



Armando Martinez
Operations Lead, Portfolio Operations Central

INFORMATION ONLY

July 30, 2021

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

Re: 2021 Soil Assessment Report – WDDU Water Station
Case No. 1RP-2108
Lea County, New Mexico

Dear Bradford Billings:

Chevron Environmental Management Company (CEMC) submits herein the *2021 Soil Assessment Report* for 1RP-2108, WDDU Water Station. The Site is located approximately 7.30 miles northeast of Jal, in Unit D, Section 32, Township 24 South, Range 38 East, Lea County, New Mexico. The Report was prepared by Arcadis U.S., Inc. (Arcadis), on behalf of CEMC. Based on the 2021 soil investigation data, additional assessment activities will be evaluated, and a proposed scope will be included in a Work Plan for review and approval to further delineate chloride impact in soil.

If you have any questions regarding this submittal, please contact Scott Foord of Arcadis at (713) 953-4853 or me at (505) 690 5408.

Respectfully,

A handwritten signature in blue ink, appearing to read "Armando Martinez".

Armando Martinez

Encl. 2021 Soil Assessment Report – WDDU Water Station

Armando Martinez
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Portfolio Operations - Central
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Chevron Environmental Management Company

2021 Soil Assessment Report

WDDU Water Station

Case No. 1RP-2108

July 2021

2021 Soil Assessment Report

2021 Soil Assessment Report

WDDU Water Station

Case No. 1RP-2108

July 2021

Prepared By:

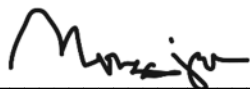
Arcadis U.S., Inc.
10205 Westheimer Road, Suite 800
Houston
Texas 77042
Phone: 713 953 4800
Fax: 713 977 4620

Prepared For:

Armando Martinez
Operations Lead Central
Chevron Environmental Management Company
P.O. Box 469
Questa, New Mexico 87556

Our Ref:

30065089



Morgan Jordan
Task Manager I



Scott Foord, PG
Certified Project Manager

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www.arcadis.com

WDDU Water Station_Soil Assessment Report_Final_JN

2021 Soil Assessment Report

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2021 Soil Assessment Report

1 Introduction

Arcadis U.S., Inc. (Arcadis) prepared this Site Assessment Report (Report), on behalf of Chevron Environmental Management Company (CEMC), summarizing the soil assessment activities conducted for the WDDU Water Station (Site).

2 Project Summary

The Site is approximately 7.30 miles northeast of Jal, in Unit D, Section 32, Township 24 South, Range 38 East, Lea County, New Mexico. A site location map is included as **Figure 1**.

On February 17, 2009, internal corrosion on a 2-inch diameter steel connection from the Water Injection Station failed releasing 158 barrels (bbls) of produced water. The Initial C-141 Form indicated the leak was isolated and repaired. A vacuum truck was immediately dispatched to the location and recovered 60 bbls of produced water. According to the New Mexico Office of the State Engineers (NMOSE) database, there is a water well approximately 0.90 miles southeast of the Site with a depth to groundwater of 105 feet below ground surface (bgs). The Initial C-141 Form for this release was submitted to the New Mexico Oil Conservation Division (NMOCD) on February 20, 2009 and approved by NMOCD on February 25, 2009. The release was assigned remediation permit number 1RP-2108. The Initial C-141 Form for this release is included in **Appendix A**.

3 2021 Soil Assessment

On January 4-5, 2021, Arcadis personnel collected soil samples from twenty locations (SB-1 through SB-20) within the release area. The sample locations were determined based on information obtained by Arcadis from the Initial C-141 Forms and from Chevron personnel familiar with the release location associated with remediation permit number 1RP-2108. The soil samples were collected with a hand auger at depths ranging from the surface to approximately 3.5 feet bgs. Hand auger refusal was encountered within all boring locations. Each boring location was backfilled with the remaining soil. Soils were characterized and logged by a field geologist based on the Unified Soil Classification System (USCS), including texture, structure, and consistence at each sample location from surface to refusal depths encountered within each boring. Boring logs for borings installed deeper than 2 feet bgs are included in **Appendix B**. Soil sample locations are presented on **Figure 2**. Sample containers (4 oz. soil jars) were supplied by Eurofins Xenco Laboratories, and samples were collected and placed on ice for delivery to Eurofins Xenco Laboratories in Midland, Texas for analysis.

The soil samples were analyzed for:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Protection Agency (USEPA) Method 8021B;
- Total Petroleum Hydrocarbons (TPH) as gasoline range organic (TPH-GRO) by USEPA Method 8015;
- TPH as diesel range organic (TPH-DRO) by USEPA Method 8015;
- TPH as motor oil range organic (TPH-MRO) by USEPA Method 8015; and
- Chloride by USEPA Method 300.

2021 Soil Assessment Report

4 Soil Analytical Results

The soil analytical results were compared to the revised New Mexico Administration Code (NMAC) screening levels for BTEX, TPH, and chloride for depth to groundwater greater than 100 feet bgs (revised Rule 19.15.29). A summary of the soil sample analytical results is presented in **Table 1**. Copies of the certified analytical reports and chain-of-custody documentation from Eurofins Xenco Laboratories are presented in **Appendix C**. The soil analytical map is presented in **Figure 3**.

4.1 BTEX

- Benzene concentrations were reported below the NMAC standard of 10 milligrams per kilogram (mg/kg) at all sample locations.
- Total BTEX concentrations were reported below the NMAC standard of 50 mg/kg at all sample locations.

4.2 TPH

- TPH (GRO + DRO) concentrations were reported below the NMAC standard of 1,000 mg/kg at all sample locations.
- Total TPH (GRO + DRO + MRO) concentrations were reported below the NMAC standard of 2,500 mg/kg at all sample locations.

