		-	-	-	-	-	-	-	-	1,260
	"	8	X		-	-	-	-	-	-	-	-	1,730
	"	10	x		-	-	-	-	-	-	-	-	2,640

(-) Not Analyzed

(BEB) Below Excavation Bottom

Excavation Depth

Date modified:5/6/2014

Appendix A

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	COG OPERATING LLC	Contact	Robert McNeill
Address	600 West Illinois Avenue, Midland, TX 79701	Telephone No.	432-230-0077
Facility Name	SRO SWD #101	Facility Type	Tank Battery

Surface Owner State	Mineral Owner	Lease No. (API#) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	05	26S	28E					Eddy

Latitude 32.07351 Longitude 104.1067

NATURE OF RELEASE

Type of Release Produced water	Volume of Release 85bbls	Volume Recovered 35bbls
Source of Release 3" steel line	Date and Hour of Occurrence 11-26-2013	Date and Hour of Discovery 11-26-2013 08:30am
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher - NMOCD	
By Whom? Michelle Mullins	Date and Hour 11-27-2013 09:45am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

A 3" steel line between the H-pump and the well head corroded due to corrosion.

Describe Area Affected and Cleanup Action Taken.*

Initially 85bbls of produced water were released from a steel line that had developed a hole going from the H- pump to the well. We were able to recover 35bbls with a vacuum truck. The release was contained on the location. All free fluids have been recovered. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD/BLM for approval prior to any significant remediation work.

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:	OIL CONSERVATION DIVISION
Printed Name: Robert Grubbs Jr.	Approved by District Supervisor:
Title: Senior Environmental Coordinator	Approval Date: / Expiration Date:
E-mail Address: rgrubbs@concho.com	Conditions of Approval: / Attached ☐
Date: 12-11-2013 Phone: 432-661-6601	

* Attach Additional Sheets If Necessary

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 04 2014
RECEIVED

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 **COG Operating LLC**	Contact **Robert McNeil**
Address **600West Illinois Avenue Midland, Texas 79701**	Telephone No. **(432) 230-0077**
Facility Name SRO SWD #101	Facility Type **Tank Battery**

Surface Owner: State	Mineral Owner	Lease No. (API #) 30-015-26105

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	05	26S	28E					Eddy

Latitude N 32.07351° **Longitude** W 104.1067°

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release 85 bbls	Volume Recovered 35 bbls
Source of Release: Equalizer	Date and Hour of Occurrence 11/26/2013	Date and Hour of Discovery 11/26/2013 08:30 a.m.
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom? **Mike Bratcher- NMOCD**	
By Whom? Michelle Mullins	Date and Hour 11-27-2013 09:45 a.m.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*

N/A

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 04 2014
RECEIVED

Describe Cause of Problem and Remedial Action Taken.*

A 3" steel line between the H-pump and the well head corroded.

Describe Area Affected and Cleanup Action Taken.*

Initially 85 bbls of produced water were released from a steel line that had developed a hole going from the H-pump to the well. We were able to recover 35 bbls with a vacuum truck. All free fluids have been recovered. Tetra Tech inspected site and collected samples to define spills extent. Soil that exceeded RRAL was removed and hauled away for proper disposal. Site was then brought up to surface grade with clean backfill material. Tetra Tech prepared closure report and submitted to NMOCD for review.

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:	OIL CONSERVATION DIVISION	
Printed Name: Ike Tavarez (Agent for COG)	Approved by District Supervisor:	
Title: Project Manager	Approval Date:	Expiration Date:
E-mail Address: Ike.Tavarez@TetraTech.com	Conditions of Approval:	Attached ☐
Date: 5-14-14 Phone: (432) 682-4559		

* Attach Additional Sheets If Necessary

Appendix F

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Justin Nixon
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 5/8/2023 8:10:50 AM

JOB DESCRIPTION

SRO SWD #101
SDG NUMBER SRO (301796637)

JOB NUMBER

880-27975-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

Eurofins Midland

Job Notes

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

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

Authorization

Generated
5/8/2023 8:10:50 AM

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

Table of Contents

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Job ID: 880-27975-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-27975-1

Receipt
The samples were received on 5/4/2023 3:07 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 5.5°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: AH1-1'-S-050323 (880-27975-1), AH1-2'-S-050323 (880-27975-2), AH1-4'-S-050323 (880-27975-3), AH3-1'-S-050323 (880-27975-4), AH3-2'-S-050323 (880-27975-5), AH3-4'-S-050323 (880-27975-6), AH4-1'-S-050323 (880-27975-7), AH4-2'-S-050323 (880-27975-8) and AH4-4'-S-050323 (880-27975-9).

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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-52638 and analytical batch 880-52587 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-27975-A-1-C MS) and (880-27975-A-1-D MSD). 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: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH1-1'-S-050323

Lab Sample ID: 880-27975-1
Date Collected: 05/03/23 08:30
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 21:17	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		05/04/23 15:23	05/04/23 21:17	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		05/04/23 15:23	05/04/23 21:17	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 15:23	05/04/23 21:17	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		05/04/23 15:23	05/04/23 21:17	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 15:23	05/04/23 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:17*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00400	0.00101	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**240**		49.9	15.0	mg/Kg			05/05/23 15:27	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	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 21:56	1
Diesel Range Organics (Over C10-C28)	**240**	**F1**	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 21:56	1
OIl Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/04/23 15:40*	*05/04/23 21:56*	*1*
o-Terphenyl	*76*		*70 - 130*	*05/04/23 15:40*	*05/04/23 21:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8100**		49.9	3.94	mg/Kg			05/05/23 15:22	10

Client Sample ID: AH1-2'-S-050323

Lab Sample ID: 880-27975-2
Date Collected: 05/03/23 08:40
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 21:38	1
Toluene	<0.000452	U	0.00198	0.000452	mg/Kg		05/04/23 15:23	05/04/23 21:38	1
Ethylbenzene	<0.000561	U	0.00198	0.000561	mg/Kg		05/04/23 15:23	05/04/23 21:38	1
m-Xylene & p-Xylene	<0.00100	U	0.00397	0.00100	mg/Kg		05/04/23 15:23	05/04/23 21:38	1
o-Xylene	**0.000344**	**J**	0.00198	0.000341	mg/Kg		05/04/23 15:23	05/04/23 21:38	1
Xylenes, Total	<0.00100	U	0.00397	0.00100	mg/Kg		05/04/23 15:23	05/04/23 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:38*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:38*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH1-2'-S-050323

Lab Sample ID: 880-27975-2
Date Collected: 05/03/23 08:40
Matrix: Solid
Date Received: 05/04/23 15:07

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			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**27.4**	**J**	49.9	15.0	mg/Kg			05/05/23 15:27	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	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:01	1
Diesel Range Organics (Over C10-C28)	**27.4**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:01	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:01*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**679**		5.01	0.396	mg/Kg			05/05/23 15:38	1

Client Sample ID: AH1-4'-S-050323

Lab Sample ID: 880-27975-3
Date Collected: 05/03/23 08:50
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 21:58	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		05/04/23 15:23	05/04/23 21:58	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		05/04/23 15:23	05/04/23 21:58	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		05/04/23 15:23	05/04/23 21:58	1
o-Xylene	<0.000347	U	0.00202	0.000347	mg/Kg		05/04/23 15:23	05/04/23 21:58	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		05/04/23 15:23	05/04/23 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:58*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*05/04/23 15:23*	*05/04/23 21:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00102	U	0.00404	0.00102	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**18.8**	**J**	49.9	15.0	mg/Kg			05/05/23 15:27	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	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:23	1
Diesel Range Organics (Over C10-C28)	**18.8**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:23	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH1-4'-S-050323

Lab Sample ID: 880-27975-3
Date Collected: 05/03/23 08:50
Matrix: Solid
Date Received: 05/04/23 15:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:23*	*1*
o-Terphenyl	*80*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52.1**		5.00	0.395	mg/Kg			05/04/23 20:21	1

Client Sample ID: AH3-1'-S-050323

Lab Sample ID: 880-27975-4
Date Collected: 05/03/23 09:00
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 22:19	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		05/04/23 15:23	05/04/23 22:19	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		05/04/23 15:23	05/04/23 22:19	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		05/04/23 15:23	05/04/23 22:19	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		05/04/23 15:23	05/04/23 22:19	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		05/04/23 15:23	05/04/23 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*05/04/23 15:23*	*05/04/23 22:19*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/04/23 15:23*	*05/04/23 22:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**33.2**	**J**	50.0	15.0	mg/Kg			05/05/23 15:27	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	**15.0**	**J**	50.0	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:44	1
Diesel Range Organics (Over C10-C28)	**18.2**	**J**	50.0	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:44	1
Oll Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		05/04/23 15:40	05/04/23 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:44*	*1*
o-Terphenyl	*76*		*70 - 130*	*05/04/23 15:40*	*05/04/23 23:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.3**		5.05	0.399	mg/Kg			05/04/23 20:26	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH3-2'-S-050323

Lab Sample ID: 880-27975-5
Date Collected: 05/03/23 09:10
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 22:39	1
Toluene	<0.000459	U	0.00201	0.000459	mg/Kg		05/04/23 15:23	05/04/23 22:39	1
Ethylbenzene	<0.000568	U	0.00201	0.000568	mg/Kg		05/04/23 15:23	05/04/23 22:39	1
m-Xylene & p-Xylene	<0.00102	U	0.00402	0.00102	mg/Kg		05/04/23 15:23	05/04/23 22:39	1
o-Xylene	**0.000355**	**J**	0.00201	0.000346	mg/Kg		05/04/23 15:23	05/04/23 22:39	1
Xylenes, Total	<0.00102	U	0.00402	0.00102	mg/Kg		05/04/23 15:23	05/04/23 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*05/04/23 15:23*	*05/04/23 22:39*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/04/23 15:23*	*05/04/23 22:39*	*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	0.00402	0.00102	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**34.6**	**J**	49.8	14.9	mg/Kg			05/05/23 15:27	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	**17.4**	**J**	49.8	14.9	mg/Kg		05/04/23 15:40	05/05/23 00:06	1
Diesel Range Organics (Over C10-C28)	**17.2**	**J**	49.8	14.9	mg/Kg		05/04/23 15:40	05/05/23 00:06	1
OII Range Organics (Over C28-C36)	<14.9	U	49.8	14.9	mg/Kg		05/04/23 15:40	05/05/23 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:06*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**85.2**		5.02	0.397	mg/Kg			05/04/23 20:31	1

Client Sample ID: AH3-4'-S-050323

Lab Sample ID: 880-27975-6
Date Collected: 05/03/23 09:20
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 23:00	1
Toluene	<0.000461	U	0.00202	0.000461	mg/Kg		05/04/23 15:23	05/04/23 23:00	1
Ethylbenzene	<0.000571	U	0.00202	0.000571	mg/Kg		05/04/23 15:23	05/04/23 23:00	1
m-Xylene & p-Xylene	<0.00102	U	0.00404	0.00102	mg/Kg		05/04/23 15:23	05/04/23 23:00	1
o-Xylene	**0.000367**	**J**	0.00202	0.000347	mg/Kg		05/04/23 15:23	05/04/23 23:00	1
Xylenes, Total	<0.00102	U	0.00404	0.00102	mg/Kg		05/04/23 15:23	05/04/23 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*05/04/23 15:23*	*05/04/23 23:00*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/04/23 15:23*	*05/04/23 23:00*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH3-4'-S-050323

Lab Sample ID: 880-27975-6
Date Collected: 05/03/23 09:20
Matrix: Solid
Date Received: 05/04/23 15:07

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			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**18.6**	**J**	49.9	15.0	mg/Kg			05/05/23 15:27	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	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:27	1
Diesel Range Organics (Over C10-C28)	**18.6**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:27	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:27*	*1*
o-Terphenyl	*81*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.0**		4.97	0.393	mg/Kg			05/04/23 20:47	1

Client Sample ID: AH4-1'-S-050323

Lab Sample ID: 880-27975-7
Date Collected: 05/03/23 09:30
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:23	05/04/23 23:20	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		05/04/23 15:23	05/04/23 23:20	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		05/04/23 15:23	05/04/23 23:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		05/04/23 15:23	05/04/23 23:20	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		05/04/23 15:23	05/04/23 23:20	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		05/04/23 15:23	05/04/23 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/04/23 15:23*	*05/04/23 23:20*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*05/04/23 15:23*	*05/04/23 23:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**39.9**	**J**	49.9	15.0	mg/Kg			05/05/23 15:27	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	**23.7**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:49	1
Diesel Range Organics (Over C10-C28)	**16.2**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:49	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH4-1'-S-050323

Lab Sample ID: 880-27975-7
Date Collected: 05/03/23 09:30
Matrix: Solid
Date Received: 05/04/23 15:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:49*	*1*
o-Terphenyl	*78*		*70 - 130*	*05/04/23 15:40*	*05/05/23 00:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1590**		24.8	1.96	mg/Kg			05/05/23 15:43	5

Client Sample ID: AH4-2'-S-050323

Lab Sample ID: 880-27975-8
Date Collected: 05/03/23 09:40
Matrix: Solid
Date Received: 05/04/23 15:07

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		05/04/23 15:28	05/05/23 04:00	1
Toluene	<0.000455	U	0.00200	0.000455	mg/Kg		05/04/23 15:28	05/05/23 04:00	1
Ethylbenzene	<0.000564	U	0.00200	0.000564	mg/Kg		05/04/23 15:28	05/05/23 04:00	1
m-Xylene & p-Xylene	<0.00101	U	0.00399	0.00101	mg/Kg		05/04/23 15:28	05/05/23 04:00	1
o-Xylene	<0.000343	U	0.00200	0.000343	mg/Kg		05/04/23 15:28	05/05/23 04:00	1
Xylenes, Total	<0.00101	U	0.00399	0.00101	mg/Kg		05/04/23 15:28	05/05/23 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*05/04/23 15:28*	*05/05/23 04:00*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*05/04/23 15:28*	*05/05/23 04:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00399	0.00101	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**16.3**	**J**	50.0	15.0	mg/Kg			05/05/23 15:27	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	<15.0	U	50.0	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:11	1
Diesel Range Organics (Over C10-C28)	**16.3**	**J**	50.0	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:11	1
OII Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*05/04/23 15:40*	*05/05/23 01:11*	*1*
o-Terphenyl	*75*		*70 - 130*	*05/04/23 15:40*	*05/05/23 01:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**865**		5.01	0.396	mg/Kg			05/05/23 15:48	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH4-4'-S-050323

Date Collected: 05/03/23 09:50
Date Received: 05/04/23 15:07

Lab Sample ID: 880-27975-9

Matrix: Solid

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		05/04/23 15:28	05/05/23 04:20	1
Toluene	<0.000458	U	0.00201	0.000458	mg/Kg		05/04/23 15:28	05/05/23 04:20	1
Ethylbenzene	<0.000567	U	0.00201	0.000567	mg/Kg		05/04/23 15:28	05/05/23 04:20	1
m-Xylene & p-Xylene	<0.00101	U	0.00402	0.00101	mg/Kg		05/04/23 15:28	05/05/23 04:20	1
o-Xylene	<0.000345	U	0.00201	0.000345	mg/Kg		05/04/23 15:28	05/05/23 04:20	1
Xylenes, Total	<0.00101	U	0.00402	0.00101	mg/Kg		05/04/23 15:28	05/05/23 04:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*05/04/23 15:28*	*05/05/23 04:20*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*05/04/23 15:28*	*05/05/23 04:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00101	U	0.00402	0.00101	mg/Kg			05/05/23 15:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**34.0**	**J**	49.9	15.0	mg/Kg			05/05/23 15:27	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	**17.9**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:33	1
Diesel Range Organics (Over C10-C28)	**16.1**	**J**	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:33	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.9	15.0	mg/Kg		05/04/23 15:40	05/05/23 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*05/04/23 15:40*	*05/05/23 01:33*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*05/04/23 15:40*	*05/05/23 01:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**511**		5.03	0.397	mg/Kg			05/04/23 21:04	1

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Method: 8021B - Volatile Organic Compounds (GC)

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

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-27975-1	AH1-1'-S-050323	93	98
880-27975-2	AH1-2'-S-050323	97	101
880-27975-3	AH1-4'-S-050323	107	102
880-27975-4	AH3-1'-S-050323	98	101
880-27975-5	AH3-2'-S-050323	103	99
880-27975-6	AH3-4'-S-050323	112	101
880-27975-7	AH4-1'-S-050323	107	106
880-27975-8	AH4-2'-S-050323	106	87
880-27975-8 MS	AH4-2'-S-050323	125	98
880-27975-8 MSD	AH4-2'-S-050323	129	92
880-27975-9	AH4-4'-S-050323	118	102
LCS 880-52593/1-A	Lab Control Sample	103	106
LCS 880-52636/1-A	Lab Control Sample	114	100
LCSD 880-52593/2-A	Lab Control Sample Dup	92	107
LCSD 880-52636/2-A	Lab Control Sample Dup	121	104
MB 880-52593/5-A	Method Blank	97	114
MB 880-52636/5-A	Method Blank	97	109

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

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

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

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

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-27975-1	AH1-1'-S-050323	102	76
880-27975-1 MS	AH1-1'-S-050323	91	64 S1-
880-27975-1 MSD	AH1-1'-S-050323	90	62 S1-
880-27975-2	AH1-2'-S-050323	106	81
880-27975-3	AH1-4'-S-050323	104	80
880-27975-4	AH3-1'-S-050323	100	76
880-27975-5	AH3-2'-S-050323	102	78
880-27975-6	AH3-4'-S-050323	106	81
880-27975-7	AH4-1'-S-050323	101	78
880-27975-8	AH4-2'-S-050323	98	75
880-27975-9	AH4-4'-S-050323	78	60 S1-
LCS 880-52638/2-A	Lab Control Sample	101	77
LCSD 880-52638/3-A	Lab Control Sample Dup	107	82
MB 880-52638/1-A	Method Blank	132 S1+	115

Percent Surrogate Recovery (Acceptance Limits)

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-52593/5-A
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52593

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		05/04/23 10:20	05/04/23 15:10	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		05/04/23 10:20	05/04/23 15:10	1
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		05/04/23 10:20	05/04/23 15:10	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 10:20	05/04/23 15:10	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		05/04/23 10:20	05/04/23 15:10	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 10:20	05/04/23 15:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/04/23 10:20*	*05/04/23 15:10*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*05/04/23 10:20*	*05/04/23 15:10*	*1*

Lab Sample ID: LCS 880-52593/1-A
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 52593

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1301		mg/Kg		130	70 - 130
Toluene	0.100	0.1241		mg/Kg		124	70 - 130
Ethylbenzene	0.100	0.09890		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.2038		mg/Kg		102	70 - 130
o-Xylene	0.100	0.09941		mg/Kg		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-52593/2-A
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 52593

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1238		mg/Kg		124	70 - 130	5	35
Toluene	0.100	0.1153		mg/Kg		115	70 - 130	7	35
Ethylbenzene	0.100	0.08851		mg/Kg		89	70 - 130	11	35
m-Xylene & p-Xylene	0.200	0.1876		mg/Kg		94	70 - 130	8	35
o-Xylene	0.100	0.08910		mg/Kg		89	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: MB 880-52636/5-A
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52636

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00200	0.000385	mg/Kg		05/04/23 15:28	05/05/23 03:31	1
Toluene	<0.000456	U	0.00200	0.000456	mg/Kg		05/04/23 15:28	05/05/23 03:31	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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

Lab Sample ID: MB 880-52636/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 52566 — **Prep Batch: 52636**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.000565	U	0.00200	0.000565	mg/Kg		05/04/23 15:28	05/05/23 03:31	1
m-Xylene & p-Xylene	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 15:28	05/05/23 03:31	1
o-Xylene	<0.000344	U	0.00200	0.000344	mg/Kg		05/04/23 15:28	05/05/23 03:31	1
Xylenes, Total	<0.00101	U	0.00400	0.00101	mg/Kg		05/04/23 15:28	05/05/23 03:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/04/23 15:28*	*05/05/23 03:31*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*05/04/23 15:28*	*05/05/23 03:31*	*1*

Lab Sample ID: LCS 880-52636/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 52566 — **Prep Batch: 52636**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1175		mg/Kg		117	70 - 130
Toluene	0.100	0.1064		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1068		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.1977		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09166		mg/Kg		92	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-52636/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 52566 — **Prep Batch: 52636**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1301		mg/Kg		130	70 - 130	10	35
Toluene	0.100	0.1203		mg/Kg		120	70 - 130	12	35
Ethylbenzene	0.100	0.1226		mg/Kg		123	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.2189		mg/Kg		109	70 - 130	10	35
o-Xylene	0.100	0.1006		mg/Kg		101	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-27975-8 MS — **Client Sample ID: AH4-2'-S-050323**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 52566 — **Prep Batch: 52636**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.000384	U	0.100	0.1025		mg/Kg		102	70 - 130
Toluene	<0.000455	U	0.100	0.1053		mg/Kg		105	70 - 130
Ethylbenzene	<0.000564	U	0.100	0.09961		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	<0.00101	U	0.201	0.1813		mg/Kg		90	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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

Lab Sample ID: 880-27975-8 MS
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: AH4-2'-S-050323
Prep Type: Total/NA
Prep Batch: 52636

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.000343	U	0.100	0.08931		mg/Kg		89	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-27975-8 MSD
Matrix: Solid
Analysis Batch: 52566

Client Sample ID: AH4-2'-S-050323
Prep Type: Total/NA
Prep Batch: 52636

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.000384	U	0.0996	0.1019		mg/Kg		102	70 - 130	1	35
Toluene	<0.000455	U	0.0996	0.1023		mg/Kg		103	70 - 130	3	35
Ethylbenzene	<0.000564	U	0.0996	0.1095		mg/Kg		110	70 - 130	9	35
m-Xylene & p-Xylene	<0.00101	U	0.199	0.2006		mg/Kg		101	70 - 130	10	35
o-Xylene	<0.000343	U	0.0996	0.09711		mg/Kg		98	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 880-52638/1-A
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52638

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		05/04/23 15:40	05/04/23 20:52	1
Diesel Range Organics (Over C10-C28)	<15.0	U	50.0	15.0	mg/Kg		05/04/23 15:40	05/04/23 20:52	1
Oil Range Organics (Over C28-C36)	<15.0	U	50.0	15.0	mg/Kg		05/04/23 15:40	05/04/23 20:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*05/04/23 15:40*	*05/04/23 20:52*	*1*
o-Terphenyl	*115*		*70 - 130*	*05/04/23 15:40*	*05/04/23 20:52*	*1*

Lab Sample ID: LCS 880-52638/2-A
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 52638

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1050		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1046		mg/Kg		105	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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

Lab Sample ID: LCS 880-52638/2-A
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 52638

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	77		70 - 130

Lab Sample ID: LCSD 880-52638/3-A
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 52638

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1124		mg/Kg		112	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1063		mg/Kg		106	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 880-27975-1 MS
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: AH1-1'-S-050323
Prep Type: Total/NA
Prep Batch: 52638

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<15.0	U	997	745.3		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)	240	F1	997	537.0	F1	mg/Kg		30	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 880-27975-1 MSD
Matrix: Solid
Analysis Batch: 52587

Client Sample ID: AH1-1'-S-050323
Prep Type: Total/NA
Prep Batch: 52638

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	<15.0	U	999	749.4		mg/Kg		75	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	240	F1	999	540.8	F1	mg/Kg		30	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	62	S1-	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-52642/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			05/04/23 19:43	1

Lab Sample ID: LCS 880-52642/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52644

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	234.4		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-52642/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52644

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	235.4		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 880-27975-1 MS — **Client Sample ID: AH1-1'-S-050323**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	8100		2500	10740		mg/Kg		106	90 - 110		

Lab Sample ID: 880-27975-1 MSD — **Client Sample ID: AH1-1'-S-050323**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8100		2500	10720		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

GC VOA

Analysis Batch: 52566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	8021B	52593
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	8021B	52593
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	8021B	52593
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	8021B	52593
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	8021B	52593
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	8021B	52593
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	8021B	52593
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	8021B	52636
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	8021B	52636
MB 880-52593/5-A	Method Blank	Total/NA	Solid	8021B	52593
MB 880-52636/5-A	Method Blank	Total/NA	Solid	8021B	52636
LCS 880-52593/1-A	Lab Control Sample	Total/NA	Solid	8021B	52593
LCS 880-52636/1-A	Lab Control Sample	Total/NA	Solid	8021B	52636
LCSD 880-52593/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	52593
LCSD 880-52636/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	52636
880-27975-8 MS	AH4-2'-S-050323	Total/NA	Solid	8021B	52636
880-27975-8 MSD	AH4-2'-S-050323	Total/NA	Solid	8021B	52636

Prep Batch: 52593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	5030B	
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	5030B	
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	5030B	
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	5030B	
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	5030B	
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	5030B	
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	5030B	
MB 880-52593/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-52593/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-52593/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 52636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	5030B	
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	5030B	
MB 880-52636/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-52636/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-52636/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-27975-8 MS	AH4-2'-S-050323	Total/NA	Solid	5030B	
880-27975-8 MSD	AH4-2'-S-050323	Total/NA	Solid	5030B	

Analysis Batch: 52732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	Total BTEX	
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

GC VOA (Continued)

Analysis Batch: 52732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 52587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	8015B NM	52638
MB 880-52638/1-A	Method Blank	Total/NA	Solid	8015B NM	52638
LCS 880-52638/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	52638
LCSD 880-52638/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	52638
880-27975-1 MS	AH1-1'-S-050323	Total/NA	Solid	8015B NM	52638
880-27975-1 MSD	AH1-1'-S-050323	Total/NA	Solid	8015B NM	52638

Prep Batch: 52638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	8015NM Prep	
MB 880-52638/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-52638/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-52638/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-27975-1 MS	AH1-1'-S-050323	Total/NA	Solid	8015NM Prep	
880-27975-1 MSD	AH1-1'-S-050323	Total/NA	Solid	8015NM Prep	

Analysis Batch: 52723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Total/NA	Solid	8015 NM	
880-27975-2	AH1-2'-S-050323	Total/NA	Solid	8015 NM	
880-27975-3	AH1-4'-S-050323	Total/NA	Solid	8015 NM	
880-27975-4	AH3-1'-S-050323	Total/NA	Solid	8015 NM	
880-27975-5	AH3-2'-S-050323	Total/NA	Solid	8015 NM	
880-27975-6	AH3-4'-S-050323	Total/NA	Solid	8015 NM	
880-27975-7	AH4-1'-S-050323	Total/NA	Solid	8015 NM	
880-27975-8	AH4-2'-S-050323	Total/NA	Solid	8015 NM	
880-27975-9	AH4-4'-S-050323	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

HPLC/IC

Leach Batch: 52642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Soluble	Solid	DI Leach	
880-27975-2	AH1-2'-S-050323	Soluble	Solid	DI Leach	
880-27975-3	AH1-4'-S-050323	Soluble	Solid	DI Leach	
880-27975-4	AH3-1'-S-050323	Soluble	Solid	DI Leach	
880-27975-5	AH3-2'-S-050323	Soluble	Solid	DI Leach	
880-27975-6	AH3-4'-S-050323	Soluble	Solid	DI Leach	
880-27975-7	AH4-1'-S-050323	Soluble	Solid	DI Leach	
880-27975-8	AH4-2'-S-050323	Soluble	Solid	DI Leach	
880-27975-9	AH4-4'-S-050323	Soluble	Solid	DI Leach	
MB 880-52642/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-52642/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-52642/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-27975-1 MS	AH1-1'-S-050323	Soluble	Solid	DI Leach	
880-27975-1 MSD	AH1-1'-S-050323	Soluble	Solid	DI Leach	

Analysis Batch: 52644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-27975-1	AH1-1'-S-050323	Soluble	Solid	300.0	52642
880-27975-2	AH1-2'-S-050323	Soluble	Solid	300.0	52642
880-27975-3	AH1-4'-S-050323	Soluble	Solid	300.0	52642
880-27975-4	AH3-1'-S-050323	Soluble	Solid	300.0	52642
880-27975-5	AH3-2'-S-050323	Soluble	Solid	300.0	52642
880-27975-6	AH3-4'-S-050323	Soluble	Solid	300.0	52642
880-27975-7	AH4-1'-S-050323	Soluble	Solid	300.0	52642
880-27975-8	AH4-2'-S-050323	Soluble	Solid	300.0	52642
880-27975-9	AH4-4'-S-050323	Soluble	Solid	300.0	52642
MB 880-52642/1-A	Method Blank	Soluble	Solid	300.0	52642
LCS 880-52642/2-A	Lab Control Sample	Soluble	Solid	300.0	52642
LCSD 880-52642/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	52642
880-27975-1 MS	AH1-1'-S-050323	Soluble	Solid	300.0	52642
880-27975-1 MSD	AH1-1'-S-050323	Soluble	Solid	300.0	52642

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH1-1'-S-050323
Lab Sample ID: 880-27975-1
Date Collected: 05/03/23 08:30
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 21:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/04/23 21:56	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	52644	05/05/23 15:22	SMC	EET MID

Client Sample ID: AH1-2'-S-050323
Lab Sample ID: 880-27975-2
Date Collected: 05/03/23 08:40
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 21:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/04/23 23:01	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/05/23 15:38	SMC	EET MID

Client Sample ID: AH1-4'-S-050323
Lab Sample ID: 880-27975-3
Date Collected: 05/03/23 08:50
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 21:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/04/23 23:23	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/04/23 20:21	SMC	EET MID

Client Sample ID: AH3-1'-S-050323
Lab Sample ID: 880-27975-4
Date Collected: 05/03/23 09:00
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 22:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH3-1'-S-050323
Lab Sample ID: 880-27975-4
Date Collected: 05/03/23 09:00
Matrix: Solid
Date Received: 05/04/23 15:07

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			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/04/23 23:44	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/04/23 20:26	SMC	EET MID

Client Sample ID: AH3-2'-S-050323
Lab Sample ID: 880-27975-5
Date Collected: 05/03/23 09:10
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 22:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/05/23 00:06	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/04/23 20:31	SMC	EET MID

Client Sample ID: AH3-4'-S-050323
Lab Sample ID: 880-27975-6
Date Collected: 05/03/23 09:20
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 23:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/05/23 00:27	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/04/23 20:47	SMC	EET MID

Client Sample ID: AH4-1'-S-050323
Lab Sample ID: 880-27975-7
Date Collected: 05/03/23 09:30
Matrix: Solid
Date Received: 05/04/23 15:07

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	52593	05/04/23 15:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/04/23 23:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/05/23 00:49	AJ	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Client Sample ID: AH4-1'-S-050323

Lab Sample ID: 880-27975-7
Date Collected: 05/03/23 09:30
Matrix: Solid
Date Received: 05/04/23 15:07

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	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	52644	05/05/23 15:43	SMC	EET MID

Client Sample ID: AH4-2'-S-050323

Lab Sample ID: 880-27975-8
Date Collected: 05/03/23 09:40
Matrix: Solid
Date Received: 05/04/23 15:07

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	52636	05/04/23 15:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/05/23 04:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/05/23 01:11	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/05/23 15:48	SMC	EET MID

Client Sample ID: AH4-4'-S-050323

Lab Sample ID: 880-27975-9
Date Collected: 05/03/23 09:50
Matrix: Solid
Date Received: 05/04/23 15:07

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	52636	05/04/23 15:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	52566	05/05/23 04:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			52732	05/05/23 15:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			52723	05/05/23 15:27	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	52638	05/04/23 15:40	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	52587	05/05/23 01:33	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	52642	05/04/23 17:27	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52644	05/04/23 21:04	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 US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

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: SRO SWD #101

Job ID: 880-27975-1
SDG: SRO (301796637)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-27975-1	AH1-1'-S-050323	Solid	05/03/23 08:30	05/04/23 15:07
880-27975-2	AH1-2'-S-050323	Solid	05/03/23 08:40	05/04/23 15:07
880-27975-3	AH1-4'-S-050323	Solid	05/03/23 08:50	05/04/23 15:07
880-27975-4	AH3-1'-S-050323	Solid	05/03/23 09:00	05/04/23 15:07
880-27975-5	AH3-2'-S-050323	Solid	05/03/23 09:10	05/04/23 15:07
880-27975-6	AH3-4'-S-050323	Solid	05/03/23 09:20	05/04/23 15:07
880-27975-7	AH4-1'-S-050323	Solid	05/03/23 09:30	05/04/23 15:07
880-27975-8	AH4-2'-S-050323	Solid	05/03/23 09:40	05/04/23 15:07
880-27975-9	AH4-4'-S-050323	Solid	05/03/23 09:50	05/04/23 15:07

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

Chain of Custody Record

eurofins Environment Testing

27975

Client Information	Sampler: Heath Boyd@Arcadis Com	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5834-795 4
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Builes@et eurofinsus com	State of Origin: NM	Page: Page 4 of 5
Company: ARCADIS US Inc	PWSID:			Job #:
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: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com, "Heath"	WO #:			
Project Name: SRO SWD #101	Project #: 88001747			
Site: SRO (30179637)	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note
			Preservation Code:				N		
AH1-1-S-050323	5/3/23	830	G	Solid			X		402
AH1-2'-S-050323		840		Solid			X		
AH1-4'-S-050323		850		Solid			X		
AH3-1'-S-050323		900		Solid			X		
AH3-2'-S-050323		910		Solid			X		
AH3-4-S-050323		920		Solid			X		
AH4-1-S-050323		930		Solid			X		
AH4-2'-S-050323		940		Solid			X		
AH4-4'-S-050323	X	950	X	Solid			X		
				Solid					
				Solid					

880-27975 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
Add to site name: Incident # NJMW1334648160

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/4/23 1505		[signature]	5/4/23 1507	
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: 5.8 15.8

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 880-27975-1
SDG Number: SRO (301796637)

Login Number: 27975
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: Justin Nixon
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 6/23/2023 10:12:06 AM Revision 2

JOB DESCRIPTION

SRO SWD #101

JOB NUMBER

890-4778-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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
6/23/2023 10:12:06 AM
Revision 2

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

Table of Contents

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low 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, 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)

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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/Site: SRO SWD #101

Job ID: 890-4778-1

Job ID: 890-4778-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4778-1

REVISION

The report being provided is a revision of the original report sent on 6/12/2023. The report (revision 1) is being revised due to Revised report to create merged report per client request.

Receipt
The samples were received on 6/5/2023 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 22.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: AH-1A-S-4' (890-4778-1), SW-8A-S-0-4' (890-4778-2), SW-9A-S-0-4' (890-4778-3) and SW-10A-S-0-4' (890-4778-4).

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-54978 and analytical batch 880-55090 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.

GC Semi VOA
Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-55008 and analytical batch 880-55080 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

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

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-29062-1

Receipt
The samples were received on 6/2/2023 3:17 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 5.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SW-6-S-0-4' (880-29062-1), SW-7-S-0-4' (880-29062-2), SW-8-S-0-4' (880-29062-3), SW-9-S-0-4' (880-29062-4), SW-10-S-0-4' (880-29062-5), B-16-S-0-4' (880-29062-6), B-17-S-4' (880-29062-7), B-18-S-4' (880-29062-8), B-19-S-4' (880-29062-9), B-20-S-4' (880-29062-10), B-21-S-4' (880-29062-11), B-22-S-4' (880-29062-12), B-23-S-4' (880-29062-13), B-24-S-4' (880-29062-14), B-25-S-4' (880-29062-15), B-26-S-4' (880-29062-16), B-27-S-4' (880-29062-17), B-28-S-4' (880-29062-18), B-29-S-4' (880-29062-19), AH-4-S-4' (880-29062-20) and AH-5-S-4' (880-29062-21).

HPLC/IC

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Job ID: 890-4778-1 (Continued)

Laboratory: Eurofins Midland (Continued)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-54661 and 880-54661 and analytical batch 880-54707 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.

Narrative

Job Narrative
880-29062-2

Receipt
The samples were received on 6/2/2023 3:17 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 5.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SW-6-S-0-4' (880-29062-1), SW-7-S-0-4' (880-29062-2), SW-8-S-0-4' (880-29062-3), SW-9-S-0-4' (880-29062-4), SW-10-S-0-4' (880-29062-5), B-16-S-0-4' (880-29062-6), B-17-S-4' (880-29062-7), B-18-S-4' (880-29062-8), B-19-S-4' (880-29062-9), B-20-S-4' (880-29062-10), B-21-S-4' (880-29062-11), B-22-S-4' (880-29062-12), B-23-S-4' (880-29062-13), B-24-S-4' (880-29062-14), B-25-S-4' (880-29062-15), B-26-S-4' (880-29062-16), B-27-S-4' (880-29062-17), B-28-S-4' (880-29062-18), B-29-S-4' (880-29062-19), AH-4-S-4' (880-29062-20) and AH-5-S-4' (880-29062-21).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54618 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 880-54618/64), (CCV 880-54618/82) and (CCV 880-54618/95).

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-54507 and 880-54705 and analytical batch 880-54618 was outside the control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: B-24-S-4' (880-29062-14) and B-26-S-4' (880-29062-16). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-54705 and analytical batch 880-54618 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54717 recovered above the upper control limit for Benzene, Toluene and Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: (CCV 880-54717/2), (CCV 880-54717/20) and (CCV 880-54717/33).

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-54723 and 880-54723 and analytical batch 880-54717 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene and o-Xylene. These analytes were biased high in the LCS 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 880-54723 and analytical batch 880-54717 was outside the control limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54659 and analytical batch 880-54610

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Job ID: 890-4778-1 (Continued)

Laboratory: Eurofins Midland (Continued)

was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW-7-S-0-4' (880-29062-2), SW-8-S-0-4' (880-29062-3), SW-9-S-0-4' (880-29062-4), B-16-S-0-4' (880-29062-6), B-20-S-4' (880-29062-10) and AH-4-S-4' (880-29062-20). 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 880-54659 and analytical batch 880-54610 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); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-54721 and analytical batch 880-54716 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.

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

Narrative

Job Narrative
880-29309-1

Receipt
The sample was received on 6/8/2023 4:36 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SW-9B-S-0-4' (880-29309-1).

GC VOA
Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-55144 and analytical batch 880-55086. The associated laboratory control sample (LCS) met acceptance criteria.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-55159/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW-9B-S-0-4' (880-29309-1), (890-4794-A-5-C), (890-4794-A-5-D MS) and (890-4794-A-5-E MSD). 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: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-6-S-0-4'

Lab Sample ID: 880-29062-1
Matrix: Solid
Date Collected: 06/01/23 10:00
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		06/05/23 09:21	06/05/23 15:50	1
Toluene	**0.000539**	**J**	0.00198	0.000451	mg/Kg		06/05/23 09:21	06/05/23 15:50	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/05/23 09:21	06/05/23 15:50	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/05/23 09:21	06/05/23 15:50	1
o-Xylene	**0.000382**	**J**	0.00198	0.000341	mg/Kg		06/05/23 09:21	06/05/23 15:50	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/05/23 09:21	06/05/23 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*	*06/05/23 09:21*	*06/05/23 15:50*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/05/23 09:21*	*06/05/23 15:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**75.9**		49.9	15.0	mg/Kg			06/05/23 11:34	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	**32.1**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 21:05	1
Diesel Range Organics (Over C10-C28)	**17.5**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 21:05	1
Oil Range Organics (Over C28-C36)	**26.3**	**J**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*06/02/23 15:38*	*06/02/23 21:05*	*1*
o-Terphenyl	*124*		*70 - 130*	*06/02/23 15:38*	*06/02/23 21:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**232**	**F1**	4.96	0.392	mg/Kg			06/04/23 14:23	1

Client Sample ID: SW-7-S-0-4'

Lab Sample ID: 880-29062-2
Matrix: Solid
Date Collected: 06/01/23 10:10
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/05/23 09:21	06/05/23 16:27	1
Toluene	**0.000712**	**J**	0.00199	0.000453	mg/Kg		06/05/23 09:21	06/05/23 16:27	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		06/05/23 09:21	06/05/23 16:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/05/23 09:21	06/05/23 16:27	1
o-Xylene	**0.000481**	**J**	0.00199	0.000342	mg/Kg		06/05/23 09:21	06/05/23 16:27	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/05/23 09:21	06/05/23 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*06/05/23 09:21*	*06/05/23 16:27*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*06/05/23 09:21*	*06/05/23 16:27*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-7-S-0-4'

Lab Sample ID: 880-29062-2
Date Collected: 06/01/23 10:10
Matrix: Solid
Date Received: 06/02/23 15:17

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00119	J	0.00398	0.00100	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	71.8		49.9	15.0	mg/Kg			06/05/23 11:34	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	32.5	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:10	1
Diesel Range Organics (Over C10-C28)	16.3	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:10	1
Oil Range Organics (Over C28-C36)	23.0	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*06/02/23 15:38*	*06/02/23 22:10*	*1*
o-Terphenyl	*142*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/02/23 22:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	304		4.99	0.394	mg/Kg			06/04/23 14:39	1

Client Sample ID: SW-8-S-0-4'

Lab Sample ID: 880-29062-3
Date Collected: 06/01/23 10:20
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/05/23 09:21	06/05/23 16:48	1
Toluene	0.000628	J	0.00199	0.000454	mg/Kg		06/05/23 09:21	06/05/23 16:48	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/05/23 09:21	06/05/23 16:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/05/23 09:21	06/05/23 16:48	1
o-Xylene	0.000555	J	0.00199	0.000343	mg/Kg		06/05/23 09:21	06/05/23 16:48	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/05/23 09:21	06/05/23 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*06/05/23 09:21*	*06/05/23 16:48*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*06/05/23 09:21*	*06/05/23 16:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00118	J	0.00398	0.00101	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.7		49.9	15.0	mg/Kg			06/05/23 11:34	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	19.8	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:32	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-8-S-0-4'

Lab Sample ID: 880-29062-3
Matrix: Solid
Date Collected: 06/01/23 10:20
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	15.8	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:32	1
Oil Range Organics (Over C28-C36)	23.1	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*06/02/23 15:38*	*06/02/23 22:32*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/02/23 22:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	850		50.2	3.97	mg/Kg			06/04/23 14:45	10

Client Sample ID: SW-9-S-0-4'

Lab Sample ID: 880-29062-4
Matrix: Solid
Date Collected: 06/01/23 10:30
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/05/23 09:21	06/05/23 17:08	1
Toluene	0.000815	J	0.00200	0.000456	mg/Kg		06/05/23 09:21	06/05/23 17:08	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/05/23 09:21	06/05/23 17:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:21	06/05/23 17:08	1
o-Xylene	0.000861	J	0.00200	0.000344	mg/Kg		06/05/23 09:21	06/05/23 17:08	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:21	06/05/23 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:08*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00168	J	0.00400	0.00101	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	57.9		49.8	14.9	mg/Kg			06/05/23 11:34	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	18.5	J B	49.8	14.9	mg/Kg		06/02/23 15:38	06/02/23 22:54	1
Diesel Range Organics (Over C10-C28)	16.7	J B	49.8	14.9	mg/Kg		06/02/23 15:38	06/02/23 22:54	1
Oil Range Organics (Over C28-C36)	22.7	J	49.8	14.9	mg/Kg		06/02/23 15:38	06/02/23 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*06/02/23 15:38*	*06/02/23 22:54*	*1*
o-Terphenyl	*144*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/02/23 22:54*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-9-S-0-4'

Lab Sample ID: 880-29062-4
Date Collected: 06/01/23 10:30
Matrix: Solid
Date Received: 06/02/23 15:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	980		50.3	3.97	mg/Kg			06/04/23 14:50	10

Client Sample ID: SW-10-S-0-4'

Lab Sample ID: 880-29062-5
Date Collected: 06/01/23 10:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000382	mg/Kg		06/05/23 09:21	06/05/23 17:29	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg		06/05/23 09:21	06/05/23 17:29	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg		06/05/23 09:21	06/05/23 17:29	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg		06/05/23 09:21	06/05/23 17:29	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/05/23 09:21	06/05/23 17:29	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg		06/05/23 09:21	06/05/23 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:29*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:29*	*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	0.00100	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	66.3		49.9	15.0	mg/Kg			06/05/23 11:34	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	26.2	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:16	1
Diesel Range Organics (Over C10-C28)	15.4	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:16	1
Oil Range Organics (Over C28-C36)	24.7	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*06/02/23 15:38*	*06/02/23 23:16*	*1*
o-Terphenyl	*120*		*70 - 130*	*06/02/23 15:38*	*06/02/23 23:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	789		49.8	3.93	mg/Kg			06/04/23 14:55	10

Client Sample ID: B-16-S-0-4'

Lab Sample ID: 880-29062-6
Date Collected: 06/01/23 11:30
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		06/05/23 09:21	06/05/23 17:49	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		06/05/23 09:21	06/05/23 17:49	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		06/05/23 09:21	06/05/23 17:49	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-16-S-0-4'

Lab Sample ID: 880-29062-6
Matrix: Solid
Date Collected: 06/01/23 11:30
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		06/05/23 09:21	06/05/23 17:49	1
o-Xylene	**0.000873**	**J**	0.00201	0.000345	mg/Kg		06/05/23 09:21	06/05/23 17:49	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		06/05/23 09:21	06/05/23 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:49*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*06/05/23 09:21*	*06/05/23 17:49*	*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	0.00101	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**81.7**		49.9	15.0	mg/Kg			06/05/23 11:34	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	**43.9**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:38	1
Diesel Range Organics (Over C10-C28)	**15.1**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:38	1
Oil Range Organics (Over C28-C36)	**22.7**	**J**	49.9	15.0	mg/Kg		06/02/23 15:38	06/02/23 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*06/02/23 15:38*	*06/02/23 23:38*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/02/23 23:38*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1530**		49.9	3.94	mg/Kg			06/04/23 15:11	10

Client Sample ID: B-17-S-4'

Lab Sample ID: 880-29062-7
Matrix: Solid
Date Collected: 06/01/23 11:40
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		06/05/23 09:21	06/05/23 18:10	1
Toluene	**0.000528**	**J**	0.00200	0.000455	mg/Kg		06/05/23 09:21	06/05/23 18:10	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		06/05/23 09:21	06/05/23 18:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/05/23 09:21	06/05/23 18:10	1
o-Xylene	**0.000601**	**J**	0.00200	0.000343	mg/Kg		06/05/23 09:21	06/05/23 18:10	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/05/23 09:21	06/05/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*06/05/23 09:21*	*06/05/23 18:10*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*06/05/23 09:21*	*06/05/23 18:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00113**	**J**	0.00399	0.00101	mg/Kg			06/06/23 13:12	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-17-S-4'

Lab Sample ID: 880-29062-7
Date Collected: 06/01/23 11:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	42.9	J	49.8	14.9	mg/Kg			06/05/23 11:34	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	20.3	J B	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 00:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 00:00	1
Oil Range Organics (Over C28-C36)	22.6	J	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*06/02/23 15:38*	*06/03/23 00:00*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/02/23 15:38*	*06/03/23 00:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		49.9	3.94	mg/Kg			06/04/23 15:17	10

Client Sample ID: B-18-S-4'

Lab Sample ID: 880-29062-8
Date Collected: 06/01/23 11:50
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		06/05/23 09:21	06/05/23 18:30	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		06/05/23 09:21	06/05/23 18:30	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		06/05/23 09:21	06/05/23 18:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		06/05/23 09:21	06/05/23 18:30	1
o-Xylene	0.000647	J	0.00201	0.000346	mg/Kg		06/05/23 09:21	06/05/23 18:30	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		06/05/23 09:21	06/05/23 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*06/05/23 09:21*	*06/05/23 18:30*	*1*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*	*06/05/23 09:21*	*06/05/23 18:30*	*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	0.00102	mg/Kg			06/06/23 13:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	67.2		50.0	15.0	mg/Kg			06/05/23 11:34	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	26.9	J B	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:22	1
Diesel Range Organics (Over C10-C28)	16.4	J B	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:22	1
Oil Range Organics (Over C28-C36)	23.9	J	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:22	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-18-S-4'

Lab Sample ID: 880-29062-8
Date Collected: 06/01/23 11:50
Matrix: Solid
Date Received: 06/02/23 15:17

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	06/02/23 15:38	06/03/23 00:22	1
o-Terphenyl	115		70 - 130	06/02/23 15:38	06/03/23 00:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1740		50.0	3.95	mg/Kg			06/04/23 15:22	10

Client Sample ID: B-19-S-4'

Lab Sample ID: 880-29062-9
Date Collected: 06/01/23 12:00
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	0.000383	mg/Kg		06/03/23 14:16	06/04/23 06:11	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/03/23 14:16	06/04/23 06:11	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/03/23 14:16	06/04/23 06:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/03/23 14:16	06/04/23 06:11	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/03/23 14:16	06/04/23 06:11	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/03/23 14:16	06/04/23 06:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	06/03/23 14:16	06/04/23 06:11	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/03/23 14:16	06/04/23 06:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	44.8	J	49.9	15.0	mg/Kg			06/05/23 11:34	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	23.1	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:44	1
Oil Range Organics (Over C28-C36)	21.7	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	06/02/23 15:38	06/03/23 00:44	1
o-Terphenyl	118		70 - 130	06/02/23 15:38	06/03/23 00:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183		5.01	0.396	mg/Kg			06/04/23 15:27	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-20-S-4'

Lab Sample ID: 880-29062-10
Date Collected: 06/01/23 12:10
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		06/03/23 14:16	06/04/23 06:37	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/03/23 14:16	06/04/23 06:37	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/03/23 14:16	06/04/23 06:37	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 06:37	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/03/23 14:16	06/04/23 06:37	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 06:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*06/03/23 14:16*	*06/04/23 06:37*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/03/23 14:16*	*06/04/23 06:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.3**		49.9	15.0	mg/Kg			06/05/23 11:34	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	**24.8**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 01:06	1
Diesel Range Organics (Over C10-C28)	**15.3**	**J B**	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 01:06	1
Oil Range Organics (Over C28-C36)	**22.2**	**J**	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*06/02/23 15:38*	*06/03/23 01:06*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/03/23 01:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1540**		50.4	3.98	mg/Kg			06/04/23 15:33	10

Client Sample ID: B-21-S-4'

Lab Sample ID: 880-29062-11
Date Collected: 06/01/23 12:20
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/03/23 14:16	06/04/23 07:03	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/03/23 14:16	06/04/23 07:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/03/23 14:16	06/04/23 07:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/03/23 14:16	06/04/23 07:03	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/03/23 14:16	06/04/23 07:03	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/03/23 14:16	06/04/23 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:03*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:03*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-21-S-4'

Lab Sample ID: 880-29062-11
Date Collected: 06/01/23 12:20
Matrix: Solid
Date Received: 06/02/23 15:17

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	0.00101	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.1**		49.8	14.9	mg/Kg			06/05/23 11:34	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	**30.6**	**J B**	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 01:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 01:49	1
Oil Range Organics (Over C28-C36)	**21.5**	**J**	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*06/02/23 15:38*	*06/03/23 01:49*	*1*
o-Terphenyl	*118*		*70 - 130*	*06/02/23 15:38*	*06/03/23 01:49*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**153**	**F1**	4.98	0.393	mg/Kg			06/04/23 15:38	1

Client Sample ID: B-22-S-4'

Lab Sample ID: 880-29062-12
Date Collected: 06/01/23 12:30
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		06/03/23 14:16	06/04/23 07:30	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		06/03/23 14:16	06/04/23 07:30	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		06/03/23 14:16	06/04/23 07:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		06/03/23 14:16	06/04/23 07:30	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/03/23 14:16	06/04/23 07:30	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		06/03/23 14:16	06/04/23 07:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:30*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:30*	*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	0.00102	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**45.9**	**J**	49.8	14.9	mg/Kg			06/05/23 11:34	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	**24.3**	**J B**	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 02:11	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-22-S-4'

Lab Sample ID: 880-29062-12
Date Collected: 06/01/23 12:30
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 02:11	1
Oil Range Organics (Over C28-C36)	**21.6**	**J**	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:11*	*1*
o-Terphenyl	*124*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1670**		50.2	3.97	mg/Kg			06/04/23 15:54	10

Client Sample ID: B-23-S-4'

Lab Sample ID: 880-29062-13
Date Collected: 06/01/23 12:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		06/03/23 14:16	06/04/23 07:57	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		06/03/23 14:16	06/04/23 07:57	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		06/03/23 14:16	06/04/23 07:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		06/03/23 14:16	06/04/23 07:57	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg		06/03/23 14:16	06/04/23 07:57	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		06/03/23 14:16	06/04/23 07:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:57*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*06/03/23 14:16*	*06/04/23 07:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**66.0**		50.0	15.0	mg/Kg			06/05/23 11:34	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	**31.3**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:33	1
Diesel Range Organics (Over C10-C28)	**15.5**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:33	1
Oil Range Organics (Over C28-C36)	**19.2**	**J**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:33*	*1*
o-Terphenyl	*129*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:33*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-23-S-4'

Lab Sample ID: 880-29062-13
Date Collected: 06/01/23 12:40
Matrix: Solid
Date Received: 06/02/23 15:17

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1840		49.5	3.91	mg/Kg			06/04/23 15:59	10

Client Sample ID: B-24-S-4'

Lab Sample ID: 880-29062-14
Date Collected: 06/01/23 12:50
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg		06/03/23 14:16	06/04/23 08:24	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		06/03/23 14:16	06/04/23 08:24	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg		06/03/23 14:16	06/04/23 08:24	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		06/03/23 14:16	06/04/23 08:24	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/03/23 14:16	06/04/23 08:24	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		06/03/23 14:16	06/04/23 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*06/03/23 14:16*	*06/04/23 08:24*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/03/23 14:16*	*06/04/23 08:24*	*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	0.00102	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	58.9		49.9	15.0	mg/Kg			06/05/23 11:34	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	23.1	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:55	1
Diesel Range Organics (Over C10-C28)	15.2	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:55	1
Oil Range Organics (Over C28-C36)	20.6	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:55*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/02/23 15:38*	*06/03/23 02:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	957		49.6	3.92	mg/Kg			06/04/23 16:16	10

Client Sample ID: B-25-S-4'

Lab Sample ID: 880-29062-15
Date Collected: 06/01/23 13:00
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/03/23 14:16	06/04/23 08:51	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/03/23 14:16	06/04/23 08:51	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/03/23 14:16	06/04/23 08:51	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-25-S-4'

Lab Sample ID: 880-29062-15
Date Collected: 06/01/23 13:00
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/03/23 14:16	06/04/23 08:51	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/03/23 14:16	06/04/23 08:51	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/03/23 14:16	06/04/23 08:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*06/03/23 14:16*	*06/04/23 08:51*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*06/03/23 14:16*	*06/04/23 08:51*	*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	0.00101	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**43.2**	**J**	50.0	15.0	mg/Kg			06/05/23 11:34	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	**23.0**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:16	1
Oil Range Organics (Over C28-C36)	**20.2**	**J**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*06/02/23 15:38*	*06/03/23 03:16*	*1*
o-Terphenyl	*122*		*70 - 130*	*06/02/23 15:38*	*06/03/23 03:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1650**		50.0	3.95	mg/Kg			06/04/23 16:21	10

Client Sample ID: B-26-S-4'

Lab Sample ID: 880-29062-16
Date Collected: 06/01/23 13:10
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		06/03/23 14:16	06/04/23 09:18	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/03/23 14:16	06/04/23 09:18	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/03/23 14:16	06/04/23 09:18	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 09:18	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/03/23 14:16	06/04/23 09:18	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 09:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*137*	*S1+*	*70 - 130*	*06/03/23 14:16*	*06/04/23 09:18*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*06/03/23 14:16*	*06/04/23 09:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/05/23 12:45	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-26-S-4'

Lab Sample ID: 880-29062-16
Date Collected: 06/01/23 13:10
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	41.8	J	50.0	15.0	mg/Kg			06/05/23 11:34	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	20.4	J B	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:39	1
Oil Range Organics (Over C28-C36)	21.4	J	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*06/02/23 15:38*	*06/03/23 03:39*	*1*
o-Terphenyl	*130*		*70 - 130*	*06/02/23 15:38*	*06/03/23 03:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	925		50.4	3.98	mg/Kg			06/04/23 16:26	10

Client Sample ID: B-27-S-4'

Lab Sample ID: 880-29062-17
Date Collected: 06/01/23 13:20
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		06/03/23 14:16	06/04/23 09:45	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		06/03/23 14:16	06/04/23 09:45	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		06/03/23 14:16	06/04/23 09:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		06/03/23 14:16	06/04/23 09:45	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg		06/03/23 14:16	06/04/23 09:45	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		06/03/23 14:16	06/04/23 09:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*06/03/23 14:16*	*06/04/23 09:45*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/03/23 14:16*	*06/04/23 09:45*	*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	0.00101	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	45.7	J	49.8	14.9	mg/Kg			06/05/23 11:34	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	25.6	J B	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 04:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 04:01	1
Oil Range Organics (Over C28-C36)	20.1	J	49.8	14.9	mg/Kg		06/02/23 15:38	06/03/23 04:01	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-27-S-4'

Lab Sample ID: 880-29062-17
Date Collected: 06/01/23 13:20
Matrix: Solid
Date Received: 06/02/23 15:17

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	06/02/23 15:38	06/03/23 04:01	1
o-Terphenyl	123		70 - 130	06/02/23 15:38	06/03/23 04:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1630		50.5	3.99	mg/Kg			06/04/23 16:32	10

Client Sample ID: B-28-S-4'

Lab Sample ID: 880-29062-18
Date Collected: 06/01/23 13:30
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		06/03/23 14:16	06/04/23 10:12	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		06/03/23 14:16	06/04/23 10:12	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		06/03/23 14:16	06/04/23 10:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		06/03/23 14:16	06/04/23 10:12	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/03/23 14:16	06/04/23 10:12	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		06/03/23 14:16	06/04/23 10:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	06/03/23 14:16	06/04/23 10:12	1
1,4-Difluorobenzene (Surr)	91		70 - 130	06/03/23 14:16	06/04/23 10:12	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	0.00102	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	56.1		49.9	15.0	mg/Kg			06/05/23 11:34	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	21.2	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:23	1
Diesel Range Organics (Over C10-C28)	15.1	J B	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:23	1
Oil Range Organics (Over C28-C36)	19.8	J	49.9	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	06/02/23 15:38	06/03/23 04:23	1
o-Terphenyl	123		70 - 130	06/02/23 15:38	06/03/23 04:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1150		49.9	3.94	mg/Kg			06/04/23 16:37	10

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-29-S-4'