4.3 Chloride

- Chloride concentrations were reported below the revised Rule 19.15.29 screening limit of 20,000 mg/kg at all sample locations. However, concentrations did exceed the revised Rule (19.15.29.13) restoration screening criteria of 600 mg/kg at nineteen sample location (SB-1 through SB-16 and SB-18 through SB-20).
 - SB-1
 - (0 – 0.5 ft) at 1,460 mg/kg
 - (1 – 1.25 ft) at 1,740 mg/kg
 - SB-2
 - (0 – 0.5 ft) at 8,480 mg/kg
 - (1 – 1.5 ft) at 5,840 mg/kg
 - SB-3
 - (0 – 0.5 ft) at 7,140 mg/kg
 - (1 – 1.5 ft) at 3,260 mg/kg
 - SB-4
 - (0 – 0.5 ft) at 3,400 mg/kg
 - (1 – 1.25 ft) at 3,630 mg/kg
 - SB-5
 - (0 – 0.5 ft) at 1,970 mg/kg
 - SB-6

2021 Soil Assessment Report

- (0 – 0.5 ft) at 1,660 mg/kg
- SB-7
 - (0 – 0.5 ft) at 11,000 mg/kg
- SB-8
 - (0 – 0.5 ft) at 3,140 mg/kg
 - (1 – 1.25 ft) at 855 mg/kg
- SB-9
 - (0 – 0.5 ft) at 9,360 mg/kg
- SB-10
 - (0 – 0.5 ft) at 15,000 mg/kg
- SB-11
 - (0 – 0.5 ft) at 15,100 mg/kg
- SB-12
 - (0 – 0.5 ft) at 6,850 mg/kg
- SB-13
 - (0 – 0.5 ft) at 812 mg/kg
- SB-14
 - (0 – 0.5 ft) at 708 mg/kg
 - (1 – 1.5 ft) at 1,040 mg/kg
- SB-15
 - (0 – 0.5 ft) at 722 mg/kg
 - (1 – 1.5 ft) at 1,060 mg/kg
- SB-16
 - (1 – 2 ft) at 1,760 mg/kg
- SB-18
 - (1 – 2 ft) at 2,250 mg/kg
- SB-19
 - (3 – 3.5 ft) at 2,550 mg/kg
- SB-20
 - (0 – 0.5 ft) at 660 mg/kg

5 Recommendation

Analytical results associated with the recent assessment activities indicated that concentrations of chloride above the restoration screening criteria of 600 mg/kg within the top 4 feet bgs of the soil column are present in surface and shallow soil in the vicinity of SB-1 through SB-16 and SB-18 through SB-20. Based upon the findings presented in this report, additional soil assessment activities are recommended to further delineate the chloride impact in soil at the Site. The revised C-141 Form is presented in **Appendix E**.

Tables

Table 1
2021 Soil Analytical Results
Chevron Environmental Management Company
WDDU Water Station
Lea County, New Mexico



Sample I.D. No.	Sample Depth (feet bgs)	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Gasoline Range Organics	Diesel Range Organics	Total GRO + DRO	Oil Range Organics	Total TPH	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
			10	--	--	--	50	--	--	1,000	--	2,500	20,000
NMAC Standards													
Restoration Requirements													
SB-1	0-0.5	1/4/21	<0.000381	<0.000451	<0.000559	<0.000341	<0.000341	<15.0	17.6 J	17.6 J	<15.0	17.6 J	1,480
SB-1	1-1.25	1/4/21	<0.000383	<0.000454	<0.000663	<0.000343	<0.000343	<15.0	<15.0	<15.0	<15.0	<15.0	1,740
SB-2	0-0.5	1/4/21	<0.000387	<0.000458	<0.000568	<0.000346	<0.000346	<15.0	<15.0	<15.0	<15.0	<15.0	8,480
SB-2	1-1.5	1/4/21	0.000838 J	0.00148 J	0.000619 J	<0.000344	0.00294	<15.0	<15.0	<15.0	<15.0	<15.0	5,840
SB-3	0-0.5	1/4/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	<15.0	<15.0	<15.0	<15.0	<15.0	7,140
SB-3	1-1.5	1/4/21	<0.000384	<0.000455	<0.000564	<0.000344	<0.000344	<15.0	<15.0	<15.0	<15.0	<15.0	3,260
SB-4	0-0.5	1/4/21	<0.000385	<0.000456	<0.000565	<0.000344	<0.000344	<15.0	15.9 J	15.9 J	<15.0	15.9 J	3,400
SB-4	1-1.25	1/4/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	<15.0	<15.0	<15.0	<15.0	<15.0	3,630
SB-5	0-0.5	1/4/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	<14.9	38.0 J	38.0 J	<14.9	38.0 J	1,970
SB-6	0-0.5	1/4/21	0.000412 J	0.00109 J	<0.000567	<0.000346	0.00150 J	<15.0	<15.0	<15.0	<15.0	<15.0	1,660
SB-7	0-0.5	1/4/21	0.000697 J	0.00135 J	<0.000563	<0.000343	0.00205	<15.0	<15.0	<15.0	<15.0	<15.0	11,000
SB-8	0-0.5	1/4/21	0.00119 J	0.00126 J	<0.000564	0.000928 J	0.00338	<15.0	21.0 J	21.0 J	<15.0	21.0 J	3,140
SB-8	1-1.25	1/4/21	0.000691 J	0.00102 J	<0.000566	<0.000345	0.00171 J	<15.0	<15.0	<15.0	<15.0	<15.0	855
SB-9	0-0.5	1/4/21	0.000443 J	0.00119 J	<0.000568	<0.000346	0.00163 J	<15.0	<15.0	<15.0	<15.0	<15.0	9,360
SB-10	0-0.5	1/5/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	16.6 J	<15.0	16.6 J	<15.0	16.6 J	15,000
SB-11	0-0.5	1/5/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	17.7 J	<15.0	17.7 J	<15.0	17.7 J	15,100
SB-12	0-0.5	1/5/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	15.4 J	<15.0	15.4 J	<15.0	15.4 J	6,850
SB-13	0-0.5	1/5/21	<0.000384	<0.000455	<0.000564	<0.000344	<0.000344	15.7 J	<15.0	15.7 J	<15.0	15.7 J	812
SB-14	0-0.5	1/5/21	<0.000385	<0.000456	<0.000565	<0.000344	<0.000344	17.1 J	28.8 J	45.9 J	<15.0	45.9 J	708
SB-14	1-1.5	1/5/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	18.6 J	156	174.6 J	60.5	235	1,040
SB-15	0-0.5	1/5/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	16.9 J	<14.9	16.9 J	<15.0	16.9 J	722
SB-15	1-1.5	1/5/21	<0.000383	<0.000453	<0.000561	<0.000342	<0.000342	16.4 J	52.0	88.4 J	17.3 J	85.7	1,060
DUP (SB-15)	1-1.5	1/5/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	17.7 J	34.9 J	52.6 J	17.1 J	69.7	1,090
SB-16	0-0.5	1/5/21	<0.000382	<0.000452	<0.000560	<0.000342	<0.000342	18.3 J	<15.0	18.3 J	<15.0	18.3 J	150
SB-16	1-2	1/5/21	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	14.9 J	<14.9	14.9 J	<14.9	14.9 J	1,760
SB-17	0-0.5	1/5/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	19.9 J	<15.0	19.9 J	<15.0	19.9 J	1.07 J
SB-17	1-2	1/5/21	<0.000388	<0.000459	<0.000569	<0.000347	<0.000347	15.0 J	<15.0	15.0 J	<15.0	15.0 J	595
SB-18	0-0.5	1/5/21	<0.000389	<0.000460	<0.000570	<0.000348	<0.000348	16.1 J	<15.0	16.1 J	<15.0	16.1 J	160
SB-18	1-2	1/5/21	<0.000385	<0.000456	<0.000565	<0.000344	<0.000344	15.3 J	15.0 J	30.3 J	<15.0	30.3 J	2,290
SB-19	0-0.5	1/5/21	<0.000389	<0.000460	<0.000570	<0.000348	<0.000348	17.9 J	<15.0	17.9 J	<15.0	17.9 J	<0.850
SB-19	1-2	1/5/21	<0.000384	<0.000455	<0.000564	<0.000344	<0.000344	15.5 J	15.5 J	31.0 J	<15.0	31.0 J	272
SB-19	3-3.5	1/5/21	<0.000386	<0.000457	<0.000567	<0.000346	<0.000346	<15.0	<15.0	<15.0	<15.0	<15.0	2,550
SB-20	0-0.5	1/5/21	<0.000386	<0.000457	<0.000566	<0.000345	<0.000345	17.7 J	<15.0	17.7 J	<15.0	17.7 J	660

Legend:

BOLD = Analytes exceeding the NMAC standards and Restoration Requirements

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

X: In our quality control review of the data a QC deficiency was observed and flagged as noted. Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries were found to be outside of the laboratory control limits due to possible matrix/chemical interference, or a concentration of target analyte high enough to affect recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

'<' 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 Administrative Code

TPH GRO: Total Petroleum Hydrocarbons Gasoline Range Organics

TPH ORO: Total Petroleum Hydrocarbons Oil Range Organics

TPH DRO: Total Petroleum Hydrocarbon Diesel Range Organics

* * * : Indicates one foot

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

DUP : Duplicate sample

Notes:

1. Chloride analyzed by United States Environmental Protection Agency (USEPA) Method 300

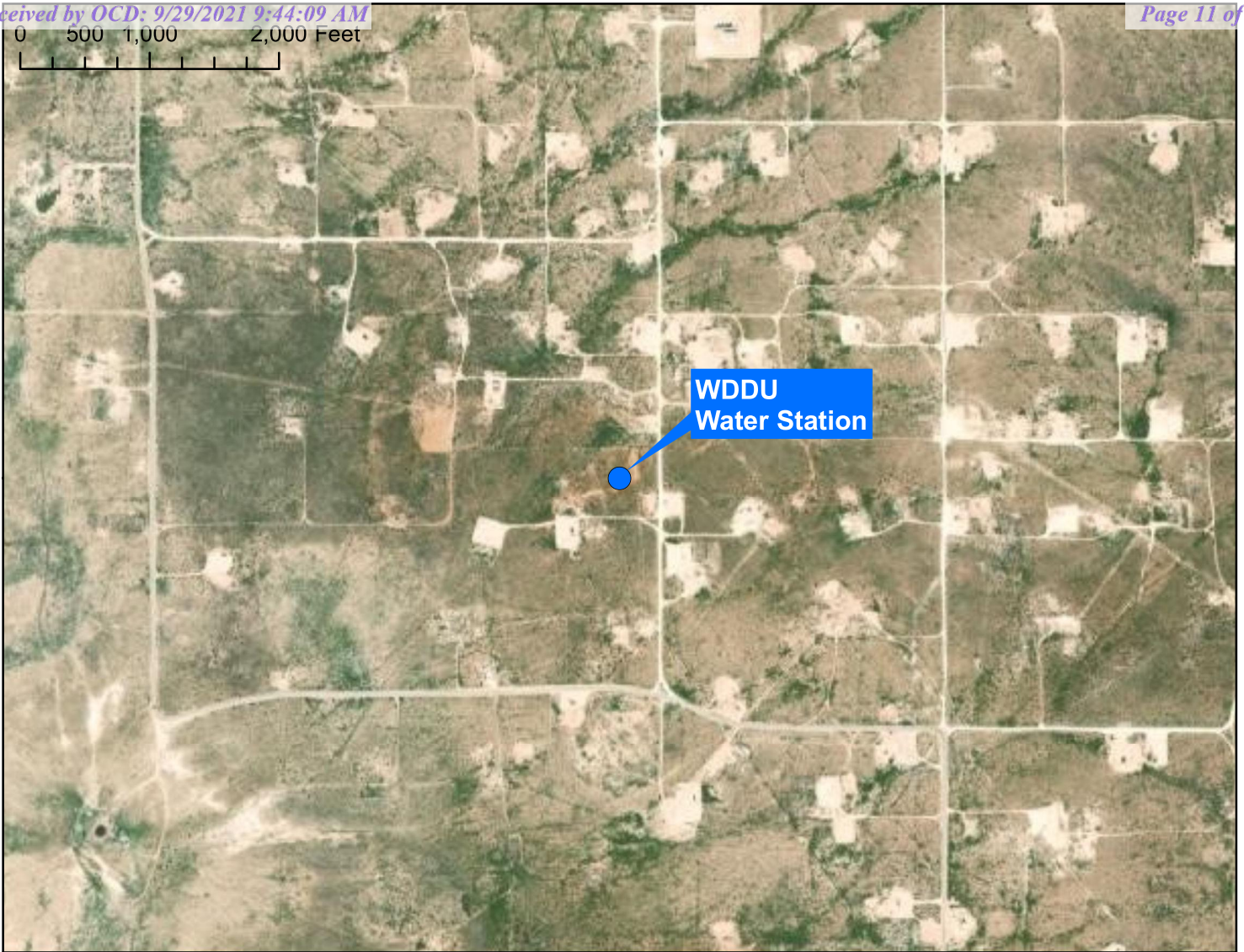
2. TPH analyzed by TPH by SW8015 Mod DRO/ORO Method

3. BTEX analyzed by USEPA Method 8021B

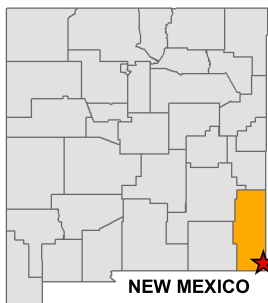
4. Closure Criteria New Mexico Administrative Code 19.15.29.12.E(2)

Figures

0 500 1,000 2,000 Feet



WDDU
Water Station



NEW MEXICO



- NOTES:
1. Datum: D_WGS_1984
 2. Site Location: 32.171070, -103.089443

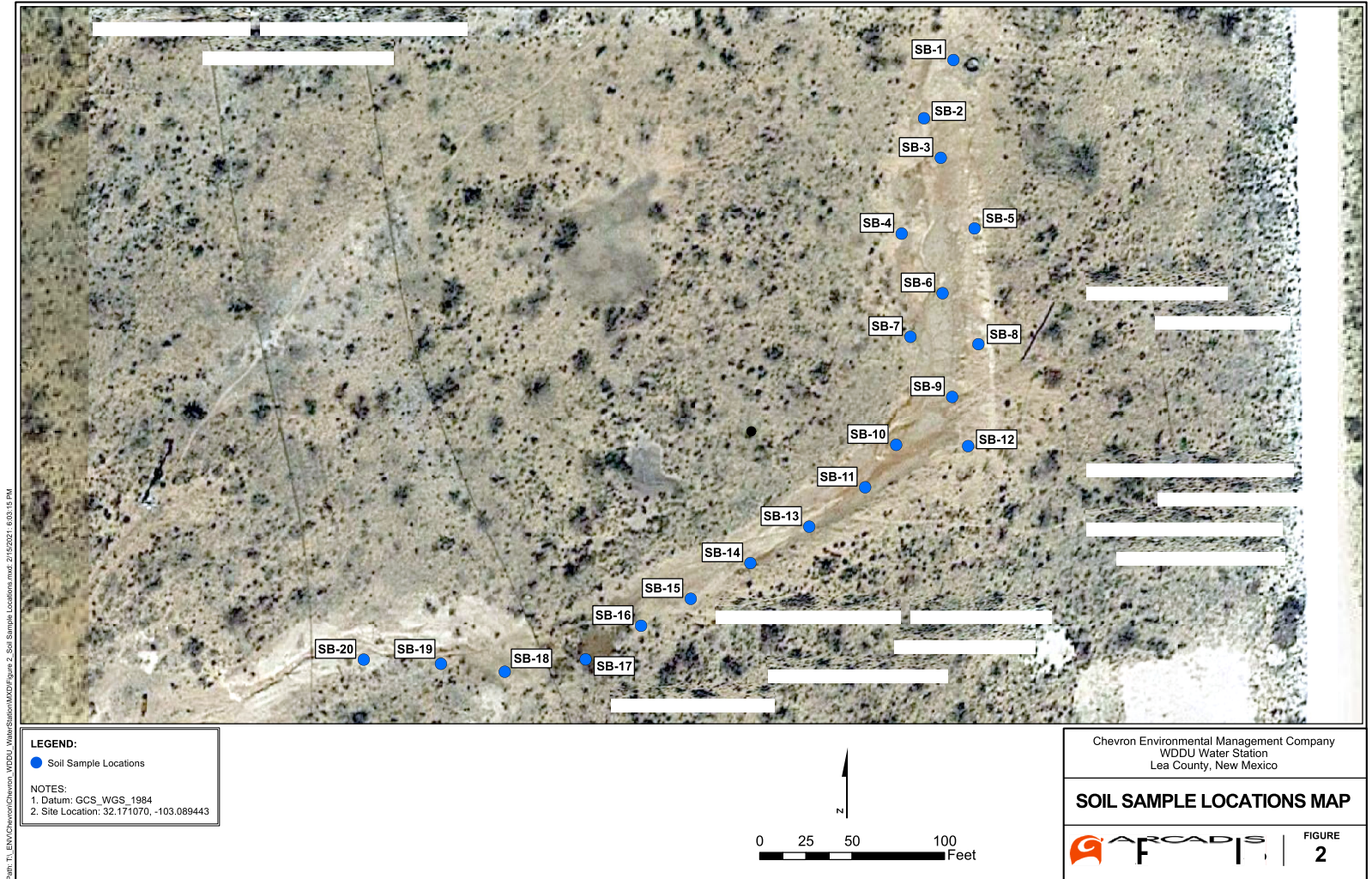
Chevron Environmental Management Company
WDDU Water Station Site
Lea County, New Mexico