Lab Sample ID: 880-29062-19
Date Collected: 06/01/23 13:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/03/23 14:16	06/04/23 12:00	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		06/03/23 14:16	06/04/23 12:00	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		06/03/23 14:16	06/04/23 12:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/03/23 14:16	06/04/23 12:00	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		06/03/23 14:16	06/04/23 12:00	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/03/23 14:16	06/04/23 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*06/03/23 14:16*	*06/04/23 12:00*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*06/03/23 14:16*	*06/04/23 12:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**61.0**		50.0	15.0	mg/Kg			06/05/23 11:34	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	**21.8**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:45	1
Diesel Range Organics (Over C10-C28)	**17.7**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:45	1
Oil Range Organics (Over C28-C36)	**21.5**	**J**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*06/02/23 15:38*	*06/03/23 04:45*	*1*
o-Terphenyl	*129*		*70 - 130*	*06/02/23 15:38*	*06/03/23 04:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**119**		5.05	0.399	mg/Kg			06/04/23 16:42	1

Client Sample ID: AH-4-S-4'

Lab Sample ID: 880-29062-20
Date Collected: 06/01/23 14:30
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	0.000381	mg/Kg		06/03/23 14:16	06/04/23 12:27	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/03/23 14:16	06/04/23 12:27	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/03/23 14:16	06/04/23 12:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 12:27	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/03/23 14:16	06/04/23 12:27	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/03/23 14:16	06/04/23 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*06/03/23 14:16*	*06/04/23 12:27*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/03/23 14:16*	*06/04/23 12:27*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: AH-4-S-4'

Lab Sample ID: 880-29062-20
Date Collected: 06/01/23 14:30
Matrix: Solid
Date Received: 06/02/23 15:17

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/05/23 12:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**79.4**		50.0	15.0	mg/Kg			06/05/23 11:34	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	**42.4**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 05:07	1
Diesel Range Organics (Over C10-C28)	**17.0**	**J B**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 05:07	1
Oil Range Organics (Over C28-C36)	**20.0**	**J**	50.0	15.0	mg/Kg		06/02/23 15:38	06/03/23 05:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*06/02/23 15:38*	*06/03/23 05:07*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*06/02/23 15:38*	*06/03/23 05:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1290**		49.9	3.94	mg/Kg			06/04/23 16:48	10

Client Sample ID: AH-5-S-4'

Lab Sample ID: 880-29062-21
Date Collected: 06/01/23 14:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199	0.000383	mg/Kg		06/05/23 09:33	06/05/23 17:50	1
Toluene	<0.00199	U *+	0.00199	0.000454	mg/Kg		06/05/23 09:33	06/05/23 17:50	1
Ethylbenzene	<0.00199	U *+	0.00199	0.000563	mg/Kg		06/05/23 09:33	06/05/23 17:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/05/23 09:33	06/05/23 17:50	1
o-Xylene	<0.00199	U *- *1	0.00199	0.000343	mg/Kg		06/05/23 09:33	06/05/23 17:50	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/05/23 09:33	06/05/23 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*06/05/23 09:33*	*06/05/23 17:50*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/05/23 09:33*	*06/05/23 17:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			06/06/23 12:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.2**		49.9	15.0	mg/Kg			06/05/23 16:57	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	**44.0**	**J**	49.9	15.0	mg/Kg		06/05/23 09:17	06/05/23 11:00	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: AH-5-S-4'

Lab Sample ID: 880-29062-21
Date Collected: 06/01/23 14:40
Matrix: Solid
Date Received: 06/02/23 15:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/05/23 09:17	06/05/23 11:00	1
Oll Range Organics (Over C28-C36)	**18.2**	**J**	49.9	15.0	mg/Kg		06/05/23 09:17	06/05/23 11:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*06/05/23 09:17*	*06/05/23 11:00*	*1*
o-Terphenyl	*128*		*70 - 130*	*06/05/23 09:17*	*06/05/23 11:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1500**		50.3	3.97	mg/Kg			06/02/23 18:25	10

Client Sample ID: SW-9B-S-0-4'

Lab Sample ID: 880-29309-1
Date Collected: 06/08/23 10:40
Matrix: Solid
Date Received: 06/08/23 16:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	0.000386	mg/Kg		06/09/23 12:33	06/10/23 19:49	1
Toluene	**0.000596**	**J F1**	0.00200	0.000457	mg/Kg		06/09/23 12:33	06/10/23 19:49	1
Ethylbenzene	<0.00200	U F1	0.00200	0.000566	mg/Kg		06/09/23 12:33	06/10/23 19:49	1
m-Xylene & p-Xylene	<0.00401	U F1	0.00401	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:49	1
o-Xylene	<0.00200	U F1	0.00200	0.000345	mg/Kg		06/09/23 12:33	06/10/23 19:49	1
Xylenes, Total	<0.00401	U F1	0.00401	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:49*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			06/12/23 13:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**45.6**	**J**	50.0	15.0	mg/Kg			06/12/23 14:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**28.2**	**J**	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:25	1
Diesel Range Organics (Over C10-C28)	**17.4**	**J**	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:25	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*06/09/23 14:05*	*06/11/23 05:25*	*1*
o-Terphenyl	*110*		*70 - 130*	*06/09/23 14:05*	*06/11/23 05:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**561**		49.8	3.93	mg/Kg			06/09/23 02:45	10

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: AH-1A-S-4'

Lab Sample ID: 890-4778-1
Matrix: Solid

Date Collected: 06/05/23 11:50
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000384	mg/Kg		06/07/23 13:42	06/09/23 12:16	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		06/07/23 13:42	06/09/23 12:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		06/07/23 13:42	06/09/23 12:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/07/23 13:42	06/09/23 12:16	1
o-Xylene	**0.000386**	**J**	0.00200	0.000343	mg/Kg		06/07/23 13:42	06/09/23 12:16	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/07/23 13:42	06/09/23 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*06/07/23 13:42*	*06/09/23 12:16*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/07/23 13:42*	*06/09/23 12:16*	*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	0.00101	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**18.4**	**J**	49.9	15.0	mg/Kg			06/09/23 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:29	1
Diesel Range Organics (Over C10-C28)	**18.4**	**J *-**	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*06/08/23 08:45*	*06/09/23 11:29*	*1*
o-Terphenyl	*90*		*70 - 130*	*06/08/23 08:45*	*06/09/23 11:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**135**		5.03	0.397	mg/Kg			06/07/23 12:12	1

Client Sample ID: SW-8A-S-0-4'

Lab Sample ID: 890-4778-2
Matrix: Solid

Date Collected: 06/05/23 14:30
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000385	mg/Kg		06/07/23 13:42	06/09/23 12:37	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:42	06/09/23 12:37	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:42	06/09/23 12:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 12:37	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:42	06/09/23 12:37	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*06/07/23 13:42*	*06/09/23 12:37*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-8A-S-0-4'

Lab Sample ID: 890-4778-2
Matrix: Solid

Date Collected: 06/05/23 14:30
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	06/07/23 13:42	06/09/23 12:37	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	0.00101	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**19.1**	**J**	49.9	15.0	mg/Kg			06/09/23 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:50	1
Diesel Range Organics (Over C10-C28)	**19.1**	**J *-**	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	06/08/23 08:45	06/09/23 11:50	1
o-Terphenyl	91		70 - 130	06/08/23 08:45	06/09/23 11:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.4**		4.99	0.394	mg/Kg			06/07/23 12:28	1

Client Sample ID: SW-9A-S-0-4'

Lab Sample ID: 890-4778-3
Matrix: Solid

Date Collected: 06/05/23 14:40
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000381	mg/Kg		06/07/23 13:42	06/09/23 12:57	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/07/23 13:42	06/09/23 12:57	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/07/23 13:42	06/09/23 12:57	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 12:57	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/07/23 13:42	06/09/23 12:57	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 12:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	06/07/23 13:42	06/09/23 12:57	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/07/23 13:42	06/09/23 12:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**18.5**	**J**	50.0	15.0	mg/Kg			06/09/23 16:20	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-9A-S-0-4'

Lab Sample ID: 890-4778-3
Matrix: Solid

Date Collected: 06/05/23 14:40
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

Method: SW846 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	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:12	1
Diesel Range Organics (Over C10-C28)	**18.5**	**J *-**	50.0	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*06/08/23 08:45*	*06/09/23 12:12*	*1*
o-Terphenyl	*88*		*70 - 130*	*06/08/23 08:45*	*06/09/23 12:12*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**736**		50.1	3.96	mg/Kg			06/07/23 12:34	10

Client Sample ID: SW-10A-S-0-4'

Lab Sample ID: 890-4778-4
Matrix: Solid

Date Collected: 06/05/23 14:50
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *+	0.00202	0.000388	mg/Kg		06/07/23 13:42	06/09/23 13:18	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		06/07/23 13:42	06/09/23 13:18	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg		06/07/23 13:42	06/09/23 13:18	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		06/07/23 13:42	06/09/23 13:18	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/07/23 13:42	06/09/23 13:18	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		06/07/23 13:42	06/09/23 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:18*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	0.00102	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**17.8**	**J**	49.9	15.0	mg/Kg			06/09/23 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:33	1
Diesel Range Organics (Over C10-C28)	**17.8**	**J *-**	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*06/08/23 08:45*	*06/09/23 12:33*	*1*
o-Terphenyl	*91*		*70 - 130*	*06/08/23 08:45*	*06/09/23 12:33*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-10A-S-0-4'

Lab Sample ID: 890-4778-4
Matrix: Solid

Date Collected: 06/05/23 14:50
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	507		49.6	3.92	mg/Kg			06/07/23 12:39	10

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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)
880-29062-1	SW-6-S-0-4'	103	82
880-29062-2	SW-7-S-0-4'	104	79
880-29062-3	SW-8-S-0-4'	109	81
880-29062-4	SW-9-S-0-4'	111	91
880-29062-5	SW-10-S-0-4'	110	87
880-29062-6	B-16-S-0-4'	109	85
880-29062-7	B-17-S-4'	108	82
880-29062-8	B-18-S-4'	102	73
880-29062-9	B-19-S-4'	105	94
880-29062-9 MS	B-19-S-4'	115	97
880-29062-9 MSD	B-19-S-4'	110	109
880-29062-10	B-20-S-4'	113	90
880-29062-11	B-21-S-4'	128	94
880-29062-12	B-22-S-4'	115	94
880-29062-13	B-23-S-4'	118	83
880-29062-14	B-24-S-4'	135 S1+	91
880-29062-15	B-25-S-4'	128	85
880-29062-16	B-26-S-4'	137 S1+	104
880-29062-17	B-27-S-4'	122	92
880-29062-18	B-28-S-4'	111	91
880-29062-19	B-29-S-4'	114	83
880-29062-20	AH-4-S-4'	121	95
880-29062-21	AH-5-S-4'	116	93
880-29309-1	SW-9B-S-0-4'	93	86
880-29309-1 MS	SW-9B-S-0-4'	95	80
880-29309-1 MSD	SW-9B-S-0-4'	96	77
890-4778-1	AH-1A-S-4'	79	87
890-4778-1 MS	AH-1A-S-4'	98	95
890-4778-1 MSD	AH-1A-S-4'	102	95
890-4778-2	SW-8A-S-0-4'	86	98
890-4778-3	SW-9A-S-0-4'	88	94
890-4778-4	SW-10A-S-0-4'	94	95
LCS 880-54705/1-A	Lab Control Sample	89	80
LCS 880-54722/1-A	Lab Control Sample	102	111
LCS 880-54723/1-A	Lab Control Sample	114	104
LCS 880-54978/1-A	Lab Control Sample	89	102
LCS 880-55144/1-A	Lab Control Sample	123	105
LCSD 880-54705/2-A	Lab Control Sample Dup	94	96
LCSD 880-54722/2-A	Lab Control Sample Dup	112	111
LCSD 880-54723/2-A	Lab Control Sample Dup	119	100
LCSD 880-54978/2-A	Lab Control Sample Dup	98	101
LCSD 880-55144/2-A	Lab Control Sample Dup	111	104
MB 880-54507/5-A	Method Blank	68 S1-	91
MB 880-54705/5-A	Method Blank	69 S1-	91
MB 880-54722/5-A	Method Blank	73	101
MB 880-54723/5-A	Method Blank	69 S1-	89
MB 880-54978/5-A	Method Blank	92	104
MB 880-55034/5-A	Method Blank	76	94
MB 880-55144/5-A	Method Blank	72	95

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-29062-1	SW-6-S-0-4'	103	124
880-29062-2	SW-7-S-0-4'	122	142 S1+
880-29062-3	SW-8-S-0-4'	118	138 S1+
880-29062-4	SW-9-S-0-4'	125	144 S1+
880-29062-5	SW-10-S-0-4'	99	120
880-29062-6	B-16-S-0-4'	119	138 S1+
880-29062-7	B-17-S-4'	98	116
880-29062-8	B-18-S-4'	99	115
880-29062-9	B-19-S-4'	99	118
880-29062-10	B-20-S-4'	107	131 S1+
880-29062-11	B-21-S-4'	100	118
880-29062-12	B-22-S-4'	108	124
880-29062-13	B-23-S-4'	105	129
880-29062-14	B-24-S-4'	101	116
880-29062-15	B-25-S-4'	100	122
880-29062-16	B-26-S-4'	113	130
880-29062-17	B-27-S-4'	103	123
880-29062-18	B-28-S-4'	101	123
880-29062-19	B-29-S-4'	105	129
880-29062-20	AH-4-S-4'	120	138 S1+
880-29062-21	AH-5-S-4'	123	128
880-29062-21 MS	AH-5-S-4'	111	101
880-29062-21 MSD	AH-5-S-4'	123	118
880-29309-1	SW-9B-S-0-4'	141 S1+	110
890-4778-1	AH-1A-S-4'	86	90
890-4778-2	SW-8A-S-0-4'	87	91
890-4778-3	SW-9A-S-0-4'	83	88
890-4778-4	SW-10A-S-0-4'	86	91
LCS 880-54659/2-A	Lab Control Sample	99	114
LCS 880-54721/2-A	Lab Control Sample	101	101
LCS 880-55008/2-A	Lab Control Sample	88	85
LCS 880-55159/2-A	Lab Control Sample	126	98
LCSD 880-54659/3-A	Lab Control Sample Dup	101	119
LCSD 880-54721/3-A	Lab Control Sample Dup	103	103
LCSD 880-55008/3-A	Lab Control Sample Dup	87	85
LCSD 880-55159/3-A	Lab Control Sample Dup	119	91
MB 880-54659/1-A	Method Blank	109	133 S1+
MB 880-54721/1-A	Method Blank	115	121
MB 880-55008/1-A	Method Blank	113	120
MB 880-55159/1-A	Method Blank	0.02 S1-	0.009 S1-

Surrogate Legend
1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-54507/5-A
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54507

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		05/31/23 13:43	06/03/23 16:03	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		05/31/23 13:43	06/03/23 16:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		05/31/23 13:43	06/03/23 16:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		05/31/23 13:43	06/03/23 16:03	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		05/31/23 13:43	06/03/23 16:03	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		05/31/23 13:43	06/03/23 16:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*05/31/23 13:43*	*06/03/23 16:03*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*05/31/23 13:43*	*06/03/23 16:03*	*1*

Lab Sample ID: MB 880-54705/5-A
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54705

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/03/23 14:16	06/04/23 05:44	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/03/23 14:16	06/04/23 05:44	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/03/23 14:16	06/04/23 05:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/03/23 14:16	06/04/23 05:44	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/03/23 14:16	06/04/23 05:44	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/03/23 14:16	06/04/23 05:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*06/03/23 14:16*	*06/04/23 05:44*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/03/23 14:16*	*06/04/23 05:44*	*1*

Lab Sample ID: LCS 880-54705/1-A
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1282		mg/Kg		128	70 - 130
Toluene	0.100	0.1108		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1063		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2071		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1029		mg/Kg		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*

Lab Sample ID: LCSD 880-54705/2-A
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1287		mg/Kg		129	70 - 130	0	35

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: LCSD 880-54705/2-A
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54705

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1166		mg/Kg		117	70 - 130	5	35
Ethylbenzene			0.100	0.1056		mg/Kg		106	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2048		mg/Kg		102	70 - 130	1	35
o-Xylene			0.100	0.1047		mg/Kg		105	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 880-29062-9 MS
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: B-19-S-4'
Prep Type: Total/NA
Prep Batch: 54705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1	0.101	0.1394	F1	mg/Kg		138	70 - 130		
Toluene	<0.00199	U	0.101	0.1244		mg/Kg		123	70 - 130		
Ethylbenzene	<0.00199	U	0.101	0.1194		mg/Kg		118	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.202	0.2327		mg/Kg		115	70 - 130		
o-Xylene	<0.00199	U	0.101	0.1147		mg/Kg		114	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 880-29062-9 MSD
Matrix: Solid
Analysis Batch: 54618

Client Sample ID: B-19-S-4'
Prep Type: Total/NA
Prep Batch: 54705

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.0996	0.1384	F1	mg/Kg		139	70 - 130	1	35
Toluene	<0.00199	U	0.0996	0.1190		mg/Kg		120	70 - 130	4	35
Ethylbenzene	<0.00199	U	0.0996	0.1103		mg/Kg		111	70 - 130	8	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2116		mg/Kg		106	70 - 130	9	35
o-Xylene	<0.00199	U	0.0996	0.1058		mg/Kg		106	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 880-54722/5-A
Matrix: Solid
Analysis Batch: 54718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/05/23 09:21	06/05/23 11:01	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/05/23 09:21	06/05/23 11:01	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/05/23 09:21	06/05/23 11:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:21	06/05/23 11:01	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: MB 880-54722/5-A
Matrix: Solid
Analysis Batch: 54718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/05/23 09:21	06/05/23 11:01	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:21	06/05/23 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*06/05/23 09:21*	*06/05/23 11:01*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/05/23 09:21*	*06/05/23 11:01*	*1*

Lab Sample ID: LCS 880-54722/1-A
Matrix: Solid
Analysis Batch: 54718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1291		mg/Kg		129	70 - 130
Toluene	0.100	0.1075		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.09845		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2096		mg/Kg		105	70 - 130
o-Xylene	0.100	0.1044		mg/Kg		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: LCSD 880-54722/2-A
Matrix: Solid
Analysis Batch: 54718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54722

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1251		mg/Kg		125	70 - 130	3	35
Toluene	0.100	0.1062		mg/Kg		106	70 - 130	1	35
Ethylbenzene	0.100	0.1018		mg/Kg		102	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2179		mg/Kg		109	70 - 130	4	35
o-Xylene	0.100	0.1064		mg/Kg		106	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: MB 880-54723/5-A
Matrix: Solid
Analysis Batch: 54717

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/05/23 09:33	06/05/23 11:35	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/05/23 09:33	06/05/23 11:35	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/05/23 09:33	06/05/23 11:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:33	06/05/23 11:35	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/05/23 09:33	06/05/23 11:35	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/05/23 09:33	06/05/23 11:35	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130	06/05/23 09:33	06/05/23 11:35	1
1,4-Difluorobenzene (Surr)	89		70 - 130	06/05/23 09:33	06/05/23 11:35	1

Lab Sample ID: LCS 880-54723/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54717 — **Prep Batch: 54723**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1383	*+	mg/Kg		138	70 - 130
Toluene	0.100	0.1216		mg/Kg		122	70 - 130
Ethylbenzene	0.100	0.1204		mg/Kg		120	70 - 130
m-Xylene & p-Xylene	0.200	0.2357		mg/Kg		118	70 - 130
o-Xylene	0.100	0.1144		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-54723/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54717 — **Prep Batch: 54723**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1489	*+	mg/Kg		149	70 - 130	7	35
Toluene	0.100	0.1349	*+	mg/Kg		135	70 - 130	10	35
Ethylbenzene	0.100	0.1324	*+	mg/Kg		132	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2585		mg/Kg		129	70 - 130	9	35
o-Xylene	0.100	0.01276	*- *1	mg/Kg		13	70 - 130	160	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-54978/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 55090 — **Prep Batch: 54978**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 11:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	06/07/23 13:42	06/09/23 11:47	1
1,4-Difluorobenzene (Surr)	104		70 - 130	06/07/23 13:42	06/09/23 11:47	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: LCS 880-54978/1-A
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1232		mg/Kg		123	70 - 130
Toluene	0.100	0.1130		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.09652		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1767		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08492		mg/Kg		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-54978/2-A
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1358	*+	mg/Kg		136	70 - 130	10	35
Toluene	0.100	0.1277		mg/Kg		128	70 - 130	12	35
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1922		mg/Kg		96	70 - 130	8	35
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130	18	35

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

Lab Sample ID: 890-4778-1 MS
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: AH-1A-S-4'
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *+	0.101	0.1112		mg/Kg		110	70 - 130
Toluene	<0.00200	U	0.101	0.1092		mg/Kg		108	70 - 130
Ethylbenzene	<0.00200	U	0.101	0.09470		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1804		mg/Kg		89	70 - 130
o-Xylene	0.000386	J	0.101	0.08583		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-4778-1 MSD
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: AH-1A-S-4'
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U *+	0.100	0.1076		mg/Kg		107	70 - 130	3	35
Toluene	<0.00200	U	0.100	0.1053		mg/Kg		105	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.09052		mg/Kg		90	70 - 130	5	35

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: 890-4778-1 MSD
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: AH-1A-S-4'
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1729		mg/Kg		86	70 - 130	4	35
o-Xylene	0.000386	J	0.100	0.08343		mg/Kg		83	70 - 130	3	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: MB 880-55034/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/08/23 12:22	06/10/23 08:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*06/08/23 12:22*	*06/10/23 08:16*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/08/23 12:22*	*06/10/23 08:16*	*1*

Lab Sample ID: MB 880-55144/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55144

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:28*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:28*	*1*

Lab Sample ID: LCS 880-55144/1-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1168		mg/Kg		117	70 - 130
Toluene	0.100	0.1048		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1086		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2243		mg/Kg		112	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: LCS 880-55144/1-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1230		mg/Kg		123	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-55144/2-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	7	35
Toluene	0.100	0.09814		mg/Kg		98	70 - 130	7	35
Ethylbenzene	0.100	0.09889		mg/Kg		99	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	9	35
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130	17	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 880-29309-1 MS
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: SW-9B-S-0-4'
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.101	0.0004494	J F1	mg/Kg		0.4	70 - 130
Toluene	0.000596	J F1	0.101	0.001963	J F1	mg/Kg		1	70 - 130
Ethylbenzene	<0.00200	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.202	<0.00403	U F1	mg/Kg		0	70 - 130
o-Xylene	<0.00200	U F1	0.101	0.0007348	J F1	mg/Kg		0.7	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*

Lab Sample ID: 880-29309-1 MSD
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: SW-9B-S-0-4'
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	0.000596	J F1	0.0996	0.001380	J F1	mg/Kg		0.8	70 - 130	35	35
Ethylbenzene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	<0.00398	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00200	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: 880-29309-1 MSD
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: SW-9B-S-0-4'
Prep Type: Total/NA
Prep Batch: 55144

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	77		70 - 130

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

Lab Sample ID: MB 880-54659/1-A
Matrix: Solid
Analysis Batch: 54610

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	17.74	J	50.0	15.0	mg/Kg		06/02/23 15:38	06/02/23 20:00	1
Diesel Range Organics (Over C10-C28)	18.62	J	50.0	15.0	mg/Kg		06/02/23 15:38	06/02/23 20:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/02/23 15:38	06/02/23 20:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	06/02/23 15:38	06/02/23 20:00	1
o-Terphenyl	133	S1+	70 - 130	06/02/23 15:38	06/02/23 20:00	1

Lab Sample ID: LCS 880-54659/2-A
Matrix: Solid
Analysis Batch: 54610

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	947.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	1000	953.0		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-54659/3-A
Matrix: Solid
Analysis Batch: 54610

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54659

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	960.3		mg/Kg		96	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	955.3		mg/Kg		96	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	119		70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: MB 880-54721/1-A
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54721

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		06/05/23 08:00	06/05/23 08:21	1
Diesel Range Organics (Over C10-C28)	15.57	J	50.0	15.0	mg/Kg		06/05/23 08:00	06/05/23 08:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/05/23 08:00	06/05/23 08:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*06/05/23 08:00*	*06/05/23 08:21*	*1*
o-Terphenyl	*121*		*70 - 130*	*06/05/23 08:00*	*06/05/23 08:21*	*1*

Lab Sample ID: LCS 880-54721/2-A
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54721

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1206		mg/Kg		121	70 - 130
Diesel Range Organics (Over C10-C28)	1000	917.6		mg/Kg		92	70 - 130

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

Lab Sample ID: LCSD 880-54721/3-A
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54721

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1211		mg/Kg		121	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	910.3		mg/Kg		91	70 - 130	1	20

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

Lab Sample ID: 880-29062-21 MS
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: AH-5-S-4'
Prep Type: Total/NA
Prep Batch: 54721

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	44.0	J	998	1039		mg/Kg		100	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1051		mg/Kg		105	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: 880-29062-21 MS
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: AH-5-S-4'
Prep Type: Total/NA
Prep Batch: 54721

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: 880-29062-21 MSD
Matrix: Solid
Analysis Batch: 54716

Client Sample ID: AH-5-S-4'
Prep Type: Total/NA
Prep Batch: 54721

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	44.0	J	999	1183		mg/Kg		114	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1214		mg/Kg		122	70 - 130	14	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: MB 880-55008/1-A
Matrix: Solid
Analysis Batch: 55080

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55008

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 07:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 07:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/08/23 08:45	06/09/23 07:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	06/08/23 08:45	06/09/23 07:48	1
o-Terphenyl	120		70 - 130	06/08/23 08:45	06/09/23 07:48	1

Lab Sample ID: LCS 880-55008/2-A
Matrix: Solid
Analysis Batch: 55080

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	754.3		mg/Kg		75	70 - 130
Diesel Range Organics (Over C10-C28)	1000	673.4	*-	mg/Kg		67	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	85		70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: LCSD 880-55008/3-A
Matrix: Solid
Analysis Batch: 55080

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55008

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	752.3		mg/Kg		75	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	999	698.5		mg/Kg		70	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: MB 880-55159/1-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55159

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.02*	*S1-*	*70 - 130*	*06/09/23 14:05*	*06/10/23 20:02*	*1*
o-Terphenyl	*0.009*	*S1-*	*70 - 130*	*06/09/23 14:05*	*06/10/23 20:02*	*1*

Lab Sample ID: LCS 880-55159/2-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	928.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	877.0		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-55159/3-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55159

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	915.1		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	906.0		mg/Kg		91	70 - 130	3	20

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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

Lab Sample ID: LCSD 880-55159/3-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55159

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54630/1-A
Matrix: Solid
Analysis Batch: 54650

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/02/23 16:06	1

Lab Sample ID: LCS 880-54630/2-A
Matrix: Solid
Analysis Batch: 54650

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	249.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-54630/3-A
Matrix: Solid
Analysis Batch: 54650

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	249.4		mg/Kg		100	90 - 110	0	20

Lab Sample ID: MB 880-54661/1-A
Matrix: Solid
Analysis Batch: 54707

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/04/23 14:07	1

Lab Sample ID: LCS 880-54661/2-A
Matrix: Solid
Analysis Batch: 54707

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-54661/3-A
Matrix: Solid
Analysis Batch: 54707

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	247.0		mg/Kg		99	90 - 110	0	20

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-29062-1 MS — **Client Sample ID: SW-6-S-0-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	232	F1	248	448.9	F1	mg/Kg		87	90 - 110

Lab Sample ID: 880-29062-1 MSD — **Client Sample ID: SW-6-S-0-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54707

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	232	F1	248	449.0	F1	mg/Kg		87	90 - 110	0	20

Lab Sample ID: 880-29062-11 MS — **Client Sample ID: B-21-S-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54707

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	153	F1	2490	3830	F1	mg/Kg		148	90 - 110

Lab Sample ID: 880-29062-11 MSD — **Client Sample ID: B-21-S-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54707

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	153	F1	2490	3827	F1	mg/Kg		148	90 - 110	0	20

Lab Sample ID: MB 880-54838/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/07/23 11:36	1

Lab Sample ID: LCS 880-54838/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	242.9		mg/Kg		97	90 - 110

Lab Sample ID: LCSD 880-54838/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	247.1		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 890-4778-1 MS — **Client Sample ID: AH-1A-S-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	135		252	367.4		mg/Kg		92	90 - 110

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-4778-1 MSD
Matrix: Solid
Analysis Batch: 54974

Client Sample ID: AH-1A-S-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	135		252	373.1		mg/Kg		95	90 - 110	2	20

Lab Sample ID: MB 880-55045/1-A
Matrix: Solid
Analysis Batch: 55059

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/09/23 00:08	1

Lab Sample ID: LCS 880-55045/2-A
Matrix: Solid
Analysis Batch: 55059

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-55045/3-A
Matrix: Solid
Analysis Batch: 55059

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	248.0		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC VOA

Prep Batch: 54507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54507/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 54618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-9	B-19-S-4'	Total/NA	Solid	8021B	54705
880-29062-10	B-20-S-4'	Total/NA	Solid	8021B	54705
880-29062-11	B-21-S-4'	Total/NA	Solid	8021B	54705
880-29062-12	B-22-S-4'	Total/NA	Solid	8021B	54705
880-29062-13	B-23-S-4'	Total/NA	Solid	8021B	54705
880-29062-14	B-24-S-4'	Total/NA	Solid	8021B	54705
880-29062-15	B-25-S-4'	Total/NA	Solid	8021B	54705
880-29062-16	B-26-S-4'	Total/NA	Solid	8021B	54705
880-29062-17	B-27-S-4'	Total/NA	Solid	8021B	54705
880-29062-18	B-28-S-4'	Total/NA	Solid	8021B	54705
880-29062-19	B-29-S-4'	Total/NA	Solid	8021B	54705
880-29062-20	AH-4-S-4'	Total/NA	Solid	8021B	54705
MB 880-54507/5-A	Method Blank	Total/NA	Solid	8021B	54507
MB 880-54705/5-A	Method Blank	Total/NA	Solid	8021B	54705
LCS 880-54705/1-A	Lab Control Sample	Total/NA	Solid	8021B	54705
LCSD 880-54705/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54705
880-29062-9 MS	B-19-S-4'	Total/NA	Solid	8021B	54705
880-29062-9 MSD	B-19-S-4'	Total/NA	Solid	8021B	54705