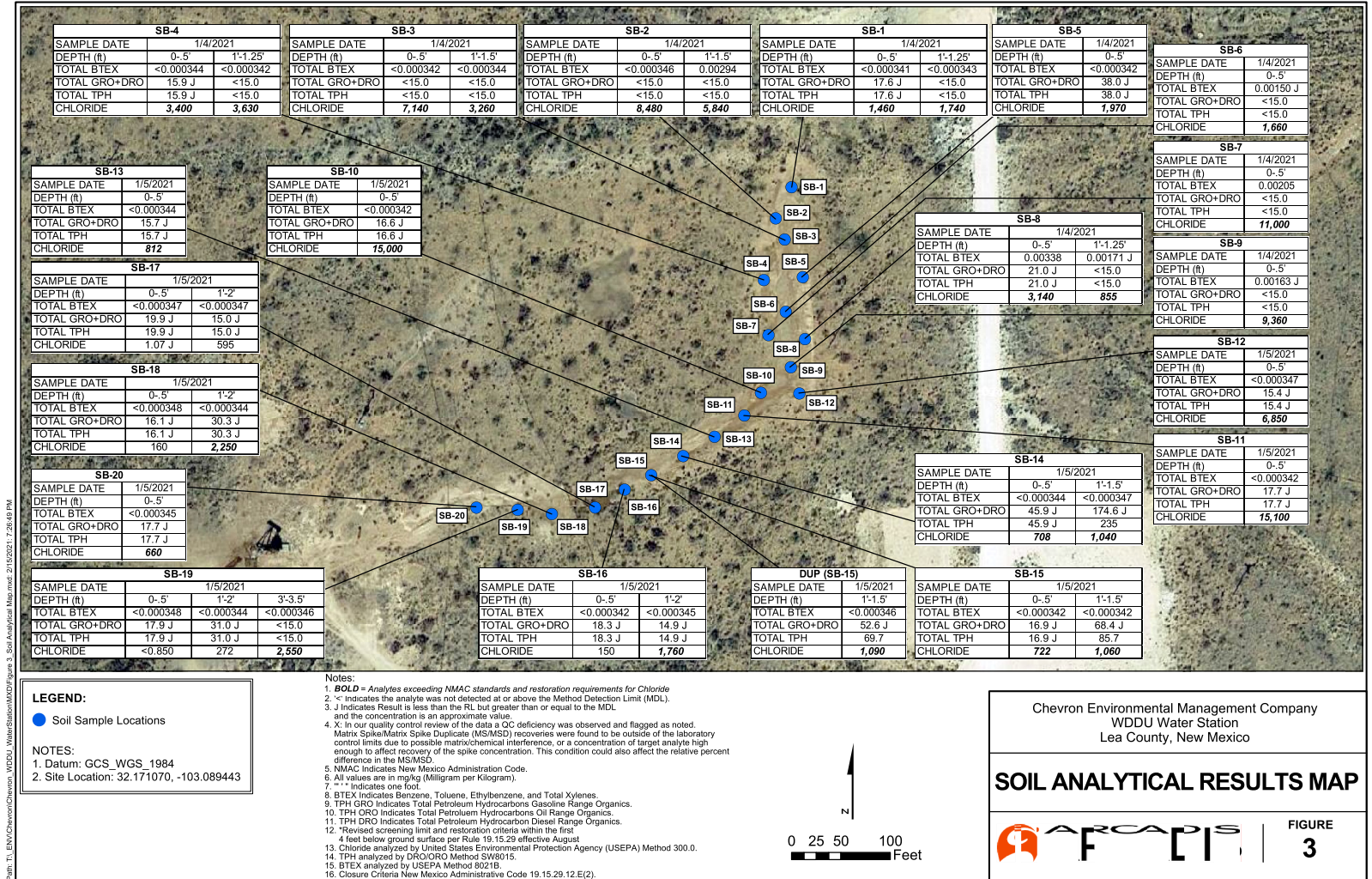
SITE LOCATION MAP



FIGURE

1





Appendix A

Initial C-141 Forms 1RP-2108

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

RECEIVED
FEB 23 2009

HOBBSDO Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company : Chevron	Contact : Ricky Heredia
Address : P.O. Drawer 29	Telephone No. : 432-523-3655 ext 7603
Facility Name : West Dollarhide Drinkard Unit	Facility Type : Water Station

Surface Owner : Chevron	Mineral Owner	Lease No.
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LOCATION OF RELEASE

NEARBY WELL 30-025-30823-00-00

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	32	24S	38 E					

Latitude _N 32 10.291' _ Longitude _W 103 05.339_

NATURE OF RELEASE

Type of Release : Produce Water	Volume of Release : 158 bbls	Volume Recovered : 60 bbls
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Called OCD	
By Whom? Ricky Heredia	Date and Hour : 02/17/2009 @ 14:30	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
NA

WATER @ 100'

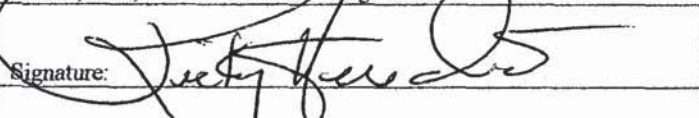
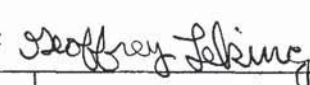
Describe Cause of Problem and Remedial Action Taken.*

Internal Corrosion on 2" Steel IPC nipple from Water Injection Station failed releasing 158 bbls produce water

Describe Area Affected and Cleanup Action Taken.*

Upon discovery mobilized one call brought in vacuum truck, Isolated and repaired leak, Recovered 60 bbls produce water, called Third party to do permanent remediation of release site

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: 	<u>OIL CONSERVATION DIVISION</u>	
Printed Name: Ricky Heredia	Approved by District Supervisor: 	
Title: HES Specialist	Approval Date: 02/25/09	Expiration Date: 04/20/09
E-mail Address: rhrh@chevron.com	Conditions of Approval: DELIN/REMEDIATION - FINAL C-141 DUE	
Date: 02/20/2009 Phone: 432-523-3655 ext 7603	Attached ☐ IRP.09.02.2108	

* Attach Additional Sheets If Necessary

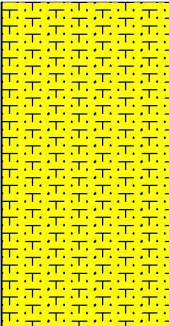
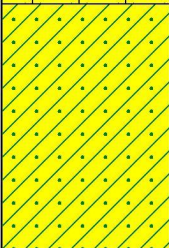
FGRL0905660588

Appendix B

Boring Log

Date Start/Finish: 1/05/2021 Drilling Company: Arcadis Drilling Method: Hand Auger Sampling Method: Hand Auger Grab	Borehole Depth: 3.5' Surface Elevation: N/A Descriptions By: Justin Steinmann	Well/Boring ID: SB-19 Client: Chevron Location: WDDU Water Station
--	--	---

DEPTH	Sample Interval	Geologic Column	Stratigraphic Description
-------	-----------------	-----------------	---------------------------

0-0.5'		Silty sand 7.5YR 5/8 strong brown, very fine sand, sub-rounded, well sorted, silty, loose, dry, trace roots. USCS - SM
1-2'		
3-3.5'		Sandy clay, 7.5YR 5/8 strong brown, very fine sand, as above, with little to some clay, homogenous throughout, pliable, nonplastic, soft to firm, slightly moist. USCS - CL
		End of boring 3.5' bgs. caliche bottom

	Remarks: Total Depth: 3.5' Below Ground Surface (bgs)
---	--

Project: 30065089
Data File: SB-19

Template: LPTEMPLATE_HA_Final
Date: 2/12/2021

Created/Edited by: AD

Page: 1 of 1

Appendix C

Laboratory Reports

Analytical Report 683338

for

ARCADIS

Project Manager: Douglas Jordan

WDDU Water Station

30065089-0002B

01.07.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.07.2021

Project Manager: **Douglas Jordan**

ARCADIS

1004 N. Big Spring St.

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **683338**

WDDU Water Station

Project Address:

Douglas Jordan:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 683338. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 683338 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink, appearing to read "Sachin Kudchadkar", written over a horizontal line.

Sachin Kudchadkar

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 683338****ARCADIS, Midland, TX**

WDDU Water Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-1-S-0-.5-210104	S	01.04.2021 10:38		683338-001
SB-1-S-1-1.25-210104	S	01.04.2021 10:47		683338-002
SB-2-S-0-.5-210104	S	01.04.2021 10:55		683338-003
SB-2-S-1-1.5-210104	S	01.04.2021 11:01		683338-004
SB-3-S-0-.5-210104	S	01.04.2021 11:09		683338-005
SB-3-S-1-1.5-210104	S	01.04.2021 11:19		683338-006
SB-4-S-0-.5-210104	S	01.04.2021 11:40		683338-007
SB-4-S-1-1.25-210104	S	01.04.2021 11:45		683338-008
SB-5-S-0-.5-210104	S	01.04.2021 11:55		683338-009
SB-6-S-0-.5-210104	S	01.04.2021 12:17		683338-010
SB-7-S-0-.5-210104	S	01.04.2021 12:42		683338-011
SB-8-S-0-0.5-210104	S	01.04.2021 12:26		683338-012
SB-8-S-1-1.25-210104	S	01.04.2021 12:32		683338-013
SB-9-S-0-.5-210104	S	01.04.2021 12:56		683338-014

**CASE NARRATIVE****Client Name: ARCADIS****Project Name: WDDU Water Station**Project ID: 30065089-0002B
Work Order Number(s): 683338Report Date: 01.07.2021
Date Received: 01.04.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3146816 Chloride by EPA 300

Lab Sample ID 683338-011 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 683338-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3146870 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7718513-1-BLK.

Batch: LBA-3146872 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits Data confirmed by re-analysis. Samples affected are: 7718515-1-BLK.