Prep Batch: 54705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-9	B-19-S-4'	Total/NA	Solid	5030B	
880-29062-10	B-20-S-4'	Total/NA	Solid	5030B	
880-29062-11	B-21-S-4'	Total/NA	Solid	5030B	
880-29062-12	B-22-S-4'	Total/NA	Solid	5030B	
880-29062-13	B-23-S-4'	Total/NA	Solid	5030B	
880-29062-14	B-24-S-4'	Total/NA	Solid	5030B	
880-29062-15	B-25-S-4'	Total/NA	Solid	5030B	
880-29062-16	B-26-S-4'	Total/NA	Solid	5030B	
880-29062-17	B-27-S-4'	Total/NA	Solid	5030B	
880-29062-18	B-28-S-4'	Total/NA	Solid	5030B	
880-29062-19	B-29-S-4'	Total/NA	Solid	5030B	
880-29062-20	AH-4-S-4'	Total/NA	Solid	5030B	
MB 880-54705/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54705/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54705/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-29062-9 MS	B-19-S-4'	Total/NA	Solid	5030B	
880-29062-9 MSD	B-19-S-4'	Total/NA	Solid	5030B	

Analysis Batch: 54717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Total/NA	Solid	8021B	54723
MB 880-54723/5-A	Method Blank	Total/NA	Solid	8021B	54723
LCS 880-54723/1-A	Lab Control Sample	Total/NA	Solid	8021B	54723
LCSD 880-54723/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54723

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC VOA

Analysis Batch: 54718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-6	B-16-S-0-4'	Total/NA	Solid	8021B	54722
880-29062-7	B-17-S-4'	Total/NA	Solid	8021B	54722
880-29062-8	B-18-S-4'	Total/NA	Solid	8021B	54722
MB 880-54722/5-A	Method Blank	Total/NA	Solid	8021B	54722
LCS 880-54722/1-A	Lab Control Sample	Total/NA	Solid	8021B	54722
LCSD 880-54722/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54722

Prep Batch: 54722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	5030B	
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	5030B	
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	5030B	
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	5030B	
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	5030B	
880-29062-6	B-16-S-0-4'	Total/NA	Solid	5030B	
880-29062-7	B-17-S-4'	Total/NA	Solid	5030B	
880-29062-8	B-18-S-4'	Total/NA	Solid	5030B	
MB 880-54722/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54722/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54722/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 54723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Total/NA	Solid	5030B	
MB 880-54723/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54723/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54723/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 54762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-6	B-16-S-0-4'	Total/NA	Solid	Total BTEX	
880-29062-7	B-17-S-4'	Total/NA	Solid	Total BTEX	
880-29062-8	B-18-S-4'	Total/NA	Solid	Total BTEX	
880-29062-9	B-19-S-4'	Total/NA	Solid	Total BTEX	
880-29062-10	B-20-S-4'	Total/NA	Solid	Total BTEX	
880-29062-11	B-21-S-4'	Total/NA	Solid	Total BTEX	
880-29062-12	B-22-S-4'	Total/NA	Solid	Total BTEX	
880-29062-13	B-23-S-4'	Total/NA	Solid	Total BTEX	
880-29062-14	B-24-S-4'	Total/NA	Solid	Total BTEX	
880-29062-15	B-25-S-4'	Total/NA	Solid	Total BTEX	
880-29062-16	B-26-S-4'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC VOA (Continued)

Analysis Batch: 54762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-17	B-27-S-4'	Total/NA	Solid	Total BTEX	
880-29062-18	B-28-S-4'	Total/NA	Solid	Total BTEX	
880-29062-19	B-29-S-4'	Total/NA	Solid	Total BTEX	
880-29062-20	AH-4-S-4'	Total/NA	Solid	Total BTEX	
880-29062-21	AH-5-S-4'	Total/NA	Solid	Total BTEX	

Prep Batch: 54978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	5030B	
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	5030B	
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	5030B	
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	5030B	
MB 880-54978/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54978/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54978/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
890-4778-1 MS	AH-1A-S-4'	Total/NA	Solid	5030B	
890-4778-1 MSD	AH-1A-S-4'	Total/NA	Solid	5030B	

Prep Batch: 55034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-55034/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 55086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	8021B	55144
MB 880-55034/5-A	Method Blank	Total/NA	Solid	8021B	55034
MB 880-55144/5-A	Method Blank	Total/NA	Solid	8021B	55144
LCS 880-55144/1-A	Lab Control Sample	Total/NA	Solid	8021B	55144
LCSD 880-55144/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	55144
880-29309-1 MS	SW-9B-S-0-4'	Total/NA	Solid	8021B	55144
880-29309-1 MSD	SW-9B-S-0-4'	Total/NA	Solid	8021B	55144

Analysis Batch: 55090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	8021B	54978
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	8021B	54978
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	8021B	54978
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	8021B	54978
MB 880-54978/5-A	Method Blank	Total/NA	Solid	8021B	54978
LCS 880-54978/1-A	Lab Control Sample	Total/NA	Solid	8021B	54978
LCSD 880-54978/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54978
890-4778-1 MS	AH-1A-S-4'	Total/NA	Solid	8021B	54978
890-4778-1 MSD	AH-1A-S-4'	Total/NA	Solid	8021B	54978

Prep Batch: 55144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	5030B	
MB 880-55144/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-55144/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-55144/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
880-29309-1 MS	SW-9B-S-0-4'	Total/NA	Solid	5030B	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC VOA (Continued)

Prep Batch: 55144 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1 MSD	SW-9B-S-0-4'	Total/NA	Solid	5030B	

Analysis Batch: 55174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	Total BTEX	
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	Total BTEX	
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	Total BTEX	
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	Total BTEX	

Analysis Batch: 55274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 54610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-6	B-16-S-0-4'	Total/NA	Solid	8015B NM	54659
880-29062-7	B-17-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-8	B-18-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-9	B-19-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-10	B-20-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-11	B-21-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-12	B-22-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-13	B-23-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-14	B-24-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-15	B-25-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-16	B-26-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-17	B-27-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-18	B-28-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-19	B-29-S-4'	Total/NA	Solid	8015B NM	54659
880-29062-20	AH-4-S-4'	Total/NA	Solid	8015B NM	54659
MB 880-54659/1-A	Method Blank	Total/NA	Solid	8015B NM	54659
LCS 880-54659/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54659
LCSD 880-54659/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54659

Prep Batch: 54659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-6	B-16-S-0-4'	Total/NA	Solid	8015NM Prep	
880-29062-7	B-17-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-8	B-18-S-4'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC Semi VOA (Continued)

Prep Batch: 54659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-9	B-19-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-10	B-20-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-11	B-21-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-12	B-22-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-13	B-23-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-14	B-24-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-15	B-25-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-16	B-26-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-17	B-27-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-18	B-28-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-19	B-29-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-20	AH-4-S-4'	Total/NA	Solid	8015NM Prep	
MB 880-54659/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54659/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54659/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Total/NA	Solid	8015B NM	54721
MB 880-54721/1-A	Method Blank	Total/NA	Solid	8015B NM	54721
LCS 880-54721/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54721
LCSD 880-54721/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54721
880-29062-21 MS	AH-5-S-4'	Total/NA	Solid	8015B NM	54721
880-29062-21 MSD	AH-5-S-4'	Total/NA	Solid	8015B NM	54721

Prep Batch: 54721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Total/NA	Solid	8015NM Prep	
MB 880-54721/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54721/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54721/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-29062-21 MS	AH-5-S-4'	Total/NA	Solid	8015NM Prep	
880-29062-21 MSD	AH-5-S-4'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-2	SW-7-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-3	SW-8-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-4	SW-9-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-5	SW-10-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-6	B-16-S-0-4'	Total/NA	Solid	8015 NM	
880-29062-7	B-17-S-4'	Total/NA	Solid	8015 NM	
880-29062-8	B-18-S-4'	Total/NA	Solid	8015 NM	
880-29062-9	B-19-S-4'	Total/NA	Solid	8015 NM	
880-29062-10	B-20-S-4'	Total/NA	Solid	8015 NM	
880-29062-11	B-21-S-4'	Total/NA	Solid	8015 NM	
880-29062-12	B-22-S-4'	Total/NA	Solid	8015 NM	
880-29062-13	B-23-S-4'	Total/NA	Solid	8015 NM	
880-29062-14	B-24-S-4'	Total/NA	Solid	8015 NM	
880-29062-15	B-25-S-4'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

GC Semi VOA (Continued)

Analysis Batch: 54748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-16	B-26-S-4'	Total/NA	Solid	8015 NM	
880-29062-17	B-27-S-4'	Total/NA	Solid	8015 NM	
880-29062-18	B-28-S-4'	Total/NA	Solid	8015 NM	
880-29062-19	B-29-S-4'	Total/NA	Solid	8015 NM	
880-29062-20	AH-4-S-4'	Total/NA	Solid	8015 NM	
880-29062-21	AH-5-S-4'	Total/NA	Solid	8015 NM	

Prep Batch: 55008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	8015NM Prep	
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	8015NM Prep	
MB 880-55008/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-55008/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-55008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 55080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	8015B NM	55008
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	8015B NM	55008
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	8015B NM	55008
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	8015B NM	55008
MB 880-55008/1-A	Method Blank	Total/NA	Solid	8015B NM	55008
LCS 880-55008/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	55008
LCSD 880-55008/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	55008

Prep Batch: 55159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	8015NM Prep	
MB 880-55159/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-55159/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-55159/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 55172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Total/NA	Solid	8015 NM	
890-4778-2	SW-8A-S-0-4'	Total/NA	Solid	8015 NM	
890-4778-3	SW-9A-S-0-4'	Total/NA	Solid	8015 NM	
890-4778-4	SW-10A-S-0-4'	Total/NA	Solid	8015 NM	

Analysis Batch: 55207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	8015B NM	55159
MB 880-55159/1-A	Method Blank	Total/NA	Solid	8015B NM	55159
LCS 880-55159/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	55159
LCSD 880-55159/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	55159

Analysis Batch: 55338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

HPLC/IC

Leach Batch: 54630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Soluble	Solid	DI Leach	
MB 880-54630/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54630/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54630/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 54650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-21	AH-5-S-4'	Soluble	Solid	300.0	54630
MB 880-54630/1-A	Method Blank	Soluble	Solid	300.0	54630
LCS 880-54630/2-A	Lab Control Sample	Soluble	Solid	300.0	54630
LCSD 880-54630/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54630

Leach Batch: 54661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Soluble	Solid	DI Leach	
880-29062-2	SW-7-S-0-4'	Soluble	Solid	DI Leach	
880-29062-3	SW-8-S-0-4'	Soluble	Solid	DI Leach	
880-29062-4	SW-9-S-0-4'	Soluble	Solid	DI Leach	
880-29062-5	SW-10-S-0-4'	Soluble	Solid	DI Leach	
880-29062-6	B-16-S-0-4'	Soluble	Solid	DI Leach	
880-29062-7	B-17-S-4'	Soluble	Solid	DI Leach	
880-29062-8	B-18-S-4'	Soluble	Solid	DI Leach	
880-29062-9	B-19-S-4'	Soluble	Solid	DI Leach	
880-29062-10	B-20-S-4'	Soluble	Solid	DI Leach	
880-29062-11	B-21-S-4'	Soluble	Solid	DI Leach	
880-29062-12	B-22-S-4'	Soluble	Solid	DI Leach	
880-29062-13	B-23-S-4'	Soluble	Solid	DI Leach	
880-29062-14	B-24-S-4'	Soluble	Solid	DI Leach	
880-29062-15	B-25-S-4'	Soluble	Solid	DI Leach	
880-29062-16	B-26-S-4'	Soluble	Solid	DI Leach	
880-29062-17	B-27-S-4'	Soluble	Solid	DI Leach	
880-29062-18	B-28-S-4'	Soluble	Solid	DI Leach	
880-29062-19	B-29-S-4'	Soluble	Solid	DI Leach	
880-29062-20	AH-4-S-4'	Soluble	Solid	DI Leach	
MB 880-54661/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54661/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54661/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-29062-1 MS	SW-6-S-0-4'	Soluble	Solid	DI Leach	
880-29062-1 MSD	SW-6-S-0-4'	Soluble	Solid	DI Leach	
880-29062-11 MS	B-21-S-4'	Soluble	Solid	DI Leach	
880-29062-11 MSD	B-21-S-4'	Soluble	Solid	DI Leach	

Analysis Batch: 54707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-1	SW-6-S-0-4'	Soluble	Solid	300.0	54661
880-29062-2	SW-7-S-0-4'	Soluble	Solid	300.0	54661
880-29062-3	SW-8-S-0-4'	Soluble	Solid	300.0	54661
880-29062-4	SW-9-S-0-4'	Soluble	Solid	300.0	54661
880-29062-5	SW-10-S-0-4'	Soluble	Solid	300.0	54661
880-29062-6	B-16-S-0-4'	Soluble	Solid	300.0	54661
880-29062-7	B-17-S-4'	Soluble	Solid	300.0	54661

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

HPLC/IC (Continued)

Analysis Batch: 54707 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29062-8	B-18-S-4'	Soluble	Solid	300.0	54661
880-29062-9	B-19-S-4'	Soluble	Solid	300.0	54661
880-29062-10	B-20-S-4'	Soluble	Solid	300.0	54661
880-29062-11	B-21-S-4'	Soluble	Solid	300.0	54661
880-29062-12	B-22-S-4'	Soluble	Solid	300.0	54661
880-29062-13	B-23-S-4'	Soluble	Solid	300.0	54661
880-29062-14	B-24-S-4'	Soluble	Solid	300.0	54661
880-29062-15	B-25-S-4'	Soluble	Solid	300.0	54661
880-29062-16	B-26-S-4'	Soluble	Solid	300.0	54661
880-29062-17	B-27-S-4'	Soluble	Solid	300.0	54661
880-29062-18	B-28-S-4'	Soluble	Solid	300.0	54661
880-29062-19	B-29-S-4'	Soluble	Solid	300.0	54661
880-29062-20	AH-4-S-4'	Soluble	Solid	300.0	54661
MB 880-54661/1-A	Method Blank	Soluble	Solid	300.0	54661
LCS 880-54661/2-A	Lab Control Sample	Soluble	Solid	300.0	54661
LCSD 880-54661/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54661
880-29062-1 MS	SW-6-S-0-4'	Soluble	Solid	300.0	54661
880-29062-1 MSD	SW-6-S-0-4'	Soluble	Solid	300.0	54661
880-29062-11 MS	B-21-S-4'	Soluble	Solid	300.0	54661
880-29062-11 MSD	B-21-S-4'	Soluble	Solid	300.0	54661

Leach Batch: 54838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Soluble	Solid	DI Leach	
890-4778-2	SW-8A-S-0-4'	Soluble	Solid	DI Leach	
890-4778-3	SW-9A-S-0-4'	Soluble	Solid	DI Leach	
890-4778-4	SW-10A-S-0-4'	Soluble	Solid	DI Leach	
MB 880-54838/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54838/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54838/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4778-1 MS	AH-1A-S-4'	Soluble	Solid	DI Leach	
890-4778-1 MSD	AH-1A-S-4'	Soluble	Solid	DI Leach	

Analysis Batch: 54974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4778-1	AH-1A-S-4'	Soluble	Solid	300.0	54838
890-4778-2	SW-8A-S-0-4'	Soluble	Solid	300.0	54838
890-4778-3	SW-9A-S-0-4'	Soluble	Solid	300.0	54838
890-4778-4	SW-10A-S-0-4'	Soluble	Solid	300.0	54838
MB 880-54838/1-A	Method Blank	Soluble	Solid	300.0	54838
LCS 880-54838/2-A	Lab Control Sample	Soluble	Solid	300.0	54838
LCSD 880-54838/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54838
890-4778-1 MS	AH-1A-S-4'	Soluble	Solid	300.0	54838
890-4778-1 MSD	AH-1A-S-4'	Soluble	Solid	300.0	54838

Leach Batch: 55045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Soluble	Solid	DI Leach	
MB 880-55045/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-55045/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-55045/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

HPLC/IC

Analysis Batch: 55059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29309-1	SW-9B-S-0-4'	Soluble	Solid	300.0	55045
MB 880-55045/1-A	Method Blank	Soluble	Solid	300.0	55045
LCS 880-55045/2-A	Lab Control Sample	Soluble	Solid	300.0	55045
LCSD 880-55045/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	55045

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-6-S-0-4'
Date Collected: 06/01/23 10:00
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.05 g	5 mL	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 15:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 21:05	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		1			54707	06/04/23 14:23	CH	EET MID

Client Sample ID: SW-7-S-0-4'
Date Collected: 06/01/23 10:10
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-2
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	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 16:27	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 22:10	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		1			54707	06/04/23 14:39	CH	EET MID

Client Sample ID: SW-8-S-0-4'
Date Collected: 06/01/23 10:20
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-3
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			5.02 g	5 mL	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 16:48	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 22:32	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 14:45	CH	EET MID

Client Sample ID: SW-9-S-0-4'
Date Collected: 06/01/23 10:30
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-4
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			5.00 g	5 mL	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 17:08	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-9-S-0-4'
Lab Sample ID: 880-29062-4
Date Collected: 06/01/23 10:30
Matrix: Solid
Date Received: 06/02/23 15:17

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			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 22:54	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 14:50	CH	EET MID

Client Sample ID: SW-10-S-0-4'
Lab Sample ID: 880-29062-5
Date Collected: 06/01/23 10:40
Matrix: Solid
Date Received: 06/02/23 15:17

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	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 17:29	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 23:16	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 14:55	CH	EET MID

Client Sample ID: B-16-S-0-4'
Lab Sample ID: 880-29062-6
Date Collected: 06/01/23 11:30
Matrix: Solid
Date Received: 06/02/23 15:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 17:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/02/23 23:38	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:11	CH	EET MID

Client Sample ID: B-17-S-4'
Lab Sample ID: 880-29062-7
Date Collected: 06/01/23 11:40
Matrix: Solid
Date Received: 06/02/23 15:17

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	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 18:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 00:00	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-17-S-4'
Date Collected: 06/01/23 11:40
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-7
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			5.01 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:17	CH	EET MID

Client Sample ID: B-18-S-4'
Date Collected: 06/01/23 11:50
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-8
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			4.97 g	5 mL	54722	06/05/23 09:21	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54718	06/05/23 18:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 13:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 00:22	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:22	CH	EET MID

Client Sample ID: B-19-S-4'
Date Collected: 06/01/23 12:00
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-9
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	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 06:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 00:44	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		1			54707	06/04/23 15:27	CH	EET MID

Client Sample ID: B-20-S-4'
Date Collected: 06/01/23 12:10
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-10
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			5.05 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 06:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 01:06	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:33	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-21-S-4'
Date Collected: 06/01/23 12:20
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-11
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			5.00 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 07:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 01:49	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		1			54707	06/04/23 15:38	CH	EET MID

Client Sample ID: B-22-S-4'
Date Collected: 06/01/23 12:30
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.95 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 07:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 02:11	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:54	CH	EET MID

Client Sample ID: B-23-S-4'
Date Collected: 06/01/23 12:40
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-13
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			4.98 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 07:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 02:33	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 15:59	CH	EET MID

Client Sample ID: B-24-S-4'
Date Collected: 06/01/23 12:50
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-14
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			4.96 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 08:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-24-S-4'
Date Collected: 06/01/23 12:50
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-14
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			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 02:55	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:16	CH	EET MID

Client Sample ID: B-25-S-4'
Date Collected: 06/01/23 13:00
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-15
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			5.02 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 08:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 03:16	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:21	CH	EET MID

Client Sample ID: B-26-S-4'
Date Collected: 06/01/23 13:10
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-16
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			5.05 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 09:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 03:39	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:26	CH	EET MID

Client Sample ID: B-27-S-4'
Date Collected: 06/01/23 13:20
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-17
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			4.98 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 09:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 04:01	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: B-27-S-4'
Date Collected: 06/01/23 13:20
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:32	CH	EET MID

Client Sample ID: B-28-S-4'
Date Collected: 06/01/23 13:30
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-18
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			4.95 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 10:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 04:23	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:37	CH	EET MID

Client Sample ID: B-29-S-4'
Date Collected: 06/01/23 13:40
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-19
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			5.03 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 12:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 04:45	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		1			54707	06/04/23 16:42	CH	EET MID

Client Sample ID: AH-4-S-4'
Date Collected: 06/01/23 14:30
Date Received: 06/02/23 15:17

Lab Sample ID: 880-29062-20
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			5.05 g	5 mL	54705	06/03/23 14:16	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54618	06/04/23 12:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/05/23 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 11:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54659	06/02/23 15:38	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54610	06/03/23 05:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54661	06/02/23 15:59	KS	EET MID
Soluble	Analysis	300.0		10			54707	06/04/23 16:48	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: AH-5-S-4'
Lab Sample ID: 880-29062-21
Date Collected: 06/01/23 14:40
Matrix: Solid
Date Received: 06/02/23 15:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	54723	06/05/23 09:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54717	06/05/23 17:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54762	06/06/23 12:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			54748	06/05/23 16:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54721	06/05/23 09:17	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54716	06/05/23 11:00	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54630	06/02/23 16:00	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54650	06/02/23 18:25	CH	EET MID

Client Sample ID: SW-9B-S-0-4'
Lab Sample ID: 880-29309-1
Date Collected: 06/08/23 10:40
Matrix: Solid
Date Received: 06/08/23 16:36

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	55144	06/09/23 12:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 19:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55274	06/12/23 13:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55338	06/12/23 14:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	55159	06/09/23 14:05	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55207	06/11/23 05:25	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	55045	06/08/23 17:15	KS	EET MID
Soluble	Analysis	300.0		10			55059	06/09/23 02:45	CH	EET MID

Client Sample ID: AH-1A-S-4'
Lab Sample ID: 890-4778-1
Date Collected: 06/05/23 11:50
Matrix: Solid
Date Received: 06/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.01 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 12:16	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55174	06/09/23 16:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55172	06/09/23 16:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	55008	06/08/23 08:45	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55080	06/09/23 11:29	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 12:12	CH	EET MID

Client Sample ID: SW-8A-S-0-4'
Lab Sample ID: 890-4778-2
Date Collected: 06/05/23 14:30
Matrix: Solid
Date Received: 06/05/23 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.00 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 12:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55174	06/09/23 16:22	AJ	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

Client Sample ID: SW-8A-S-0-4'
Date Collected: 06/05/23 14:30
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4778-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			55172	06/09/23 16:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	55008	06/08/23 08:45	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55080	06/09/23 11:50	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 12:28	CH	EET MID

Client Sample ID: SW-9A-S-0-4'
Date Collected: 06/05/23 14:40
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4778-3
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			5.05 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 12:57	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55174	06/09/23 16:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55172	06/09/23 16:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	55008	06/08/23 08:45	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55080	06/09/23 12:12	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 12:34	CH	EET MID

Client Sample ID: SW-10A-S-0-4'
Date Collected: 06/05/23 14:50
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4778-4
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			4.96 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 13:18	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55174	06/09/23 16:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55172	06/09/23 16:20	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	55008	06/08/23 08:45	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55080	06/09/23 12:33	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 12:39	CH	EET MID

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

Accreditation/Certification Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4778-1

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: SRO SWD #101

Job ID: 890-4778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-29062-1	SW-6-S-0-4'	Solid	06/01/23 10:00	06/02/23 15:17	
880-29062-2	SW-7-S-0-4'	Solid	06/01/23 10:10	06/02/23 15:17	
880-29062-3	SW-8-S-0-4'	Solid	06/01/23 10:20	06/02/23 15:17	
880-29062-4	SW-9-S-0-4'	Solid	06/01/23 10:30	06/02/23 15:17	
880-29062-5	SW-10-S-0-4'	Solid	06/01/23 10:40	06/02/23 15:17	
880-29062-6	B-16-S-0-4'	Solid	06/01/23 11:30	06/02/23 15:17	
880-29062-7	B-17-S-4'	Solid	06/01/23 11:40	06/02/23 15:17	
880-29062-8	B-18-S-4'	Solid	06/01/23 11:50	06/02/23 15:17	
880-29062-9	B-19-S-4'	Solid	06/01/23 12:00	06/02/23 15:17	
880-29062-10	B-20-S-4'	Solid	06/01/23 12:10	06/02/23 15:17	
880-29062-11	B-21-S-4'	Solid	06/01/23 12:20	06/02/23 15:17	
880-29062-12	B-22-S-4'	Solid	06/01/23 12:30	06/02/23 15:17	
880-29062-13	B-23-S-4'	Solid	06/01/23 12:40	06/02/23 15:17	
880-29062-14	B-24-S-4'	Solid	06/01/23 12:50	06/02/23 15:17	
880-29062-15	B-25-S-4'	Solid	06/01/23 13:00	06/02/23 15:17	
880-29062-16	B-26-S-4'	Solid	06/01/23 13:10	06/02/23 15:17	
880-29062-17	B-27-S-4'	Solid	06/01/23 13:20	06/02/23 15:17	
880-29062-18	B-28-S-4'	Solid	06/01/23 13:30	06/02/23 15:17	
880-29062-19	B-29-S-4'	Solid	06/01/23 13:40	06/02/23 15:17	
880-29062-20	AH-4-S-4'	Solid	06/01/23 14:30	06/02/23 15:17	
880-29062-21	AH-5-S-4'	Solid	06/01/23 14:40	06/02/23 15:17	
880-29309-1	SW-9B-S-0-4'	Solid	06/08/23 10:40	06/08/23 16:36	
890-4778-1	AH-1A-S-4'	Solid	06/05/23 11:50	06/05/23 16:30	4
890-4778-2	SW-8A-S-0-4'	Solid	06/05/23 14:30	06/05/23 16:30	0 - 4
890-4778-3	SW-9A-S-0-4'	Solid	06/05/23 14:40	06/05/23 16:30	0 - 4
890-4778-4	SW-10A-S-0-4'	Solid	06/05/23 14:50	06/05/23 16:30	0 - 4

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

Chain of Custody Record

eurofins Environment Testing

27975

Client Information	Sampler: Heath Boyd@Arcadis Com	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5834-795 4
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Builes@et eurofinsus com	State of Origin: NM	Page: Page 4 of 5
Company: ARCADIS US Inc	PWSID:			Job #:
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: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com , "Heath"	WO #:			
Project Name: SRO SWD #101	Project #: 88001747			
Site: SRO (30179637)	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D, 8015MOD_NM, 8021B	Total Number of containers	Special Instructions/Note
			Preservation Code:				N		
AH1-1-S-050323	5/3/23	830	G	Solid			X		402
AH1-2'-S-050323		840		Solid			X		
AH1-4'-S-050323		850		Solid			X		
AH3-1'-S-050323		900		Solid			X		
AH3-2'-S-050323		910		Solid			X		
AH3-4-S-050323		920		Solid			X		
AH4-1-S-050323		930		Solid			X		
AH4-2'-S-050323		940		Solid			X		
AH4-4'-S-050323	X	950	X	Solid			X		
				Solid					
				Solid					

880-27975 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
Add to site name: Incident # NJMW1334648160

Empty Kit Relinquished by	Date	Time	Method of Shipment:		
Relinquished by:	Date/Time: 5/4/23 1505	Company	Received by:	Date/Time: 5/4/23 1507	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: 5.8 15.8

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

Chain of Custody Record

eurofins Environment Testing

29062

Client Information	Sampler: Heath.Boyd@Arcadis.com	Lab PM: Bules John	Carrier Tracking No(s):	COC No: 880-6001-817 5
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Bules@et.eurofinsus com	State of Origin: NM	Page: ~~Page 5 of 20~~ Pg. 1 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl', 3day All Else			
State Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	N	N		
SW-6-S-0-4'	6/1/23	1000	C	Solid			X	X	X		
SW-7-S-0-4'		1010		Solid			X	X	X		
SW-8-S-0-4'		1020		Solid			X	X	X		
SW-9-S-0-4'		1030		Solid			X	X	X		
SW-10-S-0-4'		1040		Solid			X	X	X		
B-16-S-0-4'		1130		Solid			X	X	X		
B-17-S-4'		1140		Solid			X	X	X		
B-18-S-4'		1150		Solid			X	X	X		
B-19-S-4'		1200		Solid			X	X	X		
B-20-S-4'		1210		Solid			X	X	X		
B-21-S-4'	X	1220	X	Solid			X	X	X		

880-29062 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: Incident # nJMW1334648160

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	6/1/23 1700	Arcadis	Cindy Mclee	6-1-23 1700	Arcadis
	6-2-23 1515	Arcadis		6/2/23 1517	

Custody Seals Intact Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 5.9/5.6

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

29062

Client Information	Sampler: Heath Boyd	Lab PM: Bulles John	Carrier Tracking No(s):	COC No: 880-6001-817 6
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Bulles@et.eurofinsus com	State of Origin: NM	Page: ~~Page 6 of 20~~ Pg 2 of 2
Company: ARCADIS US Inc	PWSID			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested			
City: Midland	TAT Requested (days): 24 hr Cl 3day All Else			
State Zip: TX 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM Full TPH	300_ORGFM_28D - Chloride	8021B BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	N	N		
B-22-S-4'	6/1/23	1230	C	Solid			X	X	X		
B-23-S-4'		1240		Solid			X	X	X		
B-24-S-4'		1250		Solid			X	X	X		
B-25-S-4'		1300		Solid			X	X	X		
B-26-S-4'		1310		Solid			X	X	X		
B-27-S-4'		1320		Solid			X	X	X		
B-28-S-4'		1330		Solid			X	X	X		
B-29-S-4'		1340		Solid			X	X	X		
—		—		Solid			~~X~~	~~X~~	~~X~~ #13		
AH-4-S-4'		1430		Solid			X	X	X		
AH-5-S-4'	X	1440	X	Solid			X	X	X		

Loc. 880
29062

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: Incident # nJMW1334648160

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	6/1/23 1700	Arcadis	Received by:	6-1-23 / 1700	Arcadis
Relinquished by:	6-2-23 1515	Arcadis	Received by:	6/2/23	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1517	Company

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

29309

Client Information	Sampler: Heath Boyd	Lab PM: Bules John	Carrier Tracking No(s)	COC No 880-6001-817 12
Client Contact: Justin Nixon	Phone 575-396-4618	E Mail John Bules@et.eurofinsus.com	State of Origin NM	Page ~~Page 12 of 20~~ 1 of 1
Company: ARCADIS US Inc	PWSID			Job #
Address: 1004 North Big Spring Suite 300	Due Date Requested			
City: Midland	TAT Requested (days): 24hr Cl' 3 day Al/EISC			
State Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM - Full TPH	300_ORGFM_28D Chloride	8021B BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	N	N		
SW-9B-S-0-4'	6/8/23	1040	C	Solid			X	X	X		
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

880-29309 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
Incident #: nJMW1334648160

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	6/8/23 1300	Arcadis	[signature]	6/8/23 1300	Arcadis
[signature]	6/8/23 1050	Arcadis	[signature]	6/8/23 1036	
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 26/2.3

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.11
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 11 of 20~~ 1 of 1
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl, 3 day All Else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, NM	SSOW#:			

Analysis Requested

890-4778 Chain of Custody

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
... Acid
...O4
...lor
...bic Acid
...ter
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)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
AH-1A-S-4'	6/5/23	1150	C	Solid			x	x	x		
SW-8A-S-0-4'	|	1430	|	Solid			x	x	x		T_NM_007
SW-9A-S-0-4'	|	1440	|	Solid			x	x	x		-0.2
SW-10A-S-0-4'	x	1450	x	Solid			x	x	x		22.2/22.0
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

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: Incident #: nJMW1334648160

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 6/5/23 1630	Company: Arcadis	Received by:	Date/Time: 6.5.23 1630	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: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 890-4778-1

Login Number: 4778
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 890-4778-1

Login Number: 4778
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 06/07/23 11:36 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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Justin Nixon
ARCADIS US Inc
1004 North Big Spring
Suite 300
Midland, Texas 79701

Generated 6/23/2023 10:33:29 AM Revision 2

JOB DESCRIPTION

SRO SWD #101

JOB NUMBER

890-4779-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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
6/23/2023 10:33:29 AM
Revision 2

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

Table of Contents

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Definitions/Glossary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Job ID: 890-4779-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4755-1

Receipt
The sample was received on 5/31/2023 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: AH-1-5-3' (890-4755-1).

GC VOA
Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54540 recovered below the control limits for Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-54540/20).

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 880-54539 and analytical batch 880-54534 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-54539 and analytical batch 880-54534 contained Diesel Range Organics (Over C10-C28) and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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.

Narrative

Job Narrative
890-4756-1

Receipt
The samples were received on 5/31/2023 8:00 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 5.2°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: B-1-S-3' (890-4756-1), B-2-S-3' (890-4756-2), B-3-S-4' (890-4756-3), B-4-S-4' (890-4756-4), B-5-S-4' (890-4756-5), B-6-S-4' (890-4756-6), B-7-S-4' (890-4756-7), B-8-S-4' (890-4756-8), B-9-S-3' (890-4756-9), B-10-S-3' (890-4756-10), B-11-S-4' (890-4756-11), B-12-S-4' (890-4756-12), B-13-S-4' (890-4756-13), B-14-S-4' (890-4756-14), B-15-S-4' (890-4756-15), SW-1-S-0-4' (890-4756-16), SW-2-S-0-4' (890-4756-17), SW-3-S-0-4' (890-4756-18), SW-4-S-0-4' (890-4756-19) and SW-5-S-0-4' (890-4756-20).

GC VOA
Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike duplicate (MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-54574 and analytical batch 880-54540. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8021B: CCV biased low for Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene however an acceptable CCV was ran within the 12 hour window therefore the data have been qualified and reported.(CCV 880-54540/20)

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Job ID: 890-4779-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54640 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The samples with a detection are being re-analyzed for confirmation. The associated samples are impacted: (CCV 880-54640/2), (CCV 880-54640/20), (CCV 880-54640/33) and (CCV 880-54640/51).

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-54587 and analytical batch 880-54640 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.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54558 and analytical batch 880-54534 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-54558 and analytical batch 880-54534 contained Gasoline Range Organics (GRO)-C6-C10, Diesel Range Organics (Over C10-C28) and OIl Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-54558 and analytical batch 880-54534 was outside control limits. Sample matrix interference is suspected.

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

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

Narrative

Job Narrative
890-4779-1

Receipt
The samples were received on 6/5/2023 4:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 22.0°C

GC VOA
Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-54978 and analytical batch 880-55090 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-54980 and analytical batch 880-55086 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.

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54979 and analytical batch 880-54921 was outside the control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-54979/2-A) and (LCSD

Case Narrative

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Job ID: 890-4779-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

880-54979/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-10A-S-4' (890-4779-1), SW-2A-S-0-4' (890-4779-2), SW-11-S-0-4' (890-4779-3), SW-12-S-0-4' (890-4779-4), B-30-S-4' (890-4779-5), B-31-S-4' (890-4779-6), B-32-S-4' (890-4779-7), B-33-S-4' (890-4779-8), B-34-S-4' (890-4779-9), B-35-S-4' (890-4779-10), (890-4779-A-1-D MS) and (890-4779-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: B-36-S-4' (890-4779-11), B-37-S-4' (890-4779-12), B-38-S-4' (890-4779-13), B-39-S-4' (890-4779-14) and B-40-S-4' (890-4779-15). 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.

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-29310-1

Receipt
The sample was received on 6/8/2023 4:36 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.3°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SW-12A-S-0-4' (880-29310-1).

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-55159/1-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SW-12A-S-0-4' (880-29310-1), (890-4794-A-5-C), (890-4794-A-5-D MS) and (890-4794-A-5-E MSD). 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: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-12A-S-0-4'

Lab Sample ID: 880-29310-1
Matrix: Solid

Date Collected: 06/08/23 10:50
Date Received: 06/08/23 16:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/09/23 12:33	06/10/23 20:10	1
Toluene	**0.000865**	**J**	0.00199	0.000453	mg/Kg		06/09/23 12:33	06/10/23 20:10	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		06/09/23 12:33	06/10/23 20:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/09/23 12:33	06/10/23 20:10	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		06/09/23 12:33	06/10/23 20:10	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/09/23 12:33	06/10/23 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*06/09/23 12:33*	*06/10/23 20:10*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*06/09/23 12:33*	*06/10/23 20:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			06/12/23 13:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**30.6**	**J**	50.0	15.0	mg/Kg			06/12/23 14:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**30.6**	**J**	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:47	1
OIl Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/11/23 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*06/09/23 14:05*	*06/11/23 05:47*	*1*
o-Terphenyl	*115*		*70 - 130*	*06/09/23 14:05*	*06/11/23 05:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**436**		49.9	3.94	mg/Kg			06/09/23 02:51	10

Client Sample ID: AH-1-5-3'

Lab Sample ID: 890-4755-1
Matrix: Solid

Date Collected: 05/30/23 16:10
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000386	mg/Kg		06/01/23 11:38	06/01/23 16:39	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		06/01/23 11:38	06/01/23 16:39	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		06/01/23 11:38	06/01/23 16:39	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		06/01/23 11:38	06/01/23 16:39	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		06/01/23 11:38	06/01/23 16:39	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		06/01/23 11:38	06/01/23 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/01/23 11:38*	*06/01/23 16:39*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*06/01/23 11:38*	*06/01/23 16:39*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: AH-1-5-3'

Lab Sample ID: 890-4755-1
Matrix: Solid

Date Collected: 05/30/23 16:10
Date Received: 05/31/23 08:00
Sample Depth: 3

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	0.00101	mg/Kg			06/01/23 17:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**42.8**	**J**	50.0	15.0	mg/Kg			06/02/23 09:50	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	**21.5**	**J**	50.0	15.0	mg/Kg		06/01/23 16:30	06/01/23 20:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 16:30	06/01/23 20:09	1
Oil Range Organics (Over C28-C36)	**21.3**	**J B**	50.0	15.0	mg/Kg		06/01/23 16:30	06/01/23 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*06/01/23 16:30*	*06/01/23 20:09*	*1*
o-Terphenyl	*107*		*70 - 130*	*06/01/23 16:30*	*06/01/23 20:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**729**		50.3	3.97	mg/Kg			06/01/23 14:01	10

Client Sample ID: B-1-S-3'

Lab Sample ID: 890-4756-1
Matrix: Solid

Date Collected: 05/30/23 12:45
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201	0.000387	mg/Kg		06/01/23 11:27	06/02/23 01:11	1
Toluene	<0.00201	U F1 F2	0.00201	0.000459	mg/Kg		06/01/23 11:27	06/02/23 01:11	1
Ethylbenzene	<0.00201	U F1 F2	0.00201	0.000568	mg/Kg		06/01/23 11:27	06/02/23 01:11	1
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.00402	0.00102	mg/Kg		06/01/23 11:27	06/02/23 01:11	1
o-Xylene	<0.00201	U F1 F2	0.00201	0.000346	mg/Kg		06/01/23 11:27	06/02/23 01:11	1
Xylenes, Total	<0.00402	U F1 F2	0.00402	0.00102	mg/Kg		06/01/23 11:27	06/02/23 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*06/01/23 11:27*	*06/02/23 01:11*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/01/23 11:27*	*06/02/23 01:11*	*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	0.00102	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**44.5**	**J**	50.0	15.0	mg/Kg			06/02/23 09:50	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-1-S-3'

Lab Sample ID: 890-4756-1
Matrix: Solid

Date Collected: 05/30/23 12:45
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	26.8	J F2 B	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 21:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 21:56	1
Oil Range Organics (Over C28-C36)	17.7	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*06/01/23 10:58*	*06/01/23 21:56*	*1*
o-Terphenyl	*125*		*70 - 130*	*06/01/23 10:58*	*06/01/23 21:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	528		24.9	1.96	mg/Kg			06/01/23 12:54	5

Client Sample ID: B-2-S-3'

Lab Sample ID: 890-4756-2
Matrix: Solid

Date Collected: 05/30/23 12:55
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000388	mg/Kg		06/01/23 11:27	06/02/23 01:31	1
Toluene	<0.00202	U	0.00202	0.000460	mg/Kg		06/01/23 11:27	06/02/23 01:31	1
Ethylbenzene	<0.00202	U	0.00202	0.000570	mg/Kg		06/01/23 11:27	06/02/23 01:31	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	0.00102	mg/Kg		06/01/23 11:27	06/02/23 01:31	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/01/23 11:27	06/02/23 01:31	1
Xylenes, Total	<0.00403	U	0.00403	0.00102	mg/Kg		06/01/23 11:27	06/02/23 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*06/01/23 11:27*	*06/02/23 01:31*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/01/23 11:27*	*06/02/23 01:31*	*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	0.00102	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.7		49.8	14.9	mg/Kg			06/02/23 09:50	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	31.5	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:01	1
Oil Range Organics (Over C28-C36)	19.2	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*06/01/23 10:58*	*06/01/23 23:01*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-2-S-3'

Lab Sample ID: 890-4756-2
Matrix: Solid

Date Collected: 05/30/23 12:55
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	116		70 - 130	06/01/23 10:58	06/01/23 23:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	189		5.03	0.397	mg/Kg			06/01/23 13:11	1

Client Sample ID: B-3-S-4'

Lab Sample ID: 890-4756-3
Matrix: Solid

Date Collected: 05/30/23 13:05
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 01:51	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/01/23 11:27	06/02/23 01:51	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/01/23 11:27	06/02/23 01:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 01:51	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/01/23 11:27	06/02/23 01:51	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	06/01/23 11:27	06/02/23 01:51	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/01/23 11:27	06/02/23 01:51	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	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	61.6		49.8	14.9	mg/Kg			06/02/23 09:50	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	43.6	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:23	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:23	1
Oil Range Organics (Over C28-C36)	18.0	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	06/01/23 10:58	06/01/23 23:23	1
o-Terphenyl	126		70 - 130	06/01/23 10:58	06/01/23 23:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.9		5.02	0.397	mg/Kg			06/01/23 13:16	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-4-S-4'

Lab Sample ID: 890-4756-4
Matrix: Solid

Date Collected: 05/30/23 13:15
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		06/01/23 11:27	06/02/23 02:12	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		06/01/23 11:27	06/02/23 02:12	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		06/01/23 11:27	06/02/23 02:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 02:12	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		06/01/23 11:27	06/02/23 02:12	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*06/01/23 11:27*	*06/02/23 02:12*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/01/23 11:27*	*06/02/23 02:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**52.7**		49.8	14.9	mg/Kg			06/02/23 09:50	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	**33.9**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:45	1
Oil Range Organics (Over C28-C36)	**18.8**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/01/23 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/01/23 10:58*	*06/01/23 23:45*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/01/23 10:58*	*06/01/23 23:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**101**		4.97	0.393	mg/Kg			06/01/23 13:22	1

Client Sample ID: B-5-S-4'

Lab Sample ID: 890-4756-5
Matrix: Solid

Date Collected: 05/30/23 13:25
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	0.000387	mg/Kg		06/01/23 11:27	06/02/23 02:32	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		06/01/23 11:27	06/02/23 02:32	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		06/01/23 11:27	06/02/23 02:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		06/01/23 11:27	06/02/23 02:32	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		06/01/23 11:27	06/02/23 02:32	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		06/01/23 11:27	06/02/23 02:32	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-5-S-4'

Lab Sample ID: 890-4756-5
Matrix: Solid

Date Collected: 05/30/23 13:25
Date Received: 05/31/23 08:00
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/01/23 11:27	06/02/23 02:32	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/01/23 11:27	06/02/23 02:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.6**		50.0	15.0	mg/Kg			06/02/23 09:50	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	**33.4**	**J B**	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:06	1
Oil Range Organics (Over C28-C36)	**18.2**	**J B**	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/01/23 10:58	06/02/23 00:06	1
o-Terphenyl	115		70 - 130	06/01/23 10:58	06/02/23 00:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**964**		50.1	3.96	mg/Kg			06/01/23 13:27	10

Client Sample ID: B-6-S-4'

Lab Sample ID: 890-4756-6
Matrix: Solid

Date Collected: 05/30/23 13:35
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	0.000389	mg/Kg		06/01/23 11:27	06/02/23 02:53	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		06/01/23 11:27	06/02/23 02:53	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		06/01/23 11:27	06/02/23 02:53	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		06/01/23 11:27	06/02/23 02:53	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/01/23 11:27	06/02/23 02:53	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		06/01/23 11:27	06/02/23 02:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	06/01/23 11:27	06/02/23 02:53	1
1,4-Difluorobenzene (Surr)	126		70 - 130	06/01/23 11:27	06/02/23 02:53	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	0.00102	mg/Kg			06/02/23 17:23	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-6-S-4'

Lab Sample ID: 890-4756-6
Matrix: Solid

Date Collected: 05/30/23 13:35
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.9		50.0	15.0	mg/Kg			06/02/23 09:50	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	37.4	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:28	1
Oil Range Organics (Over C28-C36)	18.5	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*06/01/23 10:58*	*06/02/23 00:28*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/01/23 10:58*	*06/02/23 00:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	774		49.5	3.91	mg/Kg			06/01/23 13:43	10

Client Sample ID: B-7-S-4'

Lab Sample ID: 890-4756-7
Matrix: Solid

Date Collected: 05/30/23 13:45
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 03:13	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/01/23 11:27	06/02/23 03:13	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/01/23 11:27	06/02/23 03:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 03:13	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/01/23 11:27	06/02/23 03:13	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 03:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*06/01/23 11:27*	*06/02/23 03:13*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/01/23 11:27*	*06/02/23 03:13*	*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	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.9		49.9	15.0	mg/Kg			06/02/23 09:50	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	32.4	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:50	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-7-S-4'

Lab Sample ID: 890-4756-7
Matrix: Solid

Date Collected: 05/30/23 13:45
Date Received: 05/31/23 08:00
Sample Depth: 4

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)	19.5	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	06/01/23 10:58	06/02/23 00:50	1
o-Terphenyl	112		70 - 130	06/01/23 10:58	06/02/23 00:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		49.6	3.92	mg/Kg			06/01/23 13:49	10

Client Sample ID: B-8-S-4'

Lab Sample ID: 890-4756-8
Matrix: Solid

Date Collected: 05/30/23 14:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 03:33	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		06/01/23 11:27	06/02/23 03:33	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		06/01/23 11:27	06/02/23 03:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/01/23 11:27	06/02/23 03:33	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		06/01/23 11:27	06/02/23 03:33	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/01/23 11:27	06/02/23 03:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/01/23 11:27	06/02/23 03:33	1
1,4-Difluorobenzene (Surr)	111		70 - 130	06/01/23 11:27	06/02/23 03:33	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	0.00100	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	36.8	J	50.0	15.0	mg/Kg			06/02/23 09:50	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	17.2	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:11	1
Oil Range Organics (Over C28-C36)	19.6	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	06/01/23 10:58	06/02/23 01:11	1
o-Terphenyl	112		70 - 130	06/01/23 10:58	06/02/23 01:11	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-8-S-4'

Lab Sample ID: 890-4756-8
Matrix: Solid

Date Collected: 05/30/23 14:00
Date Received: 05/31/23 08:00
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		50.5	3.99	mg/Kg			06/01/23 13:54	10

Client Sample ID: B-9-S-3'

Lab Sample ID: 890-4756-9
Matrix: Solid

Date Collected: 05/30/23 14:10
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		06/01/23 11:27	06/02/23 03:54	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		06/01/23 11:27	06/02/23 03:54	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		06/01/23 11:27	06/02/23 03:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 03:54	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		06/01/23 11:27	06/02/23 03:54	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/01/23 11:27*	*06/02/23 03:54*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/01/23 11:27*	*06/02/23 03:54*	*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	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	51.6		49.9	15.0	mg/Kg			06/02/23 09:50	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	31.7	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:33	1
Oil Range Organics (Over C28-C36)	19.9	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*06/01/23 10:58*	*06/02/23 01:33*	*1*
o-Terphenyl	*113*		*70 - 130*	*06/01/23 10:58*	*06/02/23 01:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	515		25.3	1.99	mg/Kg			06/01/23 14:00	5

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-10-S-3'

Lab Sample ID: 890-4756-10
Matrix: Solid

Date Collected: 05/30/23 14:20
Date Received: 05/31/23 08:00
Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 04:14	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/01/23 11:27	06/02/23 04:14	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/01/23 11:27	06/02/23 04:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 04:14	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/01/23 11:27	06/02/23 04:14	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 04:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*06/01/23 11:27*	*06/02/23 04:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/01/23 11:27*	*06/02/23 04:14*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**38.4**	**J**	49.9	15.0	mg/Kg			06/02/23 09:50	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	**18.7**	**J B**	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:55	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:55	1
Oil Range Organics (Over C28-C36)	**19.7**	**J B**	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*06/01/23 10:58*	*06/02/23 01:55*	*1*
o-Terphenyl	*117*		*70 - 130*	*06/01/23 10:58*	*06/02/23 01:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**799**		49.8	3.93	mg/Kg			06/01/23 14:05	10

Client Sample ID: B-11-S-4'

Lab Sample ID: 890-4756-11
Matrix: Solid

Date Collected: 05/30/23 14:30
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 06:04	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		06/01/23 11:27	06/02/23 06:04	1
Ethylbenzene	<0.00199	U	0.00199	0.000562	mg/Kg		06/01/23 11:27	06/02/23 06:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/01/23 11:27	06/02/23 06:04	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		06/01/23 11:27	06/02/23 06:04	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/01/23 11:27	06/02/23 06:04	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-11-S-4'

Lab Sample ID: 890-4756-11
Matrix: Solid

Date Collected: 05/30/23 14:30
Date Received: 05/31/23 08:00
Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130	06/01/23 11:27	06/02/23 06:04	1
1,4-Difluorobenzene (Surr)	99		70 - 130	06/01/23 11:27	06/02/23 06:04	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**38.4**	**J**	49.9	15.0	mg/Kg			06/02/23 09:50	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	**18.7**	**J B**	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:38	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:38	1
Oil Range Organics (Over C28-C36)	**19.7**	**J B**	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	06/01/23 10:58	06/02/23 02:38	1
o-Terphenyl	117		70 - 130	06/01/23 10:58	06/02/23 02:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1720**		50.3	3.97	mg/Kg			06/01/23 14:10	10

Client Sample ID: B-12-S-4'

Lab Sample ID: 890-4756-12
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	0.000383	mg/Kg		06/01/23 11:27	06/02/23 06:24	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/01/23 11:27	06/02/23 06:24	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/01/23 11:27	06/02/23 06:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 06:24	1
o-Xylene	<0.00199	U	0.00199	0.000343	mg/Kg		06/01/23 11:27	06/02/23 06:24	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 11:27	06/02/23 06:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	06/01/23 11:27	06/02/23 06:24	1
1,4-Difluorobenzene (Surr)	105		70 - 130	06/01/23 11:27	06/02/23 06:24	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	0.00101	mg/Kg			06/02/23 17:23	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-12-S-4'

Lab Sample ID: 890-4756-12
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	48.9	J	50.0	15.0	mg/Kg			06/02/23 09:50	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	28.8	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:59	1
Oil Range Organics (Over C28-C36)	20.1	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*06/01/23 10:58*	*06/02/23 02:59*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/01/23 10:58*	*06/02/23 02:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1320		50.1	3.96	mg/Kg			06/01/23 14:27	10

Client Sample ID: B-13-S-4'

Lab Sample ID: 890-4756-13
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000384	mg/Kg		06/01/23 11:27	06/02/23 06:45	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		06/01/23 11:27	06/02/23 06:45	1
Ethylbenzene	<0.00200	U	0.00200	0.000564	mg/Kg		06/01/23 11:27	06/02/23 06:45	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 06:45	1
o-Xylene	0.000563	J	0.00200	0.000343	mg/Kg		06/01/23 11:27	06/02/23 06:45	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/01/23 11:27	06/02/23 06:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*06/01/23 11:27*	*06/02/23 06:45*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/01/23 11:27*	*06/02/23 06:45*	*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	0.00101	mg/Kg			06/02/23 17:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	41.4	J	49.8	14.9	mg/Kg			06/02/23 09:50	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	21.7	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 03:21	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 03:21	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-13-S-4'

Lab Sample ID: 890-4756-13
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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)	19.7	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 03:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	06/01/23 10:58	06/02/23 03:21	1
o-Terphenyl	115		70 - 130	06/01/23 10:58	06/02/23 03:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1580		49.7	3.93	mg/Kg			06/01/23 14:32	10

Client Sample ID: B-14-S-4'

Lab Sample ID: 890-4756-14
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201	0.000387	mg/Kg		06/01/23 13:10	06/03/23 03:19	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		06/01/23 13:10	06/03/23 03:19	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		06/01/23 13:10	06/03/23 03:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		06/01/23 13:10	06/03/23 03:19	1
o-Xylene	<0.00201	U	0.00201	0.000345	mg/Kg		06/01/23 13:10	06/03/23 03:19	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		06/01/23 13:10	06/03/23 03:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	06/01/23 13:10	06/03/23 03:19	1
1,4-Difluorobenzene (Surr)	96		70 - 130	06/01/23 13:10	06/03/23 03:19	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	0.00101	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	38.0	J	49.9	15.0	mg/Kg			06/02/23 09:50	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	18.1	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 03:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 03:42	1
Oil Range Organics (Over C28-C36)	19.9	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 03:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	06/01/23 10:58	06/02/23 03:42	1
o-Terphenyl	112		70 - 130	06/01/23 10:58	06/02/23 03:42	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-14-S-4'

Lab Sample ID: 890-4756-14
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		4.96	0.392	mg/Kg			06/01/23 14:49	1

Client Sample ID: B-15-S-4'

Lab Sample ID: 890-4756-15
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000386	mg/Kg		06/01/23 13:10	06/03/23 03:40	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		06/01/23 13:10	06/03/23 03:40	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		06/01/23 13:10	06/03/23 03:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		06/01/23 13:10	06/03/23 03:40	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		06/01/23 13:10	06/03/23 03:40	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		06/01/23 13:10	06/03/23 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*06/01/23 13:10*	*06/03/23 03:40*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*06/01/23 13:10*	*06/03/23 03:40*	*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	0.00101	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.2		50.0	15.0	mg/Kg			06/02/23 09:50	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	30.5	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 04:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 04:04	1
Oil Range Organics (Over C28-C36)	19.7	J B	50.0	15.0	mg/Kg		06/01/23 10:58	06/02/23 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*06/01/23 10:58*	*06/02/23 04:04*	*1*
o-Terphenyl	*125*		*70 - 130*	*06/01/23 10:58*	*06/02/23 04:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	973		50.3	3.97	mg/Kg			06/01/23 14:54	10

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-1-S-0-4'

Lab Sample ID: 890-4756-16
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000381	mg/Kg		06/01/23 13:10	06/03/23 04:00	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/01/23 13:10	06/03/23 04:00	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/01/23 13:10	06/03/23 04:00	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/01/23 13:10	06/03/23 04:00	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/01/23 13:10	06/03/23 04:00	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/01/23 13:10	06/03/23 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*06/01/23 13:10*	*06/03/23 04:00*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/01/23 13:10*	*06/03/23 04:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.4**		49.8	14.9	mg/Kg			06/02/23 09:50	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	**30.9**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:25	1
Oil Range Organics (Over C28-C36)	**19.5**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*06/01/23 10:58*	*06/02/23 04:25*	*1*
o-Terphenyl	*127*		*70 - 130*	*06/01/23 10:58*	*06/02/23 04:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**184**		5.02	0.397	mg/Kg			06/01/23 14:59	1

Client Sample ID: SW-2-S-0-4'

Lab Sample ID: 890-4756-17
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199	0.000383	mg/Kg		06/01/23 13:10	06/03/23 04:21	1
Toluene	<0.00199	U	0.00199	0.000454	mg/Kg		06/01/23 13:10	06/03/23 04:21	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/01/23 13:10	06/03/23 04:21	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 13:10	06/03/23 04:21	1
o-Xylene	**0.000487**	**J**	0.00199	0.000343	mg/Kg		06/01/23 13:10	06/03/23 04:21	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/01/23 13:10	06/03/23 04:21	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-2-S-0-4'

Lab Sample ID: 890-4756-17
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/01/23 13:10	06/03/23 04:21	1
1,4-Difluorobenzene (Surr)	102		70 - 130	06/01/23 13:10	06/03/23 04:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00101	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**87.2**		49.8	14.9	mg/Kg			06/02/23 09:50	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	**45.8**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:47	1
Diesel Range Organics (Over C10-C28)	**19.8**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:47	1
Oil Range Organics (Over C28-C36)	**21.6**	**J B**	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/01/23 10:58	06/02/23 04:47	1
o-Terphenyl	116		70 - 130	06/01/23 10:58	06/02/23 04:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**615**		25.0	1.97	mg/Kg			06/01/23 15:05	5

Client Sample ID: SW-3-S-0-4'

Lab Sample ID: 890-4756-18
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201	0.000387	mg/Kg		06/01/23 13:10	06/03/23 04:41	1
Toluene	<0.00201	U	0.00201	0.000458	mg/Kg		06/01/23 13:10	06/03/23 04:41	1
Ethylbenzene	<0.00201	U	0.00201	0.000567	mg/Kg		06/01/23 13:10	06/03/23 04:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00101	mg/Kg		06/01/23 13:10	06/03/23 04:41	1
o-Xylene	**0.000394**	**J**	0.00201	0.000345	mg/Kg		06/01/23 13:10	06/03/23 04:41	1
Xylenes, Total	<0.00402	U	0.00402	0.00101	mg/Kg		06/01/23 13:10	06/03/23 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	06/01/23 13:10	06/03/23 04:41	1
1,4-Difluorobenzene (Surr)	101		70 - 130	06/01/23 13:10	06/03/23 04:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00101	mg/Kg			06/05/23 16:54	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-3-S-0-4'

Lab Sample ID: 890-4756-18
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.8		49.9	15.0	mg/Kg			06/02/23 09:50	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	38.7	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:08	1
Oil Range Organics (Over C28-C36)	21.1	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:08*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	173		4.98	0.393	mg/Kg			06/01/23 15:10	1

Client Sample ID: SW-4-S-0-4'