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-1-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-001

Date Collected: 01.04.2021 10:38

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1460	4.96	0.852	mg/kg	01.05.2021 13:02	X	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 13:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	17.6	50.0	15.0	mg/kg	01.05.2021 13:02	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 13:02	U	1
Total TPH	PHC635	17.6	50.0	15.0	mg/kg	01.05.2021 13:02	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.05.2021 13:02	
o-Terphenyl	84-15-1	117	%	70-130	01.05.2021 13:02	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-1-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-001

Date Collected: 01.04.2021 10:38

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146815

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000381	0.00198	0.000381	mg/kg	01.05.2021 22:04	U	1
Toluene	108-88-3	<0.000451	0.00198	0.000451	mg/kg	01.05.2021 22:04	U	1
Ethylbenzene	100-41-4	<0.000559	0.00198	0.000559	mg/kg	01.05.2021 22:04	U	1
m,p-Xylenes	179601-23-1	<0.00100	0.00396	0.00100	mg/kg	01.05.2021 22:04	U	1
o-Xylene	95-47-6	<0.000341	0.00198	0.000341	mg/kg	01.05.2021 22:04	U	1
Total Xylenes	1330-20-7	<0.000341	0.00198	0.000341	mg/kg	01.05.2021 22:04	U	1
Total BTEX		<0.000341	0.00198	0.000341	mg/kg	01.05.2021 22:04	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.05.2021 22:04	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.05.2021 22:04	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-1-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-002

Date Collected: 01.04.2021 10:47

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1740	24.9	4.27	mg/kg	01.05.2021 13:18		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 14:08	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.05.2021 14:08	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 14:08	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.05.2021 14:08	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-130	01.05.2021 14:08	
o-Terphenyl	84-15-1	126	%	70-130	01.05.2021 14:08	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-1-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-002

Date Collected: 01.04.2021 10:47

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146815

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.05.2021 22:24	U	1
Toluene	108-88-3	<0.000454	0.00199	0.000454	mg/kg	01.05.2021 22:24	U	1
Ethylbenzene	100-41-4	<0.000563	0.00199	0.000563	mg/kg	01.05.2021 22:24	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	01.05.2021 22:24	U	1
o-Xylene	95-47-6	<0.000343	0.00199	0.000343	mg/kg	01.05.2021 22:24	U	1
Total Xylenes	1330-20-7	<0.000343	0.00199	0.000343	mg/kg	01.05.2021 22:24	U	1
Total BTEX		<0.000343	0.00199	0.000343	mg/kg	01.05.2021 22:24	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.05.2021 22:24	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.05.2021 22:24	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-2-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-003

Date Collected: 01.04.2021 10:55

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8480	49.9	8.57	mg/kg	01.05.2021 13:23		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.05.2021 14:30	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.05.2021 14:30	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.05.2021 14:30	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	01.05.2021 14:30	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-130	01.05.2021 14:30	
o-Terphenyl	84-15-1	124	%	70-130	01.05.2021 14:30	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-2-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-003

Date Collected: 01.04.2021 10:55

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.05.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3146815

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000387	0.00201	0.000387	mg/kg	01.05.2021 22:45	U	1
Toluene	108-88-3	<0.000458	0.00201	0.000458	mg/kg	01.05.2021 22:45	U	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	01.05.2021 22:45	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.05.2021 22:45	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 22:45	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 22:45	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	01.05.2021 22:45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	108	%	70-130	01.05.2021 22:45			
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.05.2021 22:45			



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-2-S-1-1.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-004

Date Collected: 01.04.2021 11:01

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5840	50.5	8.67	mg/kg	01.05.2021 13:28		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 14:52	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.05.2021 14:52	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 14:52	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.05.2021 14:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-130	01.05.2021 14:52	
o-Terphenyl	84-15-1	126	%	70-130	01.05.2021 14:52	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-2-S-1-1.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-004

Date Collected: 01.04.2021 11:01

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.000838	0.00200	0.000384	mg/kg	01.05.2021 18:15	J	1
Toluene	108-88-3	0.00148	0.00200	0.000455	mg/kg	01.05.2021 18:15	J	1
Ethylbenzene	100-41-4	0.000619	0.00200	0.000564	mg/kg	01.05.2021 18:15	J	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	01.05.2021 18:15	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.05.2021 18:15	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.05.2021 18:15	U	1
Total BTEX		0.00294	0.00200	0.000344	mg/kg	01.05.2021 18:15		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.05.2021 18:15			
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.05.2021 18:15			



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-3-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-005

Date Collected: 01.04.2021 11:09

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	7140	49.9	8.57	mg/kg	01.05.2021 13:33		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.05.2021 15:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.05.2021 15:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.05.2021 15:14	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	01.05.2021 15:14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-130	01.05.2021 15:14	
o-Terphenyl	84-15-1	119	%	70-130	01.05.2021 15:14	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-3-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-005

Date Collected: 01.04.2021 11:09

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	01.06.2021 15:29	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	01.06.2021 15:29	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	01.06.2021 15:29	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	01.06.2021 15:29	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 15:29	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 15:29	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	01.06.2021 15:29	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.06.2021 15:29			
4-Bromofluorobenzene	460-00-4	100	%	70-130	01.06.2021 15:29			



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-3-S-1-1.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-006

Date Collected: 01.04.2021 11:19

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3260	24.8	4.26	mg/kg	01.05.2021 13:49		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146870

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.05.2021 15:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.05.2021 15:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.05.2021 15:36	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	01.05.2021 15:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	01.05.2021 15:36	
o-Terphenyl	84-15-1	128	%	70-130	01.05.2021 15:36	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-3-S-1-1.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-006

Date Collected: 01.04.2021 11:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	01.06.2021 15:50	U	1
Toluene	108-88-3	<0.000455	0.00200	0.000455	mg/kg	01.06.2021 15:50	U	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	01.06.2021 15:50	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	01.06.2021 15:50	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 15:50	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 15:50	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.06.2021 15:50	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.06.2021 15:50			
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.06.2021 15:50			