Lab Sample ID: 890-4756-19
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *+	0.00202	0.000389	mg/Kg		06/01/23 13:10	06/03/23 05:02	1
Toluene	<0.00202	U	0.00202	0.000461	mg/Kg		06/01/23 13:10	06/03/23 05:02	1
Ethylbenzene	<0.00202	U	0.00202	0.000571	mg/Kg		06/01/23 13:10	06/03/23 05:02	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	0.00102	mg/Kg		06/01/23 13:10	06/03/23 05:02	1
o-Xylene	<0.00202	U	0.00202	0.000347	mg/Kg		06/01/23 13:10	06/03/23 05:02	1
Xylenes, Total	<0.00404	U	0.00404	0.00102	mg/Kg		06/01/23 13:10	06/03/23 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*06/01/23 13:10*	*06/03/23 05:02*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/01/23 13:10*	*06/03/23 05:02*	*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	0.00102	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	73.9		49.8	14.9	mg/Kg			06/02/23 09:50	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	36.2	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 05:29	1
Diesel Range Organics (Over C10-C28)	16.3	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 05:29	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-4-S-0-4'

Lab Sample ID: 890-4756-19
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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)	21.4	J B	49.8	14.9	mg/Kg		06/01/23 10:58	06/02/23 05:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:29*	*1*
o-Terphenyl	*111*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	333		5.00	0.395	mg/Kg			06/01/23 15:16	1

Client Sample ID: SW-5-S-0-4'

Lab Sample ID: 890-4756-20
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000382	mg/Kg		06/01/23 13:10	06/03/23 05:22	1
Toluene	<0.00198	U	0.00198	0.000452	mg/Kg		06/01/23 13:10	06/03/23 05:22	1
Ethylbenzene	<0.00198	U	0.00198	0.000561	mg/Kg		06/01/23 13:10	06/03/23 05:22	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	0.00100	mg/Kg		06/01/23 13:10	06/03/23 05:22	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/01/23 13:10	06/03/23 05:22	1
Xylenes, Total	<0.00397	U	0.00397	0.00100	mg/Kg		06/01/23 13:10	06/03/23 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*06/01/23 13:10*	*06/03/23 05:22*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/01/23 13:10*	*06/03/23 05:22*	*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	0.00100	mg/Kg			06/05/23 16:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	40.0	J	49.9	15.0	mg/Kg			06/02/23 09:50	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	20.1	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:51	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:51	1
Oil Range Organics (Over C28-C36)	19.9	J B	49.9	15.0	mg/Kg		06/01/23 10:58	06/02/23 05:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:51*	*1*
o-Terphenyl	*115*		*70 - 130*	*06/01/23 10:58*	*06/02/23 05:51*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-5-S-0-4'

Lab Sample ID: 890-4756-20
Matrix: Solid

Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00
Sample Depth: 0 - 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	148		5.01	0.396	mg/Kg			06/01/23 15:21	1

Client Sample ID: B-10A-S-4'

Lab Sample ID: 890-4779-1
Matrix: Solid

Date Collected: 06/05/23 11:30
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000386	mg/Kg		06/07/23 13:42	06/09/23 13:38	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		06/07/23 13:42	06/09/23 13:38	1
Ethylbenzene	<0.00200	U	0.00200	0.000566	mg/Kg		06/07/23 13:42	06/09/23 13:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 13:38	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		06/07/23 13:42	06/09/23 13:38	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 13:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:38*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:38*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	0.00101	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	28.4	J	50.0	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.4	J	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 21:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 21:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/07/23 21:22*	*1*
o-Terphenyl	*121*		*70 - 130*	*06/07/23 13:46*	*06/07/23 21:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	924		49.8	3.93	mg/Kg			06/07/23 12:45	10

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-2A-S-0-4'

Lab Sample ID: 890-4779-2
Matrix: Solid

Date Collected: 06/05/23 11:40
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000385	mg/Kg		06/07/23 13:42	06/09/23 13:58	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:42	06/09/23 13:58	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:42	06/09/23 13:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 13:58	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:42	06/09/23 13:58	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:58*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:42*	*06/09/23 13:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	0.00101	mg/Kg			06/09/23 16:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**33.0**	**J**	49.9	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**33.0**	**J**	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:25	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/07/23 22:25*	*1*
o-Terphenyl	*117*		*70 - 130*	*06/07/23 13:46*	*06/07/23 22:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.5**		5.00	0.395	mg/Kg			06/07/23 13:01	1

Client Sample ID: SW-11-S-0-4'

Lab Sample ID: 890-4779-3
Matrix: Solid

Date Collected: 06/05/23 12:00
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000381	mg/Kg		06/07/23 13:42	06/09/23 17:12	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/07/23 13:42	06/09/23 17:12	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/07/23 13:42	06/09/23 17:12	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 17:12	1
o-Xylene	**0.000394**	**J**	0.00198	0.000341	mg/Kg		06/07/23 13:42	06/09/23 17:12	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*	*06/07/23 13:42*	*06/09/23 17:12*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-11-S-0-4'

Lab Sample ID: 890-4779-3
Matrix: Solid

Date Collected: 06/05/23 12:00
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	06/07/23 13:42	06/09/23 17:12	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/09/23 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	**50.7**		49.9	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**31.8**	**J**	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:46	1
Diesel Range Organics (Over C10-C28)	**18.9**	**J**	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	150	S1+	70 - 130	06/07/23 13:46	06/07/23 22:46	1
o-Terphenyl	117		70 - 130	06/07/23 13:46	06/07/23 22:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52.7**		4.98	0.393	mg/Kg			06/07/23 13:07	1

Client Sample ID: SW-12-S-0-4'

Lab Sample ID: 890-4779-4
Matrix: Solid

Date Collected: 06/05/23 12:10
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199	0.000383	mg/Kg		06/07/23 13:42	06/09/23 17:32	1
Toluene	<0.00199	U	0.00199	0.000453	mg/Kg		06/07/23 13:42	06/09/23 17:32	1
Ethylbenzene	**0.000594**	**J**	0.00199	0.000562	mg/Kg		06/07/23 13:42	06/09/23 17:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00100	mg/Kg		06/07/23 13:42	06/09/23 17:32	1
o-Xylene	<0.00199	U	0.00199	0.000342	mg/Kg		06/07/23 13:42	06/09/23 17:32	1
Xylenes, Total	<0.00398	U	0.00398	0.00100	mg/Kg		06/07/23 13:42	06/09/23 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	06/07/23 13:42	06/09/23 17:32	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/07/23 13:42	06/09/23 17:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	0.00100	mg/Kg			06/09/23 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	**36.3**	**J**	50.0	15.0	mg/Kg			06/08/23 10:54	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-12-S-0-4'

Lab Sample ID: 890-4779-4
Matrix: Solid

Date Collected: 06/05/23 12:10
Date Received: 06/05/23 16:30
Sample Depth: 0 - 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	36.3	J	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/07/23 23:07*	*1*
o-Terphenyl	*118*		*70 - 130*	*06/07/23 13:46*	*06/07/23 23:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	825		50.5	3.99	mg/Kg			06/07/23 13:12	10

Client Sample ID: B-30-S-4'

Lab Sample ID: 890-4779-5
Matrix: Solid

Date Collected: 06/05/23 12:20
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201	0.000387	mg/Kg		06/07/23 13:42	06/09/23 17:53	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		06/07/23 13:42	06/09/23 17:53	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		06/07/23 13:42	06/09/23 17:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:42	06/09/23 17:53	1
o-Xylene	0.000454	J	0.00201	0.000346	mg/Kg		06/07/23 13:42	06/09/23 17:53	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:42	06/09/23 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:42*	*06/09/23 17:53*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/07/23 13:42*	*06/09/23 17:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			06/09/23 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	18.8	J	49.9	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.8	J	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/07/23 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*149*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/07/23 23:28*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/07/23 13:46*	*06/07/23 23:28*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-30-S-4'

Lab Sample ID: 890-4779-5
Matrix: Solid

Date Collected: 06/05/23 12:20
Date Received: 06/05/23 16:30
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	70.6		4.97	0.393	mg/Kg			06/07/23 13:17	1

Client Sample ID: B-31-S-4'

Lab Sample ID: 890-4779-6
Matrix: Solid

Date Collected: 06/05/23 12:30
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000386	mg/Kg		06/07/23 13:42	06/09/23 18:13	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		06/07/23 13:42	06/09/23 18:13	1
Ethylbenzene	0.000741	J	0.00200	0.000566	mg/Kg		06/07/23 13:42	06/09/23 18:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:13	1
o-Xylene	<0.00200	U	0.00200	0.000345	mg/Kg		06/07/23 13:42	06/09/23 18:13	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*06/07/23 13:42*	*06/09/23 18:13*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/07/23 13:42*	*06/09/23 18:13*	*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	0.00101	mg/Kg			06/09/23 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	21.4	J	49.8	14.9	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.4	J	49.8	14.9	mg/Kg		06/07/23 13:46	06/07/23 23:50	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/07/23 23:50	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/07/23 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*146*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/07/23 23:50*	*1*
o-Terphenyl	*114*		*70 - 130*	*06/07/23 13:46*	*06/07/23 23:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	126		4.99	0.394	mg/Kg			06/07/23 13:23	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-32-S-4'

Lab Sample ID: 890-4779-7
Matrix: Solid

Date Collected: 06/05/23 12:40
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000384	mg/Kg		06/07/23 13:42	06/09/23 18:34	1
Toluene	<0.00200	U	0.00200	0.000455	mg/Kg		06/07/23 13:42	06/09/23 18:34	1
Ethylbenzene	**0.000843**	**J**	0.00200	0.000564	mg/Kg		06/07/23 13:42	06/09/23 18:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:34	1
o-Xylene	<0.00200	U	0.00200	0.000343	mg/Kg		06/07/23 13:42	06/09/23 18:34	1
Xylenes, Total	<0.00399	U	0.00399	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:42*	*06/09/23 18:34*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:42*	*06/09/23 18:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	0.00101	mg/Kg			06/09/23 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	**21.5**	**J**	49.8	14.9	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.5**	**J**	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 00:11	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 00:11	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 00:11*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/07/23 13:46*	*06/08/23 00:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**316**		5.01	0.396	mg/Kg			06/07/23 13:28	1

Client Sample ID: B-33-S-4'

Lab Sample ID: 890-4779-8
Matrix: Solid

Date Collected: 06/05/23 12:50
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000385	mg/Kg		06/07/23 13:42	06/09/23 18:54	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:42	06/09/23 18:54	1
Ethylbenzene	**0.000808**	**J**	0.00200	0.000565	mg/Kg		06/07/23 13:42	06/09/23 18:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:54	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:42	06/09/23 18:54	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:42*	*06/09/23 18:54*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-33-S-4'

Lab Sample ID: 890-4779-8
Matrix: Solid

Date Collected: 06/05/23 12:50
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	06/07/23 13:42	06/09/23 18:54	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	0.00101	mg/Kg			06/09/23 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	**19.9**	**J**	50.0	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.9**	**J**	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	155	S1+	70 - 130	06/07/23 13:46	06/08/23 00:32	1
o-Terphenyl	121		70 - 130	06/07/23 13:46	06/08/23 00:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**544**		49.7	3.93	mg/Kg			06/07/23 13:45	10

Client Sample ID: B-34-S-4'

Lab Sample ID: 890-4779-9
Matrix: Solid

Date Collected: 06/05/23 13:00
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000381	mg/Kg		06/07/23 13:42	06/09/23 19:15	1
Toluene	<0.00198	U	0.00198	0.000451	mg/Kg		06/07/23 13:42	06/09/23 19:15	1
Ethylbenzene	**0.000619**	**J**	0.00198	0.000559	mg/Kg		06/07/23 13:42	06/09/23 19:15	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 19:15	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/07/23 13:42	06/09/23 19:15	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:42	06/09/23 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	06/07/23 13:42	06/09/23 19:15	1
1,4-Difluorobenzene (Surr)	97		70 - 130	06/07/23 13:42	06/09/23 19:15	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/09/23 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	**21.4**	**J**	49.9	15.0	mg/Kg			06/08/23 10:54	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-34-S-4'

Lab Sample ID: 890-4779-9
Matrix: Solid

Date Collected: 06/05/23 13:00
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.4**	**J**	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:54	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*159*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 00:54*	*1*
o-Terphenyl	*125*		*70 - 130*	*06/07/23 13:46*	*06/08/23 00:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1020**		50.4	3.98	mg/Kg			06/07/23 13:50	10

Client Sample ID: B-35-S-4'

Lab Sample ID: 890-4779-10
Matrix: Solid

Date Collected: 06/05/23 13:10
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201	0.000387	mg/Kg		06/07/23 13:42	06/09/23 19:35	1
Toluene	<0.00201	U	0.00201	0.000459	mg/Kg		06/07/23 13:42	06/09/23 19:35	1
Ethylbenzene	**0.000685**	**J**	0.00201	0.000568	mg/Kg		06/07/23 13:42	06/09/23 19:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:42	06/09/23 19:35	1
o-Xylene	**0.000582**	**J**	0.00201	0.000346	mg/Kg		06/07/23 13:42	06/09/23 19:35	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:42	06/09/23 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:42*	*06/09/23 19:35*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/07/23 13:42*	*06/09/23 19:35*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00127**	**J**	0.00402	0.00102	mg/Kg			06/09/23 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	**19.2**	**J**	49.9	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.2**	**J**	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 01:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 01:15	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 01:15*	*1*
o-Terphenyl	*122*		*70 - 130*	*06/07/23 13:46*	*06/08/23 01:15*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-35-S-4'

Lab Sample ID: 890-4779-10
Matrix: Solid

Date Collected: 06/05/23 13:10
Date Received: 06/05/23 16:30
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1550**		49.8	3.93	mg/Kg			06/07/23 14:06	10

Client Sample ID: B-36-S-4'

Lab Sample ID: 890-4779-11
Matrix: Solid

Date Collected: 06/05/23 13:20
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000386	mg/Kg		06/07/23 13:42	06/09/23 19:55	1
Toluene	<0.00200	U	0.00200	0.000457	mg/Kg		06/07/23 13:42	06/09/23 19:55	1
Ethylbenzene	**0.000766**	**J**	0.00200	0.000566	mg/Kg		06/07/23 13:42	06/09/23 19:55	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 19:55	1
o-Xylene	**0.000414**	**J**	0.00200	0.000345	mg/Kg		06/07/23 13:42	06/09/23 19:55	1
Xylenes, Total	<0.00401	U	0.00401	0.00101	mg/Kg		06/07/23 13:42	06/09/23 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*06/07/23 13:42*	*06/09/23 19:55*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:42*	*06/09/23 19:55*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00118**	**J**	0.00401	0.00101	mg/Kg			06/09/23 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	**21.2**	**J**	49.8	14.9	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**21.2**	**J**	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 01:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 01:57	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 01:57*	*1*
o-Terphenyl	*113*		*70 - 130*	*06/07/23 13:46*	*06/08/23 01:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1690**		50.5	3.99	mg/Kg			06/07/23 14:12	10

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-37-S-4'

Lab Sample ID: 890-4779-12
Matrix: Solid

Date Collected: 06/05/23 13:30
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199	0.000383	mg/Kg		06/07/23 13:56	06/10/23 03:51	1
Toluene	**0.000660**	**J**	0.00199	0.000454	mg/Kg		06/07/23 13:56	06/10/23 03:51	1
Ethylbenzene	<0.00199	U	0.00199	0.000563	mg/Kg		06/07/23 13:56	06/10/23 03:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	0.00101	mg/Kg		06/07/23 13:56	06/10/23 03:51	1
o-Xylene	**0.000442**	**J**	0.00199	0.000343	mg/Kg		06/07/23 13:56	06/10/23 03:51	1
Xylenes, Total	<0.00398	U	0.00398	0.00101	mg/Kg		06/07/23 13:56	06/10/23 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:56*	*06/10/23 03:51*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*06/07/23 13:56*	*06/10/23 03:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00110**	**J**	0.00398	0.00101	mg/Kg			06/10/23 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	**19.4**	**J**	49.8	14.9	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**19.4**	**J**	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 02:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 02:18	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	14.9	mg/Kg		06/07/23 13:46	06/08/23 02:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 02:18*	*1*
o-Terphenyl	*117*		*70 - 130*	*06/07/23 13:46*	*06/08/23 02:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**845**		50.5	3.99	mg/Kg			06/07/23 14:17	10

Client Sample ID: B-38-S-4'

Lab Sample ID: 890-4779-13
Matrix: Solid

Date Collected: 06/05/23 13:40
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	0.000385	mg/Kg		06/07/23 13:56	06/10/23 04:12	1
Toluene	**0.000694**	**J**	0.00200	0.000456	mg/Kg		06/07/23 13:56	06/10/23 04:12	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:56	06/10/23 04:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:56	06/10/23 04:12	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:56	06/10/23 04:12	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:56	06/10/23 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:56*	*06/10/23 04:12*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-38-S-4'

Lab Sample ID: 890-4779-13
Matrix: Solid

Date Collected: 06/05/23 13:40
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130	06/07/23 13:56	06/10/23 04:12	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	0.00101	mg/Kg			06/10/23 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	**47.4**	**J**	50.0	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**27.8**	**J**	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 02:39	1
Diesel Range Organics (Over C10-C28)	**19.6**	**J**	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 02:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 02:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	146	S1+	70 - 130	06/07/23 13:46	06/08/23 02:39	1
o-Terphenyl	115		70 - 130	06/07/23 13:46	06/08/23 02:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**778**		50.5	3.99	mg/Kg			06/07/23 14:23	10

Client Sample ID: B-39-S-4'

Lab Sample ID: 890-4779-14
Matrix: Solid

Date Collected: 06/05/23 13:50
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201	0.000387	mg/Kg		06/07/23 13:56	06/10/23 04:32	1
Toluene	**0.000843**	**J**	0.00201	0.000459	mg/Kg		06/07/23 13:56	06/10/23 04:32	1
Ethylbenzene	<0.00201	U	0.00201	0.000568	mg/Kg		06/07/23 13:56	06/10/23 04:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:56	06/10/23 04:32	1
o-Xylene	<0.00201	U	0.00201	0.000346	mg/Kg		06/07/23 13:56	06/10/23 04:32	1
Xylenes, Total	<0.00402	U	0.00402	0.00102	mg/Kg		06/07/23 13:56	06/10/23 04:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	06/07/23 13:56	06/10/23 04:32	1
1,4-Difluorobenzene (Surr)	79		70 - 130	06/07/23 13:56	06/10/23 04:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	0.00102	mg/Kg			06/10/23 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	**46.4**	**J**	49.9	15.0	mg/Kg			06/08/23 10:54	1

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-39-S-4'

Lab Sample ID: 890-4779-14
Matrix: Solid

Date Collected: 06/05/23 13:50
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	28.7	J	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:00	1
Diesel Range Organics (Over C10-C28)	17.7	J	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:00	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 03:00*	*1*
o-Terphenyl	*117*		*70 - 130*	*06/07/23 13:46*	*06/08/23 03:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	594		49.8	3.93	mg/Kg			06/07/23 14:28	10

Client Sample ID: B-40-S-4'

Lab Sample ID: 890-4779-15
Matrix: Solid

Date Collected: 06/05/23 14:00
Date Received: 06/05/23 16:30
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198	0.000381	mg/Kg		06/07/23 13:56	06/10/23 04:53	1
Toluene	0.000981	J	0.00198	0.000451	mg/Kg		06/07/23 13:56	06/10/23 04:53	1
Ethylbenzene	<0.00198	U	0.00198	0.000559	mg/Kg		06/07/23 13:56	06/10/23 04:53	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:56	06/10/23 04:53	1
o-Xylene	<0.00198	U	0.00198	0.000341	mg/Kg		06/07/23 13:56	06/10/23 04:53	1
Xylenes, Total	<0.00396	U	0.00396	0.00100	mg/Kg		06/07/23 13:56	06/10/23 04:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*	*06/07/23 13:56*	*06/10/23 04:53*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*06/07/23 13:56*	*06/10/23 04:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	0.00100	mg/Kg			06/10/23 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	21.7	J	50.0	15.0	mg/Kg			06/08/23 10:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	21.7	J	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:21	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/08/23 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*152*	*S1+*	*70 - 130*	*06/07/23 13:46*	*06/08/23 03:21*	*1*
o-Terphenyl	*120*		*70 - 130*	*06/07/23 13:46*	*06/08/23 03:21*	*1*

Client Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-40-S-4'

Date Collected: 06/05/23 14:00
Date Received: 06/05/23 16:30
Sample Depth: 4

Lab Sample ID: 890-4779-15

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.1		5.01	0.396	mg/Kg			06/07/23 14:34	1

Surrogate Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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)
880-29310-1	SW-12A-S-0-4'	99	80
890-4755-1	AH-1-5-3'	94	102
890-4756-1	B-1-S-3'	76	90
890-4756-1 MS	B-1-S-3'	88	105
890-4756-1 MSD	B-1-S-3'	89	120
890-4756-2	B-2-S-3'	83	96
890-4756-3	B-3-S-4'	91	102
890-4756-4	B-4-S-4'	93	100
890-4756-5	B-5-S-4'	90	102
890-4756-6	B-6-S-4'	93	126
890-4756-7	B-7-S-4'	87	100
890-4756-8	B-8-S-4'	90	111
890-4756-9	B-9-S-3'	94	101
890-4756-10	B-10-S-3'	85	99
890-4756-11	B-11-S-4'	76	99
890-4756-12	B-12-S-4'	77	105
890-4756-13	B-13-S-4'	79	96
890-4756-14	B-14-S-4'	82	96
890-4756-14 MS	B-14-S-4'	90	99
890-4756-14 MSD	B-14-S-4'	98	99
890-4756-15	B-15-S-4'	90	89
890-4756-16	SW-1-S-0-4'	90	99
890-4756-17	SW-2-S-0-4'	90	102
890-4756-18	SW-3-S-0-4'	95	101
890-4756-19	SW-4-S-0-4'	89	92
890-4756-20	SW-5-S-0-4'	91	97
890-4779-1	B-10A-S-4'	92	98
890-4779-2	SW-2A-S-0-4'	96	92
890-4779-3	SW-11-S-0-4'	83	90
890-4779-4	SW-12-S-0-4'	88	97
890-4779-5	B-30-S-4'	92	98
890-4779-6	B-31-S-4'	89	97
890-4779-7	B-32-S-4'	94	92
890-4779-8	B-33-S-4'	94	98
890-4779-9	B-34-S-4'	95	97
890-4779-10	B-35-S-4'	94	96
890-4779-11	B-36-S-4'	97	94
890-4779-12	B-37-S-4'	92	74
890-4779-13	B-38-S-4'	94	70
890-4779-14	B-39-S-4'	97	79
890-4779-15	B-40-S-4'	84	86
LCS 880-54574/1-A	Lab Control Sample	87	98
LCS 880-54576/1-A	Lab Control Sample	95	86
LCS 880-54587/1-A	Lab Control Sample	97	114
LCS 880-54978/1-A	Lab Control Sample	89	102
LCS 880-54980/1-A	Lab Control Sample	113	98
LCS 880-55144/1-A	Lab Control Sample	123	105
LCSD 880-54574/2-A	Lab Control Sample Dup	101	90
LCSD 880-54576/2-A	Lab Control Sample Dup	82	122

Surrogate Summary

Client: ARCADIS US Inc
Job ID: 890-4779-1
Project/Site: SRO SWD #101

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)
LCSD 880-54587/2-A	Lab Control Sample Dup	101	114
LCSD 880-54978/2-A	Lab Control Sample Dup	98	101
LCSD 880-54980/2-A	Lab Control Sample Dup	105	98
LCSD 880-55144/2-A	Lab Control Sample Dup	111	104
MB 880-54574/5-A	Method Blank	87	106
MB 880-54576/5-A	Method Blank	88	111
MB 880-54587/5-A	Method Blank	86	109
MB 880-54637/5-A	Method Blank	82	112
MB 880-54975/5-A	Method Blank	73	95
MB 880-54978/5-A	Method Blank	92	104
MB 880-54980/5-A	Method Blank	73	94
MB 880-55034/5-A	Method Blank	76	94
MB 880-55144/5-A	Method Blank	72	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)
880-29310-1	SW-12A-S-0-4'	147 S1+	115
890-4755-1	AH-1-5-3'	99	107
890-4756-1	B-1-S-3'	118	125
890-4756-1 MS	B-1-S-3'	117	116
890-4756-1 MSD	B-1-S-3'	99	100
890-4756-2	B-2-S-3'	108	116
890-4756-3	B-3-S-4'	113	126
890-4756-4	B-4-S-4'	102	114
890-4756-5	B-5-S-4'	102	115
890-4756-6	B-6-S-4'	101	114
890-4756-7	B-7-S-4'	99	112
890-4756-8	B-8-S-4'	99	112
890-4756-9	B-9-S-3'	103	113
890-4756-10	B-10-S-3'	105	117
890-4756-11	B-11-S-4'	103	117
890-4756-12	B-12-S-4'	114	126
890-4756-13	B-13-S-4'	103	115
890-4756-14	B-14-S-4'	100	112
890-4756-15	B-15-S-4'	113	125
890-4756-16	SW-1-S-0-4'	115	127
890-4756-17	SW-2-S-0-4'	102	116
890-4756-18	SW-3-S-0-4'	104	114
890-4756-19	SW-4-S-0-4'	99	111
890-4756-20	SW-5-S-0-4'	102	115
890-4779-1	B-10A-S-4'	155 S1+	121
890-4779-1 MS	B-10A-S-4'	163 S1+	120
890-4779-1 MSD	B-10A-S-4'	164 S1+	119

Surrogate Summary

Client: ARCADIS US Inc
Job ID: 890-4779-1
Project/Site: SRO SWD #101

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)**
890-4779-2	SW-2A-S-0-4'	152 S1+	117
890-4779-3	SW-11-S-0-4'	150 S1+	117
890-4779-4	SW-12-S-0-4'	151 S1+	118
890-4779-5	B-30-S-4'	149 S1+	116
890-4779-6	B-31-S-4'	146 S1+	114
890-4779-7	B-32-S-4'	148 S1+	116
890-4779-8	B-33-S-4'	155 S1+	121
890-4779-9	B-34-S-4'	159 S1+	125
890-4779-10	B-35-S-4'	155 S1+	122
890-4779-11	B-36-S-4'	143 S1+	113
890-4779-12	B-37-S-4'	147 S1+	117
890-4779-13	B-38-S-4'	146 S1+	115
890-4779-14	B-39-S-4'	147 S1+	117
890-4779-15	B-40-S-4'	152 S1+	120
LCS 880-54539/2-A	Lab Control Sample	90	104
LCS 880-54558/2-A	Lab Control Sample	90	102
LCS 880-54979/2-A	Lab Control Sample	147 S1+	113
LCS 880-55159/2-A	Lab Control Sample	126	98
LCSD 880-54539/3-A	Lab Control Sample Dup	92	104
LCSD 880-54558/3-A	Lab Control Sample Dup	92	105
LCSD 880-54979/3-A	Lab Control Sample Dup	144 S1+	111
LCSD 880-55159/3-A	Lab Control Sample Dup	119	91
MB 880-54539/1-A	Method Blank	119	136 S1+
MB 880-54558/1-A	Method Blank	120	136 S1+
MB 880-54979/1-A	Method Blank	12 S1-	10 S1-
MB 880-55159/1-A	Method Blank	0.02 S1-	0.009 S1-

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-54574/5-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/01/23 11:27	06/02/23 00:42	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/01/23 11:27	06/02/23 00:42	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/01/23 11:27	06/02/23 00:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 11:27	06/02/23 00:42	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/01/23 11:27	06/02/23 00:42	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 11:27	06/02/23 00:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*06/01/23 11:27*	*06/02/23 00:42*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*06/01/23 11:27*	*06/02/23 00:42*	*1*

Lab Sample ID: LCS 880-54574/1-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09218		mg/Kg		92	70 - 130
Toluene	0.100	0.09877		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.08306		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1660		mg/Kg		83	70 - 130
o-Xylene	0.100	0.07697		mg/Kg		77	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-54574/2-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09275		mg/Kg		93	70 - 130	1	35
Toluene	0.100	0.09820		mg/Kg		98	70 - 130	1	35
Ethylbenzene	0.100	0.09202		mg/Kg		92	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1854		mg/Kg		93	70 - 130	11	35
o-Xylene	0.100	0.08406		mg/Kg		84	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 890-4756-1 MS
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.100	0.1115		mg/Kg		111	70 - 130
Toluene	<0.00201	U F1 F2	0.100	0.1035		mg/Kg		103	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: 890-4756-1 MS
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1 F2	0.100	0.08745		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.1760		mg/Kg		88	70 - 130
o-Xylene	<0.00201	U F1 F2	0.100	0.08034		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-4756-1 MSD
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0996	<0.00199	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00201	U F1 F2	0.0996	0.0007183	J F1 F2	mg/Kg		0.7	70 - 130	197	35
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.001380	J F1 F2	mg/Kg		1	70 - 130	194	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.003500	J F1 F2	mg/Kg		2	70 - 130	192	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.001581	J F1 F2	mg/Kg		2	70 - 130	192	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*

Lab Sample ID: MB 880-54576/5-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54576

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/01/23 11:38	06/01/23 13:47	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/01/23 11:38	06/01/23 13:47	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/01/23 11:38	06/01/23 13:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 11:38	06/01/23 13:47	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/01/23 11:38	06/01/23 13:47	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 11:38	06/01/23 13:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*06/01/23 11:38*	*06/01/23 13:47*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*06/01/23 11:38*	*06/01/23 13:47*	*1*

Lab Sample ID: LCS 880-54576/1-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1136		mg/Kg		114	70 - 130
Toluene	0.100	0.1135		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.1051		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.200	0.2129		mg/Kg		106	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-54576/1-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54576

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09494		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-54576/2-A
Matrix: Solid
Analysis Batch: 54540

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54576

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1221		mg/Kg		122	70 - 130	7	35
Toluene	0.100	0.1147		mg/Kg		115	70 - 130	1	35
Ethylbenzene	0.100	0.09721		mg/Kg		97	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1959		mg/Kg		98	70 - 130	8	35
o-Xylene	0.100	0.08816		mg/Kg		88	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*

Lab Sample ID: MB 880-54587/5-A
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/01/23 13:10	06/03/23 02:51	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/01/23 13:10	06/03/23 02:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*06/01/23 13:10*	*06/03/23 02:51*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*06/01/23 13:10*	*06/03/23 02:51*	*1*

Lab Sample ID: LCS 880-54587/1-A
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1313	*+	mg/Kg		131	70 - 130
Toluene	0.100	0.1118		mg/Kg		112	70 - 130
Ethylbenzene	0.100	0.1071		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2021		mg/Kg		101	70 - 130
o-Xylene	0.100	0.09225		mg/Kg		92	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-54587/1-A
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54587

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: LCSD 880-54587/2-A
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54587

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1319	*+	mg/Kg		132	70 - 130	0	35
Toluene			0.100	0.1163		mg/Kg		116	70 - 130	4	35
Ethylbenzene			0.100	0.1110		mg/Kg		111	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2120		mg/Kg		106	70 - 130	5	35
o-Xylene			0.100	0.09543		mg/Kg		95	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: 890-4756-14 MS
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: B-14-S-4'
Prep Type: Total/NA
Prep Batch: 54587

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U *+	0.101	0.1291		mg/Kg		128	70 - 130		
Toluene	<0.00201	U	0.101	0.1071		mg/Kg		106	70 - 130		
Ethylbenzene	<0.00201	U	0.101	0.1047		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1916		mg/Kg		95	70 - 130		
o-Xylene	<0.00201	U	0.101	0.08682		mg/Kg		86	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-4756-14 MSD
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: B-14-S-4'
Prep Type: Total/NA
Prep Batch: 54587

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U *+	0.0990	0.1283		mg/Kg		130	70 - 130	1	35
Toluene	<0.00201	U	0.0990	0.1084		mg/Kg		110	70 - 130	1	35
Ethylbenzene	<0.00201	U	0.0990	0.1097		mg/Kg		111	70 - 130	5	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1992		mg/Kg		101	70 - 130	4	35
o-Xylene	<0.00201	U	0.0990	0.08930		mg/Kg		90	70 - 130	3	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: MB 880-54637/5-A
Matrix: Solid
Analysis Batch: 54640

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54637

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/02/23 10:46	06/02/23 15:14	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/02/23 10:46	06/02/23 15:14	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/02/23 10:46	06/02/23 15:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/02/23 10:46	06/02/23 15:14	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/02/23 10:46	06/02/23 15:14	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/02/23 10:46	06/02/23 15:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*06/02/23 10:46*	*06/02/23 15:14*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*06/02/23 10:46*	*06/02/23 15:14*	*1*

Lab Sample ID: MB 880-54975/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/07/23 13:25	06/09/23 11:03	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:25	06/09/23 11:03	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:25	06/09/23 11:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:25	06/09/23 11:03	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:25	06/09/23 11:03	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:25	06/09/23 11:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*06/07/23 13:25*	*06/09/23 11:03*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/07/23 13:25*	*06/09/23 11:03*	*1*

Lab Sample ID: MB 880-54978/5-A
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54978

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:42	06/09/23 11:47	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:42	06/09/23 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/07/23 13:42*	*06/09/23 11:47*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*06/07/23 13:42*	*06/09/23 11:47*	*1*

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-54978/1-A
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1232		mg/Kg		123	70 - 130
Toluene	0.100	0.1130		mg/Kg		113	70 - 130
Ethylbenzene	0.100	0.09652		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	0.200	0.1767		mg/Kg		88	70 - 130
o-Xylene	0.100	0.08492		mg/Kg		85	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-54978/2-A
Matrix: Solid
Analysis Batch: 55090

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54978

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1358	*+	mg/Kg		136	70 - 130	10	35
Toluene	0.100	0.1277		mg/Kg		128	70 - 130	12	35
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1922		mg/Kg		96	70 - 130	8	35
o-Xylene	0.100	0.1021		mg/Kg		102	70 - 130	18	35

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

Lab Sample ID: MB 880-54980/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/07/23 13:56	06/09/23 21:41	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/07/23 13:56	06/09/23 21:41	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/07/23 13:56	06/09/23 21:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:56	06/09/23 21:41	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/07/23 13:56	06/09/23 21:41	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/07/23 13:56	06/09/23 21:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*06/07/23 13:56*	*06/09/23 21:41*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/07/23 13:56*	*06/09/23 21:41*	*1*

Lab Sample ID: LCS 880-54980/1-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1245		mg/Kg		125	70 - 130
Toluene	0.100	0.1134		mg/Kg		113	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-54980/1-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.100	0.1131		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	0.200	0.2339		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1131		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-54980/2-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1330	*+	mg/Kg		133	70 - 130	7	35
Toluene	0.100	0.1193		mg/Kg		119	70 - 130	5	35
Ethylbenzene	0.100	0.1242		mg/Kg		124	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2507		mg/Kg		125	70 - 130	7	35
o-Xylene	0.100	0.1202		mg/Kg		120	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-55034/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/08/23 12:22	06/10/23 08:16	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/08/23 12:22	06/10/23 08:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*06/08/23 12:22*	*06/10/23 08:16*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/08/23 12:22*	*06/10/23 08:16*	*1*

Lab Sample ID: MB 880-55144/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55144

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	0.000385	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Toluene	<0.00200	U	0.00200	0.000456	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Ethylbenzene	<0.00200	U	0.00200	0.000565	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:28	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: MB 880-55144/5-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55144

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	0.000344	mg/Kg		06/09/23 12:33	06/10/23 19:28	1
Xylenes, Total	<0.00400	U	0.00400	0.00101	mg/Kg		06/09/23 12:33	06/10/23 19:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:28*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/09/23 12:33*	*06/10/23 19:28*	*1*

Lab Sample ID: LCS 880-55144/1-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1168		mg/Kg		117	70 - 130
Toluene	0.100	0.1048		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1086		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2243		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1230		mg/Kg		123	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-55144/2-A
Matrix: Solid
Analysis Batch: 55086

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55144

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	7	35
Toluene	0.100	0.09814		mg/Kg		98	70 - 130	7	35
Ethylbenzene	0.100	0.09889		mg/Kg		99	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2042		mg/Kg		102	70 - 130	9	35
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130	17	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-54539/1-A
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54539

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Diesel Range Organics (Over C10-C28)	16.43	J	50.0	15.0	mg/Kg		06/01/23 07:59	06/01/23 08:40	1
Oil Range Organics (Over C28-C36)	24.29	J	50.0	15.0	mg/Kg		06/01/23 07:59	06/01/23 08:40	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	06/01/23 07:59	06/01/23 08:40	1
o-Terphenyl	136	S1+	70 - 130	06/01/23 07:59	06/01/23 08:40	1

Lab Sample ID: LCS 880-54539/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54534 — **Prep Batch: 54539**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1220		mg/Kg		122	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.2		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: LCSD 880-54539/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54534 — **Prep Batch: 54539**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1113		mg/Kg		111	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	830.6		mg/Kg		83	70 - 130	15	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: MB 880-54558/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54534 — **Prep Batch: 54558**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	18.82	J	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 20:52	1
Diesel Range Organics (Over C10-C28)	17.79	J	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 20:52	1
Oil Range Organics (Over C28-C36)	19.05	J	50.0	15.0	mg/Kg		06/01/23 10:58	06/01/23 20:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	06/01/23 10:58	06/01/23 20:52	1
o-Terphenyl	136	S1+	70 - 130	06/01/23 10:58	06/01/23 20:52	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-54558/2-A
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54558

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	886.3		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	893.3		mg/Kg		89	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-54558/3-A
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54558

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	886.1		mg/Kg		89	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	894.3		mg/Kg		89	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: 890-4756-1 MS
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54558

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	26.8	J F2 B	998	1162		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1201		mg/Kg		120	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*117*		*70 - 130*
o-Terphenyl	*116*		*70 - 130*

Lab Sample ID: 890-4756-1 MSD
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54558

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	26.8	J F2 B	999	933.4	F2	mg/Kg		91	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1026		mg/Kg		103	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: 890-4756-1 MSD
Matrix: Solid
Analysis Batch: 54534

Client Sample ID: B-1-S-3'
Prep Type: Total/NA
Prep Batch: 54558

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-Terphenyl	100		70 - 130

Lab Sample ID: MB 880-54979/1-A
Matrix: Solid
Analysis Batch: 54921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54979

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 19:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 19:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/07/23 13:46	06/07/23 19:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	12	S1-	70 - 130	06/07/23 13:46	06/07/23 19:31	1
o-Terphenyl	10	S1-	70 - 130	06/07/23 13:46	06/07/23 19:31	1

Lab Sample ID: LCS 880-54979/2-A
Matrix: Solid
Analysis Batch: 54921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54979

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1063		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1003		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-54979/3-A
Matrix: Solid
Analysis Batch: 54921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54979

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1077		mg/Kg		108	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1047		mg/Kg		105	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	144	S1+	70 - 130
o-Terphenyl	111		70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: 890-4779-1 MS
Matrix: Solid
Analysis Batch: 54921

Client Sample ID: B-10A-S-4'
Prep Type: Total/NA
Prep Batch: 54979

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	28.4	J	999	1060		mg/Kg		103	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	999	989.1		mg/Kg		99	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*163*	*S1+*	*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-4779-1 MSD
Matrix: Solid
Analysis Batch: 54921

Client Sample ID: B-10A-S-4'
Prep Type: Total/NA
Prep Batch: 54979

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	28.4	J	999	1030		mg/Kg		100	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	987.4		mg/Kg		99	70 - 130	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*164*	*S1+*	*70 - 130*
o-Terphenyl	*119*		*70 - 130*

Lab Sample ID: MB 880-55159/1-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 55159

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	15.0	mg/Kg		06/09/23 14:05	06/10/23 20:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*0.02*	*S1-*	*70 - 130*	*06/09/23 14:05*	*06/10/23 20:02*	*1*
o-Terphenyl	*0.009*	*S1-*	*70 - 130*	*06/09/23 14:05*	*06/10/23 20:02*	*1*

Lab Sample ID: LCS 880-55159/2-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55159

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	928.0		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	1000	877.0		mg/Kg		88	70 - 130

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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

Lab Sample ID: LCS 880-55159/2-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 55159

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Lab Sample ID: LCSD 880-55159/3-A
Matrix: Solid
Analysis Batch: 55207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 55159

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	915.1		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	906.0		mg/Kg		91	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54556/1-A
Matrix: Solid
Analysis Batch: 54577

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/01/23 11:53	1

Lab Sample ID: LCS 880-54556/2-A
Matrix: Solid
Analysis Batch: 54577

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	245.8		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-54556/3-A
Matrix: Solid
Analysis Batch: 54577

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	246.0		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-54458/1-A
Matrix: Solid
Analysis Batch: 54586

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/01/23 12:38	1

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-54458/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	254.5		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-54458/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	250.2		mg/Kg		100	90 - 110	2	20

Lab Sample ID: 890-4756-1 MS — **Client Sample ID: B-1-S-3'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	528		1240	1741		mg/Kg		98	90 - 110		

Lab Sample ID: 890-4756-1 MSD — **Client Sample ID: B-1-S-3'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	528		1240	1853		mg/Kg		107	90 - 110	6	20

Lab Sample ID: 890-4756-11 MS — **Client Sample ID: B-11-S-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1720		2520	4011		mg/Kg		91	90 - 110		

Lab Sample ID: 890-4756-11 MSD — **Client Sample ID: B-11-S-4'**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54586

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1720		2520	4061		mg/Kg		93	90 - 110	1	20

Lab Sample ID: MB 880-54838/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/07/23 11:36	1

Lab Sample ID: LCS 880-54838/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 54974

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	242.9		mg/Kg		97	90 - 110		

QC Sample Results

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-54838/3-A
Matrix: Solid
Analysis Batch: 54974

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	247.1		mg/Kg		99	90 - 110	2	20

Lab Sample ID: 890-4779-7 MS
Matrix: Solid
Analysis Batch: 54974

Client Sample ID: B-32-S-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	316		251	550.9		mg/Kg		94	90 - 110		

Lab Sample ID: 890-4779-7 MSD
Matrix: Solid
Analysis Batch: 54974

Client Sample ID: B-32-S-4'
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	316		251	543.5		mg/Kg		91	90 - 110	1	20

Lab Sample ID: MB 880-55045/1-A
Matrix: Solid
Analysis Batch: 55059

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	0.395	mg/Kg			06/09/23 00:08	1

Lab Sample ID: LCS 880-55045/2-A
Matrix: Solid
Analysis Batch: 55059

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-55045/3-A
Matrix: Solid
Analysis Batch: 55059

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	248.0		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC VOA

Analysis Batch: 54540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	8021B	54576
890-4756-1	B-1-S-3'	Total/NA	Solid	8021B	54574
890-4756-2	B-2-S-3'	Total/NA	Solid	8021B	54574
890-4756-3	B-3-S-4'	Total/NA	Solid	8021B	54574
890-4756-4	B-4-S-4'	Total/NA	Solid	8021B	54574
890-4756-5	B-5-S-4'	Total/NA	Solid	8021B	54574
890-4756-6	B-6-S-4'	Total/NA	Solid	8021B	54574
890-4756-7	B-7-S-4'	Total/NA	Solid	8021B	54574
890-4756-8	B-8-S-4'	Total/NA	Solid	8021B	54574
890-4756-9	B-9-S-3'	Total/NA	Solid	8021B	54574
890-4756-10	B-10-S-3'	Total/NA	Solid	8021B	54574
890-4756-11	B-11-S-4'	Total/NA	Solid	8021B	54574
890-4756-12	B-12-S-4'	Total/NA	Solid	8021B	54574
890-4756-13	B-13-S-4'	Total/NA	Solid	8021B	54574
MB 880-54574/5-A	Method Blank	Total/NA	Solid	8021B	54574
MB 880-54576/5-A	Method Blank	Total/NA	Solid	8021B	54576
LCS 880-54574/1-A	Lab Control Sample	Total/NA	Solid	8021B	54574
LCS 880-54576/1-A	Lab Control Sample	Total/NA	Solid	8021B	54576
LCSD 880-54574/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54574
LCSD 880-54576/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54576
890-4756-1 MS	B-1-S-3'	Total/NA	Solid	8021B	54574
890-4756-1 MSD	B-1-S-3'	Total/NA	Solid	8021B	54574

Prep Batch: 54574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Total/NA	Solid	5030B	
890-4756-2	B-2-S-3'	Total/NA	Solid	5030B	
890-4756-3	B-3-S-4'	Total/NA	Solid	5030B	
890-4756-4	B-4-S-4'	Total/NA	Solid	5030B	
890-4756-5	B-5-S-4'	Total/NA	Solid	5030B	
890-4756-6	B-6-S-4'	Total/NA	Solid	5030B	
890-4756-7	B-7-S-4'	Total/NA	Solid	5030B	
890-4756-8	B-8-S-4'	Total/NA	Solid	5030B	
890-4756-9	B-9-S-3'	Total/NA	Solid	5030B	
890-4756-10	B-10-S-3'	Total/NA	Solid	5030B	
890-4756-11	B-11-S-4'	Total/NA	Solid	5030B	
890-4756-12	B-12-S-4'	Total/NA	Solid	5030B	
890-4756-13	B-13-S-4'	Total/NA	Solid	5030B	
MB 880-54574/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54574/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54574/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
890-4756-1 MS	B-1-S-3'	Total/NA	Solid	5030B	
890-4756-1 MSD	B-1-S-3'	Total/NA	Solid	5030B	

Prep Batch: 54576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	5030B	
MB 880-54576/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-54576/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54576/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC VOA

Prep Batch: 54587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-14	B-14-S-4'	Total/NA	Solid	5030B	
890-4756-15	B-15-S-4'	Total/NA	Solid	5030B	
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	5030B	
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	5030B	
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	5030B	
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	5030B	
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	5030B	
MB 880-54587/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54587/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54587/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	
890-4756-14 MS	B-14-S-4'	Total/NA	Solid	5030B	
890-4756-14 MSD	B-14-S-4'	Total/NA	Solid	5030B	

Analysis Batch: 54605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	Total BTEX	

Prep Batch: 54637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54637/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 54640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-14	B-14-S-4'	Total/NA	Solid	8021B	54587
890-4756-15	B-15-S-4'	Total/NA	Solid	8021B	54587
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	8021B	54587
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	8021B	54587
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	8021B	54587
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	8021B	54587
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	8021B	54587
MB 880-54587/5-A	Method Blank	Total/NA	Solid	8021B	54587
MB 880-54637/5-A	Method Blank	Total/NA	Solid	8021B	54637
LCS 880-54587/1-A	Lab Control Sample	Total/NA	Solid	8021B	54587
LCSD 880-54587/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54587
890-4756-14 MS	B-14-S-4'	Total/NA	Solid	8021B	54587
890-4756-14 MSD	B-14-S-4'	Total/NA	Solid	8021B	54587

Analysis Batch: 54676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Total/NA	Solid	Total BTEX	
890-4756-2	B-2-S-3'	Total/NA	Solid	Total BTEX	
890-4756-3	B-3-S-4'	Total/NA	Solid	Total BTEX	
890-4756-4	B-4-S-4'	Total/NA	Solid	Total BTEX	
890-4756-5	B-5-S-4'	Total/NA	Solid	Total BTEX	
890-4756-6	B-6-S-4'	Total/NA	Solid	Total BTEX	
890-4756-7	B-7-S-4'	Total/NA	Solid	Total BTEX	
890-4756-8	B-8-S-4'	Total/NA	Solid	Total BTEX	
890-4756-9	B-9-S-3'	Total/NA	Solid	Total BTEX	
890-4756-10	B-10-S-3'	Total/NA	Solid	Total BTEX	
890-4756-11	B-11-S-4'	Total/NA	Solid	Total BTEX	
890-4756-12	B-12-S-4'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC VOA (Continued)

Analysis Batch: 54676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-13	B-13-S-4'	Total/NA	Solid	Total BTEX	
890-4756-14	B-14-S-4'	Total/NA	Solid	Total BTEX	
890-4756-15	B-15-S-4'	Total/NA	Solid	Total BTEX	
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	Total BTEX	
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	Total BTEX	
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	Total BTEX	
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	Total BTEX	
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	Total BTEX	

Prep Batch: 54975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54975/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 54978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	5030B	
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	5030B	
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	5030B	
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	5030B	
890-4779-5	B-30-S-4'	Total/NA	Solid	5030B	
890-4779-6	B-31-S-4'	Total/NA	Solid	5030B	
890-4779-7	B-32-S-4'	Total/NA	Solid	5030B	
890-4779-8	B-33-S-4'	Total/NA	Solid	5030B	
890-4779-9	B-34-S-4'	Total/NA	Solid	5030B	
890-4779-10	B-35-S-4'	Total/NA	Solid	5030B	
890-4779-11	B-36-S-4'	Total/NA	Solid	5030B	
MB 880-54978/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54978/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54978/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 54980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-12	B-37-S-4'	Total/NA	Solid	5030B	
890-4779-13	B-38-S-4'	Total/NA	Solid	5030B	
890-4779-14	B-39-S-4'	Total/NA	Solid	5030B	
890-4779-15	B-40-S-4'	Total/NA	Solid	5030B	
MB 880-54980/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-54980/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-54980/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Prep Batch: 55034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-55034/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 55086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	8021B	55144
890-4779-12	B-37-S-4'	Total/NA	Solid	8021B	54980
890-4779-13	B-38-S-4'	Total/NA	Solid	8021B	54980
890-4779-14	B-39-S-4'	Total/NA	Solid	8021B	54980
890-4779-15	B-40-S-4'	Total/NA	Solid	8021B	54980

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC VOA (Continued)

Analysis Batch: 55086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54975/5-A	Method Blank	Total/NA	Solid	8021B	54975
MB 880-54980/5-A	Method Blank	Total/NA	Solid	8021B	54980
MB 880-55034/5-A	Method Blank	Total/NA	Solid	8021B	55034
MB 880-55144/5-A	Method Blank	Total/NA	Solid	8021B	55144
LCS 880-54980/1-A	Lab Control Sample	Total/NA	Solid	8021B	54980
LCS 880-55144/1-A	Lab Control Sample	Total/NA	Solid	8021B	55144
LCSD 880-54980/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54980
LCSD 880-55144/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	55144

Analysis Batch: 55090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	8021B	54978
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	8021B	54978
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	8021B	54978
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	8021B	54978
890-4779-5	B-30-S-4'	Total/NA	Solid	8021B	54978
890-4779-6	B-31-S-4'	Total/NA	Solid	8021B	54978
890-4779-7	B-32-S-4'	Total/NA	Solid	8021B	54978
890-4779-8	B-33-S-4'	Total/NA	Solid	8021B	54978
890-4779-9	B-34-S-4'	Total/NA	Solid	8021B	54978
890-4779-10	B-35-S-4'	Total/NA	Solid	8021B	54978
890-4779-11	B-36-S-4'	Total/NA	Solid	8021B	54978
MB 880-54978/5-A	Method Blank	Total/NA	Solid	8021B	54978
LCS 880-54978/1-A	Lab Control Sample	Total/NA	Solid	8021B	54978
LCSD 880-54978/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54978

Prep Batch: 55144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	5030B	
MB 880-55144/5-A	Method Blank	Total/NA	Solid	5030B	
LCS 880-55144/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 880-55144/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 55175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	Total BTEX	
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	Total BTEX	
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	Total BTEX	
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	Total BTEX	
890-4779-5	B-30-S-4'	Total/NA	Solid	Total BTEX	
890-4779-6	B-31-S-4'	Total/NA	Solid	Total BTEX	
890-4779-7	B-32-S-4'	Total/NA	Solid	Total BTEX	
890-4779-8	B-33-S-4'	Total/NA	Solid	Total BTEX	
890-4779-9	B-34-S-4'	Total/NA	Solid	Total BTEX	
890-4779-10	B-35-S-4'	Total/NA	Solid	Total BTEX	
890-4779-11	B-36-S-4'	Total/NA	Solid	Total BTEX	
890-4779-12	B-37-S-4'	Total/NA	Solid	Total BTEX	
890-4779-13	B-38-S-4'	Total/NA	Solid	Total BTEX	
890-4779-14	B-39-S-4'	Total/NA	Solid	Total BTEX	
890-4779-15	B-40-S-4'	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC VOA

Analysis Batch: 55275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 54534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	8015B NM	54539
890-4756-1	B-1-S-3'	Total/NA	Solid	8015B NM	54558
890-4756-2	B-2-S-3'	Total/NA	Solid	8015B NM	54558
890-4756-3	B-3-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-4	B-4-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-5	B-5-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-6	B-6-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-7	B-7-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-8	B-8-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-9	B-9-S-3'	Total/NA	Solid	8015B NM	54558
890-4756-10	B-10-S-3'	Total/NA	Solid	8015B NM	54558
890-4756-11	B-11-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-12	B-12-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-13	B-13-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-14	B-14-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-15	B-15-S-4'	Total/NA	Solid	8015B NM	54558
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	8015B NM	54558
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	8015B NM	54558
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	8015B NM	54558
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	8015B NM	54558
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	8015B NM	54558
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015B NM	54539
MB 880-54558/1-A	Method Blank	Total/NA	Solid	8015B NM	54558
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54539
LCS 880-54558/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54558
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54539
LCSD 880-54558/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54558
890-4756-1 MS	B-1-S-3'	Total/NA	Solid	8015B NM	54558
890-4756-1 MSD	B-1-S-3'	Total/NA	Solid	8015B NM	54558

Prep Batch: 54539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	8015NM Prep	
MB 880-54539/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54539/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54539/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 54558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Total/NA	Solid	8015NM Prep	
890-4756-2	B-2-S-3'	Total/NA	Solid	8015NM Prep	
890-4756-3	B-3-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-4	B-4-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-5	B-5-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-6	B-6-S-4'	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC Semi VOA (Continued)

Prep Batch: 54558 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-7	B-7-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-8	B-8-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-9	B-9-S-3'	Total/NA	Solid	8015NM Prep	
890-4756-10	B-10-S-3'	Total/NA	Solid	8015NM Prep	
890-4756-11	B-11-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-12	B-12-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-13	B-13-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-14	B-14-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-15	B-15-S-4'	Total/NA	Solid	8015NM Prep	
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	8015NM Prep	
MB 880-54558/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54558/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54558/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4756-1 MS	B-1-S-3'	Total/NA	Solid	8015NM Prep	
890-4756-1 MSD	B-1-S-3'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Total/NA	Solid	8015 NM	

Analysis Batch: 54635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Total/NA	Solid	8015 NM	
890-4756-2	B-2-S-3'	Total/NA	Solid	8015 NM	
890-4756-3	B-3-S-4'	Total/NA	Solid	8015 NM	
890-4756-4	B-4-S-4'	Total/NA	Solid	8015 NM	
890-4756-5	B-5-S-4'	Total/NA	Solid	8015 NM	
890-4756-6	B-6-S-4'	Total/NA	Solid	8015 NM	
890-4756-7	B-7-S-4'	Total/NA	Solid	8015 NM	
890-4756-8	B-8-S-4'	Total/NA	Solid	8015 NM	
890-4756-9	B-9-S-3'	Total/NA	Solid	8015 NM	
890-4756-10	B-10-S-3'	Total/NA	Solid	8015 NM	
890-4756-11	B-11-S-4'	Total/NA	Solid	8015 NM	
890-4756-12	B-12-S-4'	Total/NA	Solid	8015 NM	
890-4756-13	B-13-S-4'	Total/NA	Solid	8015 NM	
890-4756-14	B-14-S-4'	Total/NA	Solid	8015 NM	
890-4756-15	B-15-S-4'	Total/NA	Solid	8015 NM	
890-4756-16	SW-1-S-0-4'	Total/NA	Solid	8015 NM	
890-4756-17	SW-2-S-0-4'	Total/NA	Solid	8015 NM	
890-4756-18	SW-3-S-0-4'	Total/NA	Solid	8015 NM	
890-4756-19	SW-4-S-0-4'	Total/NA	Solid	8015 NM	
890-4756-20	SW-5-S-0-4'	Total/NA	Solid	8015 NM	

Analysis Batch: 54921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	8015B NM	54979

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC Semi VOA (Continued)

Analysis Batch: 54921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	8015B NM	54979
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	8015B NM	54979
890-4779-5	B-30-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-6	B-31-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-7	B-32-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-8	B-33-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-9	B-34-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-10	B-35-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-11	B-36-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-12	B-37-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-13	B-38-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-14	B-39-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-15	B-40-S-4'	Total/NA	Solid	8015B NM	54979
MB 880-54979/1-A	Method Blank	Total/NA	Solid	8015B NM	54979
LCS 880-54979/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54979
LCSD 880-54979/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54979
890-4779-1 MS	B-10A-S-4'	Total/NA	Solid	8015B NM	54979
890-4779-1 MSD	B-10A-S-4'	Total/NA	Solid	8015B NM	54979

Prep Batch: 54979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	8015NM Prep	
890-4779-5	B-30-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-6	B-31-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-7	B-32-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-8	B-33-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-9	B-34-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-10	B-35-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-11	B-36-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-12	B-37-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-13	B-38-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-14	B-39-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-15	B-40-S-4'	Total/NA	Solid	8015NM Prep	
MB 880-54979/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54979/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54979/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4779-1 MS	B-10A-S-4'	Total/NA	Solid	8015NM Prep	
890-4779-1 MSD	B-10A-S-4'	Total/NA	Solid	8015NM Prep	

Analysis Batch: 55030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Total/NA	Solid	8015 NM	
890-4779-2	SW-2A-S-0-4'	Total/NA	Solid	8015 NM	
890-4779-3	SW-11-S-0-4'	Total/NA	Solid	8015 NM	
890-4779-4	SW-12-S-0-4'	Total/NA	Solid	8015 NM	
890-4779-5	B-30-S-4'	Total/NA	Solid	8015 NM	
890-4779-6	B-31-S-4'	Total/NA	Solid	8015 NM	
890-4779-7	B-32-S-4'	Total/NA	Solid	8015 NM	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

GC Semi VOA (Continued)

Analysis Batch: 55030 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-8	B-33-S-4'	Total/NA	Solid	8015 NM	
890-4779-9	B-34-S-4'	Total/NA	Solid	8015 NM	
890-4779-10	B-35-S-4'	Total/NA	Solid	8015 NM	
890-4779-11	B-36-S-4'	Total/NA	Solid	8015 NM	
890-4779-12	B-37-S-4'	Total/NA	Solid	8015 NM	
890-4779-13	B-38-S-4'	Total/NA	Solid	8015 NM	
890-4779-14	B-39-S-4'	Total/NA	Solid	8015 NM	
890-4779-15	B-40-S-4'	Total/NA	Solid	8015 NM	

Prep Batch: 55159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	8015NM Prep	
MB 880-55159/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-55159/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-55159/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 55207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	8015B NM	55159
MB 880-55159/1-A	Method Blank	Total/NA	Solid	8015B NM	55159
LCS 880-55159/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	55159
LCSD 880-55159/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	55159

Analysis Batch: 55339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 54458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Soluble	Solid	DI Leach	
890-4756-2	B-2-S-3'	Soluble	Solid	DI Leach	
890-4756-3	B-3-S-4'	Soluble	Solid	DI Leach	
890-4756-4	B-4-S-4'	Soluble	Solid	DI Leach	
890-4756-5	B-5-S-4'	Soluble	Solid	DI Leach	
890-4756-6	B-6-S-4'	Soluble	Solid	DI Leach	
890-4756-7	B-7-S-4'	Soluble	Solid	DI Leach	
890-4756-8	B-8-S-4'	Soluble	Solid	DI Leach	
890-4756-9	B-9-S-3'	Soluble	Solid	DI Leach	
890-4756-10	B-10-S-3'	Soluble	Solid	DI Leach	
890-4756-11	B-11-S-4'	Soluble	Solid	DI Leach	
890-4756-12	B-12-S-4'	Soluble	Solid	DI Leach	
890-4756-13	B-13-S-4'	Soluble	Solid	DI Leach	
890-4756-14	B-14-S-4'	Soluble	Solid	DI Leach	
890-4756-15	B-15-S-4'	Soluble	Solid	DI Leach	
890-4756-16	SW-1-S-0-4'	Soluble	Solid	DI Leach	
890-4756-17	SW-2-S-0-4'	Soluble	Solid	DI Leach	
890-4756-18	SW-3-S-0-4'	Soluble	Solid	DI Leach	
890-4756-19	SW-4-S-0-4'	Soluble	Solid	DI Leach	
890-4756-20	SW-5-S-0-4'	Soluble	Solid	DI Leach	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

HPLC/IC (Continued)

Leach Batch: 54458 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54458/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54458/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54458/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4756-1 MS	B-1-S-3'	Soluble	Solid	DI Leach	
890-4756-1 MSD	B-1-S-3'	Soluble	Solid	DI Leach	
890-4756-11 MS	B-11-S-4'	Soluble	Solid	DI Leach	
890-4756-11 MSD	B-11-S-4'	Soluble	Solid	DI Leach	

Leach Batch: 54556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Soluble	Solid	DI Leach	
MB 880-54556/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54556/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54556/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 54577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4755-1	AH-1-5-3'	Soluble	Solid	300.0	54556
MB 880-54556/1-A	Method Blank	Soluble	Solid	300.0	54556
LCS 880-54556/2-A	Lab Control Sample	Soluble	Solid	300.0	54556
LCSD 880-54556/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54556

Analysis Batch: 54586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4756-1	B-1-S-3'	Soluble	Solid	300.0	54458
890-4756-2	B-2-S-3'	Soluble	Solid	300.0	54458
890-4756-3	B-3-S-4'	Soluble	Solid	300.0	54458
890-4756-4	B-4-S-4'	Soluble	Solid	300.0	54458
890-4756-5	B-5-S-4'	Soluble	Solid	300.0	54458
890-4756-6	B-6-S-4'	Soluble	Solid	300.0	54458
890-4756-7	B-7-S-4'	Soluble	Solid	300.0	54458
890-4756-8	B-8-S-4'	Soluble	Solid	300.0	54458
890-4756-9	B-9-S-3'	Soluble	Solid	300.0	54458
890-4756-10	B-10-S-3'	Soluble	Solid	300.0	54458
890-4756-11	B-11-S-4'	Soluble	Solid	300.0	54458
890-4756-12	B-12-S-4'	Soluble	Solid	300.0	54458
890-4756-13	B-13-S-4'	Soluble	Solid	300.0	54458
890-4756-14	B-14-S-4'	Soluble	Solid	300.0	54458
890-4756-15	B-15-S-4'	Soluble	Solid	300.0	54458
890-4756-16	SW-1-S-0-4'	Soluble	Solid	300.0	54458
890-4756-17	SW-2-S-0-4'	Soluble	Solid	300.0	54458
890-4756-18	SW-3-S-0-4'	Soluble	Solid	300.0	54458
890-4756-19	SW-4-S-0-4'	Soluble	Solid	300.0	54458
890-4756-20	SW-5-S-0-4'	Soluble	Solid	300.0	54458
MB 880-54458/1-A	Method Blank	Soluble	Solid	300.0	54458
LCS 880-54458/2-A	Lab Control Sample	Soluble	Solid	300.0	54458
LCSD 880-54458/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54458
890-4756-1 MS	B-1-S-3'	Soluble	Solid	300.0	54458
890-4756-1 MSD	B-1-S-3'	Soluble	Solid	300.0	54458
890-4756-11 MS	B-11-S-4'	Soluble	Solid	300.0	54458
890-4756-11 MSD	B-11-S-4'	Soluble	Solid	300.0	54458

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

HPLC/IC

Leach Batch: 54838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Soluble	Solid	DI Leach	
890-4779-2	SW-2A-S-0-4'	Soluble	Solid	DI Leach	
890-4779-3	SW-11-S-0-4'	Soluble	Solid	DI Leach	
890-4779-4	SW-12-S-0-4'	Soluble	Solid	DI Leach	
890-4779-5	B-30-S-4'	Soluble	Solid	DI Leach	
890-4779-6	B-31-S-4'	Soluble	Solid	DI Leach	
890-4779-7	B-32-S-4'	Soluble	Solid	DI Leach	
890-4779-8	B-33-S-4'	Soluble	Solid	DI Leach	
890-4779-9	B-34-S-4'	Soluble	Solid	DI Leach	
890-4779-10	B-35-S-4'	Soluble	Solid	DI Leach	
890-4779-11	B-36-S-4'	Soluble	Solid	DI Leach	
890-4779-12	B-37-S-4'	Soluble	Solid	DI Leach	
890-4779-13	B-38-S-4'	Soluble	Solid	DI Leach	
890-4779-14	B-39-S-4'	Soluble	Solid	DI Leach	
890-4779-15	B-40-S-4'	Soluble	Solid	DI Leach	
MB 880-54838/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54838/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54838/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4779-7 MS	B-32-S-4'	Soluble	Solid	DI Leach	
890-4779-7 MSD	B-32-S-4'	Soluble	Solid	DI Leach	

Analysis Batch: 54974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4779-1	B-10A-S-4'	Soluble	Solid	300.0	54838
890-4779-2	SW-2A-S-0-4'	Soluble	Solid	300.0	54838
890-4779-3	SW-11-S-0-4'	Soluble	Solid	300.0	54838
890-4779-4	SW-12-S-0-4'	Soluble	Solid	300.0	54838
890-4779-5	B-30-S-4'	Soluble	Solid	300.0	54838
890-4779-6	B-31-S-4'	Soluble	Solid	300.0	54838
890-4779-7	B-32-S-4'	Soluble	Solid	300.0	54838
890-4779-8	B-33-S-4'	Soluble	Solid	300.0	54838
890-4779-9	B-34-S-4'	Soluble	Solid	300.0	54838
890-4779-10	B-35-S-4'	Soluble	Solid	300.0	54838
890-4779-11	B-36-S-4'	Soluble	Solid	300.0	54838
890-4779-12	B-37-S-4'	Soluble	Solid	300.0	54838
890-4779-13	B-38-S-4'	Soluble	Solid	300.0	54838
890-4779-14	B-39-S-4'	Soluble	Solid	300.0	54838
890-4779-15	B-40-S-4'	Soluble	Solid	300.0	54838
MB 880-54838/1-A	Method Blank	Soluble	Solid	300.0	54838
LCS 880-54838/2-A	Lab Control Sample	Soluble	Solid	300.0	54838
LCSD 880-54838/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54838
890-4779-7 MS	B-32-S-4'	Soluble	Solid	300.0	54838
890-4779-7 MSD	B-32-S-4'	Soluble	Solid	300.0	54838

Leach Batch: 55045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Soluble	Solid	DI Leach	
MB 880-55045/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-55045/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-55045/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

HPLC/IC

Analysis Batch: 55059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-29310-1	SW-12A-S-0-4'	Soluble	Solid	300.0	55045
MB 880-55045/1-A	Method Blank	Soluble	Solid	300.0	55045
LCS 880-55045/2-A	Lab Control Sample	Soluble	Solid	300.0	55045
LCSD 880-55045/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	55045

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-12A-S-0-4'
Date Collected: 06/08/23 10:50
Date Received: 06/08/23 16:36

Lab Sample ID: 880-29310-1
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	55144	06/09/23 12:33	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 20:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55275	06/12/23 13:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55339	06/12/23 14:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	55159	06/09/23 14:05	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	55207	06/11/23 05:47	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	55045	06/08/23 17:15	KS	EET MID
Soluble	Analysis	300.0		10			55059	06/09/23 02:51	CH	EET MID

Client Sample ID: AH-1-5-3'
Date Collected: 05/30/23 16:10
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4755-1
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			4.99 g	5 mL	54576	06/01/23 11:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/01/23 16:39	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54605	06/01/23 17:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			54634	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54539	06/01/23 16:30	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 20:09	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54556	06/01/23 10:20	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54577	06/01/23 14:01	CH	EET MID

Client Sample ID: B-1-S-3'
Date Collected: 05/30/23 12:45
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-1
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			4.97 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 01:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 21:56	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54586	06/01/23 12:54	CH	EET MID

Client Sample ID: B-2-S-3'
Date Collected: 05/30/23 12:55
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-2
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	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 01:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-2-S-3'
Date Collected: 05/30/23 12:55
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 23:01	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 13:11	CH	EET MID

Client Sample ID: B-3-S-4'
Date Collected: 05/30/23 13:05
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-3
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			5.02 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 01:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 23:23	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 13:16	CH	EET MID

Client Sample ID: B-4-S-4'
Date Collected: 05/30/23 13:15
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-4
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			5.01 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 02:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/01/23 23:45	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 13:22	CH	EET MID

Client Sample ID: B-5-S-4'
Date Collected: 05/30/23 13:25
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-5
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			4.97 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 02:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 00:06	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-5-S-4'
Date Collected: 05/30/23 13:25
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 13:27	CH	EET MID

Client Sample ID: B-6-S-4'
Date Collected: 05/30/23 13:35
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-6
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			4.95 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 02:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 00:28	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 13:43	CH	EET MID

Client Sample ID: B-7-S-4'
Date Collected: 05/30/23 13:45
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			5.02 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 03:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 00:50	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 13:49	CH	EET MID

Client Sample ID: B-8-S-4'
Date Collected: 05/30/23 14:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-8
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			5.03 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 03:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 01:11	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 13:54	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-9-S-3'
Date Collected: 05/30/23 14:10
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-9
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			5.01 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 03:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 01:33	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54586	06/01/23 14:00	CH	EET MID

Client Sample ID: B-10-S-3'
Date Collected: 05/30/23 14:20
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-10
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			5.02 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 04:14	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 01:55	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 14:05	CH	EET MID

Client Sample ID: B-11-S-4'
Date Collected: 05/30/23 14:30
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-11
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			5.03 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 06:04	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 02:38	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 14:10	CH	EET MID

Client Sample ID: B-12-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-12
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			5.02 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 06:24	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-12-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 02:59	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 14:27	CH	EET MID

Client Sample ID: B-13-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-13
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			5.01 g	5 mL	54574	06/01/23 11:27	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54540	06/02/23 06:45	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/02/23 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 03:21	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 14:32	CH	EET MID

Client Sample ID: B-14-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			4.98 g	5 mL	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 03:19	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 03:42	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 14:49	CH	EET MID

Client Sample ID: B-15-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-15
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			4.99 g	5 mL	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 03:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 04:04	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-15-S-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54586	06/01/23 14:54	CH	EET MID

Client Sample ID: SW-1-S-0-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-16
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			5.05 g	5 mL	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 04:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 04:25	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 14:59	CH	EET MID

Client Sample ID: SW-2-S-0-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-17
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	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 04:21	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 04:47	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	54586	06/01/23 15:05	CH	EET MID

Client Sample ID: SW-3-S-0-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-18
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	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 04:41	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 05:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 15:10	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-4-S-0-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-19
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	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 05:02	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 05:29	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 15:16	CH	EET MID

Client Sample ID: SW-5-S-0-4'
Date Collected: 05/30/23 00:00
Date Received: 05/31/23 08:00

Lab Sample ID: 890-4756-20
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			5.04 g	5 mL	54587	06/01/23 13:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54640	06/03/23 05:22	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			54676	06/05/23 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			54635	06/02/23 09:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54558	06/01/23 10:58	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54534	06/02/23 05:51	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54458	05/31/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54586	06/01/23 15:21	CH	EET MID

Client Sample ID: B-10A-S-4'
Date Collected: 06/05/23 11:30
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-1
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			4.99 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 13:38	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 16:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 21:22	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 12:45	CH	EET MID

Client Sample ID: SW-2A-S-0-4'
Date Collected: 06/05/23 11:40
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-2
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			5.00 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 13:58	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 16:22	AJ	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: SW-2A-S-0-4'
Date Collected: 06/05/23 11:40
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 22:25	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 13:01	CH	EET MID

Client Sample ID: SW-11-S-0-4'
Date Collected: 06/05/23 12:00
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-3
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			5.05 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 17:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 22:46	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 13:07	CH	EET MID

Client Sample ID: SW-12-S-0-4'
Date Collected: 06/05/23 12:10
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-4
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			5.03 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 17:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 23:07	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 13:12	CH	EET MID

Client Sample ID: B-30-S-4'
Date Collected: 06/05/23 12:20
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-5
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			4.97 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 17:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 23:28	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-30-S-4'
Date Collected: 06/05/23 12:20
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-5
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	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 13:17	CH	EET MID

Client Sample ID: B-31-S-4'
Date Collected: 06/05/23 12:30
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-6
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			4.99 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 18:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/07/23 23:50	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 13:23	CH	EET MID

Client Sample ID: B-32-S-4'
Date Collected: 06/05/23 12:40
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-7
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	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 18:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 00:11	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 13:28	CH	EET MID

Client Sample ID: B-33-S-4'
Date Collected: 06/05/23 12:50
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-8
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			5.00 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 18:54	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 00:32	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 13:45	CH	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-34-S-4'
Date Collected: 06/05/23 13:00
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-9
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			5.05 g	5 mL	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 19:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 00:54	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 13:50	CH	EET MID

Client Sample ID: B-35-S-4'
Date Collected: 06/05/23 13:10
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-10
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	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 19:35	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 01:15	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 14:06	CH	EET MID

Client Sample ID: B-36-S-4'
Date Collected: 06/05/23 13:20
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-11
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	54978	06/07/23 13:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55090	06/09/23 19:55	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/09/23 21:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 01:57	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 14:12	CH	EET MID

Client Sample ID: B-37-S-4'
Date Collected: 06/05/23 13:30
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-12
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			5.02 g	5 mL	54980	06/07/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 03:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/10/23 18:16	AJ	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-37-S-4'
Date Collected: 06/05/23 13:30
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 02:18	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 14:17	CH	EET MID

Client Sample ID: B-38-S-4'
Date Collected: 06/05/23 13:40
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-13
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			5.00 g	5 mL	54980	06/07/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 04:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/10/23 18:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 02:39	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 14:23	CH	EET MID

Client Sample ID: B-39-S-4'
Date Collected: 06/05/23 13:50
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-14
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			4.97 g	5 mL	54980	06/07/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 04:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/10/23 18:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 03:00	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		10			54974	06/07/23 14:28	CH	EET MID

Client Sample ID: B-40-S-4'
Date Collected: 06/05/23 14:00
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-15
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			5.05 g	5 mL	54980	06/07/23 13:56	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	55086	06/10/23 04:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			55175	06/10/23 18:16	AJ	EET MID
Total/NA	Analysis	8015 NM		1			55030	06/08/23 10:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54979	06/07/23 13:46	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54921	06/08/23 03:21	SM	EET MID

Lab Chronicle

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

Client Sample ID: B-40-S-4'

Date Collected: 06/05/23 14:00
Date Received: 06/05/23 16:30

Lab Sample ID: 890-4779-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	54838	06/06/23 09:35	KS	EET MID
Soluble	Analysis	300.0		1			54974	06/07/23 14:34	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: SRO SWD #101

Job ID: 890-4779-1

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
Total BTEX		Solid	Total BTEX

Method Summary

Client: ARCADIS US Inc
Project/Site: SRO SWD #101

Job ID: 890-4779-1

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: SRO SWD #101

Job ID: 890-4779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-29310-1	SW-12A-S-0-4'	Solid	06/08/23 10:50	06/08/23 16:36	
890-4755-1	AH-1-5-3'	Solid	05/30/23 16:10	05/31/23 08:00	3
890-4756-1	B-1-S-3'	Solid	05/30/23 12:45	05/31/23 08:00	3
890-4756-2	B-2-S-3'	Solid	05/30/23 12:55	05/31/23 08:00	3
890-4756-3	B-3-S-4'	Solid	05/30/23 13:05	05/31/23 08:00	4
890-4756-4	B-4-S-4'	Solid	05/30/23 13:15	05/31/23 08:00	4
890-4756-5	B-5-S-4'	Solid	05/30/23 13:25	05/31/23 08:00	4
890-4756-6	B-6-S-4'	Solid	05/30/23 13:35	05/31/23 08:00	4
890-4756-7	B-7-S-4'	Solid	05/30/23 13:45	05/31/23 08:00	4
890-4756-8	B-8-S-4'	Solid	05/30/23 14:00	05/31/23 08:00	4
890-4756-9	B-9-S-3'	Solid	05/30/23 14:10	05/31/23 08:00	3
890-4756-10	B-10-S-3'	Solid	05/30/23 14:20	05/31/23 08:00	3
890-4756-11	B-11-S-4'	Solid	05/30/23 14:30	05/31/23 08:00	4
890-4756-12	B-12-S-4'	Solid	05/30/23 00:00	05/31/23 08:00	4
890-4756-13	B-13-S-4'	Solid	05/30/23 00:00	05/31/23 08:00	4
890-4756-14	B-14-S-4'	Solid	05/30/23 00:00	05/31/23 08:00	4
890-4756-15	B-15-S-4'	Solid	05/30/23 00:00	05/31/23 08:00	4
890-4756-16	SW-1-S-0-4'	Solid	05/30/23 00:00	05/31/23 08:00	0 - 4
890-4756-17	SW-2-S-0-4'	Solid	05/30/23 00:00	05/31/23 08:00	0 - 4
890-4756-18	SW-3-S-0-4'	Solid	05/30/23 00:00	05/31/23 08:00	0 - 4
890-4756-19	SW-4-S-0-4'	Solid	05/30/23 00:00	05/31/23 08:00	0 - 4
890-4756-20	SW-5-S-0-4'	Solid	05/30/23 00:00	05/31/23 08:00	0 - 4
890-4779-1	B-10A-S-4'	Solid	06/05/23 11:30	06/05/23 16:30	4
890-4779-2	SW-2A-S-0-4'	Solid	06/05/23 11:40	06/05/23 16:30	0 - 4
890-4779-3	SW-11-S-0-4'	Solid	06/05/23 12:00	06/05/23 16:30	0 - 4
890-4779-4	SW-12-S-0-4'	Solid	06/05/23 12:10	06/05/23 16:30	0 - 4
890-4779-5	B-30-S-4'	Solid	06/05/23 12:20	06/05/23 16:30	4
890-4779-6	B-31-S-4'	Solid	06/05/23 12:30	06/05/23 16:30	4
890-4779-7	B-32-S-4'	Solid	06/05/23 12:40	06/05/23 16:30	4
890-4779-8	B-33-S-4'	Solid	06/05/23 12:50	06/05/23 16:30	4
890-4779-9	B-34-S-4'	Solid	06/05/23 13:00	06/05/23 16:30	4
890-4779-10	B-35-S-4'	Solid	06/05/23 13:10	06/05/23 16:30	4
890-4779-11	B-36-S-4'	Solid	06/05/23 13:20	06/05/23 16:30	4
890-4779-12	B-37-S-4'	Solid	06/05/23 13:30	06/05/23 16:30	4
890-4779-13	B-38-S-4'	Solid	06/05/23 13:40	06/05/23 16:30	4
890-4779-14	B-39-S-4'	Solid	06/05/23 13:50	06/05/23 16:30	4
890-4779-15	B-40-S-4'	Solid	06/05/23 14:00	06/05/23 16:30	4

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

Chain of Custody Record

eurofins Environment Testing

27976

Client Information	Sampler: Heath.Boyd@Arcadis.com	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5834-795 3
Client Contact: Justin Nixon	Phone: 575 390-4618	E-Mail: John Builes@et.eurofinsus com	State of Origin: NM	Page: ~~Page 3 of 5~~ Pg. 1 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
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: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001747			
Site: SRO (30179637)	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/~~8015MOD_NM/8021B~~	Total Number of containers	Special Instructions/Note
			Preservation Code:				N		
T1-1'-S-050323	5/3/23	1030	G	Solid			X		402
T1-2'-S-050323		1040		Solid			X		
T1-4'-S-050323		1050		Solid			X		
T2-1'-S-050323		1100		Solid			X		
T2-2'-S-050323		1110		Solid			X		
T2-4'-S-050323		1120		Solid			X		
T3-1'-S-050323		1130		Solid			X		
T3-2'-S-050323		1140		Solid			X		
T3-4'-S-050323		1150		Solid			X		
T4-1'-S-050323		1250		Solid			X		
T4-2'-S-050323	X	1300	X	Solid			X		

880-27976 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: Add to site name. NMLB1121352991

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
JB	5/4/23 1505			5/4/23 1502	
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: 5.9 15.5

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

Chain of Custody Record

eurofins Environment Testing

279976

Client Information	Sampler: Heath.Boyd@Arcadis	Lab PM: Builes John	Carrier Tracking No(s):	COC No: 880-5834-795 5
Client Contact: Justin Nixon	Phone: 575 390-4618	E-Mail: John Builes@et.eurofinsus com	State of Origin: NM	Page: ~~Page 5 of 5~~ Pg. 2 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days):			
State Zip: TX 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001747			
Site: SRO (30179637)	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			
T4-4'-S-050323	5/3/23	1310	G	Solid				X		
T8-1'-S-050323		1320		Solid				X		
T8-2'-S-050323		1330		Solid				X		
T8-4'-S-050323		1340		Solid				X		
T9-1'-S-050323		1350		Solid			X			
T9-2'-S-050323		1400		Solid			X			
T9-4'-S-050323		1410					X			

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

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

Deliverable Requested I II III IV Other (specify)

Special Instructions/QC Requirements
Add to site name: NMLB1121352991

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/4/23 1505		[signature]	5/4/23 1502	

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

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

Chain of Custody Record

eurofins Environment Testing

27976

Client Information	Sampler: Heath Boyd@Arcadis.com	Lab PM: Builes John	Carrier Tracking No(s)	COC No: 880-5834-795 2
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Builes@et eurofinsus com	State of Origin: NM	Page: Page 2 of 5
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24 hr			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001747			
Site: SRO(30179637)	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, ~~9014/WCD_NM, 9034B~~	Total Number of containers	Special Instructions/Note
			Preservation Code:				N		
T5-1'-S-050423	5/4/23	930	G	Solid			X		
T5-2'-S-050423		940		Solid			X		
T5-4'-S-050423		950		Solid			X		
T7-1'-S-050423		1020		Solid			X		
T7-2'-S-050423		1030		Solid			X		
T7-4'-S-050423	X	1040	X	Solid			X		
				Solid					
				Solid					
				Solid					
				Solid					
				Solid					

Loc: 880
27976

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
Add to Site name. NMLB1121352491

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	5/4/23 1505			5/4/23 1502	
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

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

Chain of Custody Record

eurofins
Environment Testing

29310

Client Information	Sampler: Heath Boyd	Lab PM: Bulles John	Carrier Tracking No(s):	COC No.: 880-6001-817 13
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John Bulles@et eurofinsus com	State of Origin: NM	Page: Page 13 of 20
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl', 3 day All Else			
State Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin Nixon@arcadis com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B BTEX	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	N	N		
SW-12A-S-0-4'	6/8/23	1050	C	Solid			X	X	X		
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

880-29310 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
Incident #: nMLB1121352991

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	6/8/23 1300	Arcadis		6/8/23 1250	Arcadis
	6/8/23 1650	Arcadis		6/8/23 1636	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: 2.6/2.3

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.3
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 3 of 20~~ 7 of 7
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl 3day All else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, NM	SSOW#:			

Analysis Requested

890-4755 Chain of Custody

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
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)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
AH-1-S-3'	5/30/23	1610	C	Solid			X	X	X		
				Solid							T_NM-007
				Solid							-0-2
				Solid							5.4/5.2
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

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: Incident #: nJMW1334648160 (Seperate Report)

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/31/23 0800	Company: Arcadis	Received by:	Date/Time: 5.31 23 800	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: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath. Boyd@Arcadis	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.1
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 1 of 20~~ 1 of 2
Company: ARCADIS US Inc	PWSID:			Job #
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl 5day All else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, NM	SSOW#:			

Analysis Requested

890-4756 Chain of Custody

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, ...aHSO4, ...eOH, ...mchlor, ...scorbic Acid, ...e, ...l Water, ...DTA, ...DA
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)
...er:

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 c	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-1-S-3'	5/30/23	1245	C	Solid			Y	Y	Y		
B-2-S-3'		1255		Solid			X	X	Y		T-NM-007
B-3-S-4'		1305		Solid			X	X	X		-0.2
B-4-S-4'		1315		Solid			Y	X	Y		5.4/5.2
B-5-S-4'		1325		Solid			Y	Y	X		
B-6-S-4'		1335		Solid			Y	Y	X		
B-7-S-4'		1345		Solid			X	Y	X		
B-8-S-4'		1400		Solid			X	Y	Y		
B-9-S-3'		1410		Solid			Y	X	Y		
B-10-S-3'		1420		Solid			X	Y	X		
B-11-S-4'	X	1430	X	Solid			Y	X	Y		

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: ~~Incident #: nSMW1337164810~~ nMLB1121352991

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	5/31/23 0800	Arcadis	Clue Cap	5.31.23 8:00	
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: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath. Boyd @ Arcadis.com	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.2
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 2 of 20~~ 2 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr cl 30day all else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM - Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-12-S-4'	5/30/23		C	Solid			X	X	X		
B-13-S-4'				Solid			X	X	X		2_NM_007
B-14-S-4'				Solid			X	X	X		-0.2
B-15-S-4'				Solid			X	X	X		5.4/5.2
SW-1-S-0-4'				Solid			X	X	X		
SW-2-S-0-4'				Solid			X	X	X		
SW-3-S-0-4'				Solid			X	X	X		
SW-4-S-0-4'				Solid			X	X	X		
SW-5-S-0-4'	X		X	Solid			X	X	X		
				Solid							
				Solid							

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: Incident #: nMLB1121352991

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/31/23 0800	Arcadis	[signature]	5.31.23 8:00	

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.9
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin: NM	Page: ~~Page 9 of 20~~ 1 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24hr Cl' 3day All else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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
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)

890-4779 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 Num	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-10A-S-4'	6/5/23	1130	C	Solid			X	X	X		
SW-2A-S-0-4'		1140		Solid			X	X	X		TWM007
SW-11-S-0-4'		1200		Solid			X	X	X		-0.2
SW-12-S-0-4'		1210		Solid			X	X	X		22.2/22.0
B-30-S-4'		1220		Solid			X	X	X		
B-31-S-4'		1230		Solid			X	X	X		
B-32-S-4'		1240		Solid			X	X	X		
B-33-S-4'		1250		Solid			X	X	X		
B-34-S-4'		1300		Solid			X	X	X		
B-35-S-4'		1310		Solid			X	X	X		
B-36-S-4'	X	1320	X	Solid			X	X	X		

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

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

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

Special Instructions/QC Requirements: Incident #: nMLB1121352991

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	6/5/23 1630	Arcadis	[signature]	6-5-23 1636	

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

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Heath Boyd	Lab PM: Builes, John	Carrier Tracking No(s):	COC No: 880-6001-817.10
Client Contact: Justin Nixon	Phone: 575-390-4618	E-Mail: John.Builes@et.eurofinsus.com	State of Origin:	Page: ~~Page 10 of 20~~ 2 of 2
Company: ARCADIS US Inc	PWSID:			Job #:
Address: 1004 North Big Spring Suite 300	Due Date Requested:			
City: Midland	TAT Requested (days): 24 hr Cl, 3Day All Else			
State, Zip: TX, 79701	Compliance Project: Δ Yes Δ No			
Phone: 432-296-9547(Tel)	PO #: Purchase Order Requested			
Email: Justin.Nixon@arcadis.com	WO #:			
Project Name: SRO SWD #101	Project #: 88001777			
Site: Eddy County, 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)	8015MOD_NM_- Full TPH	300_ORGFM_28D - Chloride	8021B - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
B-37-S-4'	6/5/23	1330	C	Solid			X	X	X		
B-38-S-4'		1340		Solid			X	X	X		Pal
B-39-S-4'		1350		Solid			X	X	X		
B-40-S-4'	X	1400	X	Solid			X	X	X		
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							
				Solid							

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:
Incident #: nMLB1121355291

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	6/5/23 1630	Arcadis	[signature]	6-5-23 1630	
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: 01/16/2019

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 890-4779-1

Login Number: 4779
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: ARCADIS US Inc

Job Number: 890-4779-1

Login Number: 4779
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 06/07/23 11:36 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	

Arcadis U.S., Inc.
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District I
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Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 268472

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 268472
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	Closure approved. Site will need to meet all the requirements of 19.15.29.13 NMAC.	11/6/2023