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-4-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-007

Date Collected: 01.04.2021 11:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3400	24.9	4.27	mg/kg	01.05.2021 13:54		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 22:48	U	1
Diesel Range Organics (DRO)	C10C28DRO	15.9	50.0	15.0	mg/kg	01.05.2021 22:48	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 22:48	U	1
Total TPH	PHC635	15.9	50.0	15.0	mg/kg	01.05.2021 22:48	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.05.2021 22:48	
o-Terphenyl	84-15-1	118	%	70-130	01.05.2021 22:48	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-4-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-007

Date Collected: 01.04.2021 11:40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.06.2021 16:10	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.06.2021 16:10	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.06.2021 16:10	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.06.2021 16:10	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 16:10	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 16:10	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.06.2021 16:10	U	1

Surrogate

1,4-Difluorobenzene
4-Bromofluorobenzene

Cas Number

540-36-3
460-00-4

% Recovery

94
117

Units

%
%

Limits

70-130
70-130

Analysis Date

01.06.2021 16:10
01.06.2021 16:10

Flag



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-4-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-008

Date Collected: 01.04.2021 11:45

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3630	25.1	4.31	mg/kg	01.05.2021 14:00		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 23:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.05.2021 23:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 23:53	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.05.2021 23:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.05.2021 23:53	
o-Terphenyl	84-15-1	122	%	70-130	01.05.2021 23:53	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-4-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-008

Date Collected: 01.04.2021 11:45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	01.06.2021 16:31	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	01.06.2021 16:31	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	01.06.2021 16:31	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	01.06.2021 16:31	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:31	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:31	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.06.2021 16:31			
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.06.2021 16:31			



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-5-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-009

Date Collected: 01.04.2021 11:55

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1970	24.9	4.27	mg/kg	01.05.2021 14:05		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	49.8	14.9	mg/kg	01.06.2021 00:15	U	1
Diesel Range Organics (DRO)	C10C28DRO	38.0	49.8	14.9	mg/kg	01.06.2021 00:15	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.06.2021 00:15	U	1
Total TPH	PHC635	38.0	49.8	14.9	mg/kg	01.06.2021 00:15	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-130	01.06.2021 00:15	
o-Terphenyl	84-15-1	113	%	70-130	01.06.2021 00:15	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-5-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-009

Date Collected: 01.04.2021 11:55

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	01.06.2021 16:52	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	01.06.2021 16:52	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	01.06.2021 16:52	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	01.06.2021 16:52	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:52	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:52	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	01.06.2021 16:52	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.06.2021 16:52			
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.06.2021 16:52			



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-6-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-010

Date Collected: 01.04.2021 12:17

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1660	24.9	4.27	mg/kg	01.05.2021 14:10		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.06.2021 00:37	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 00:37	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 00:37	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.06.2021 00:37	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	110	%	70-130	01.06.2021 00:37	
o-Terphenyl	84-15-1	126	%	70-130	01.06.2021 00:37	



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-6-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-010

Date Collected: 01.04.2021 12:17

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.000412	0.00201	0.000386	mg/kg	01.05.2021 20:46	J	1
Toluene	108-88-3	0.00109	0.00201	0.000457	mg/kg	01.05.2021 20:46	J	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	01.05.2021 20:46	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.05.2021 20:46	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 20:46	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 20:46	U	1
Total BTEX		0.00150	0.00201	0.000346	mg/kg	01.05.2021 20:46	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.05.2021 20:46			
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.05.2021 20:46			



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ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-7-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-011

Date Collected: 01.04.2021 12:42

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	11000	99.2	17.0	mg/kg	01.05.2021 14:15		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.06.2021 00:59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.06.2021 00:59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.06.2021 00:59	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	01.06.2021 00:59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.06.2021 00:59	
o-Terphenyl	84-15-1	115	%	70-130	01.06.2021 00:59	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-7-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-011

Date Collected: 01.04.2021 12:42

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.000697	0.00199	0.000383	mg/kg	01.05.2021 21:12	J	1
Toluene	108-88-3	0.00135	0.00199	0.000454	mg/kg	01.05.2021 21:12	J	1
Ethylbenzene	100-41-4	<0.000563	0.00199	0.000563	mg/kg	01.05.2021 21:12	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	01.05.2021 21:12	U	1
o-Xylene	95-47-6	<0.000343	0.00199	0.000343	mg/kg	01.05.2021 21:12	U	1
Total Xylenes	1330-20-7	<0.000343	0.00199	0.000343	mg/kg	01.05.2021 21:12	U	1
Total BTEX		0.00205	0.00199	0.000343	mg/kg	01.05.2021 21:12		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.05.2021 21:12			
1,4-Difluorobenzene	540-36-3	113	%	70-130	01.05.2021 21:12			



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-8-S-0-0.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-012

Date Collected: 01.04.2021 12:26

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	3140	25.1	4.30	mg/kg	01.05.2021 14:31		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.06.2021 01:21	U	1
Diesel Range Organics (DRO)	C10C28DRO	21.0	49.9	15.0	mg/kg	01.06.2021 01:21	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.06.2021 01:21	U	1
Total TPH	PHC635	21.0	49.9	15.0	mg/kg	01.06.2021 01:21	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-130	01.06.2021 01:21	
o-Terphenyl	84-15-1	118	%	70-130	01.06.2021 01:21	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-8-S-0-0.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-012

Date Collected: 01.04.2021 12:26

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00119	0.00200	0.000384	mg/kg	01.05.2021 21:37	J	1
Toluene	108-88-3	0.00126	0.00200	0.000455	mg/kg	01.05.2021 21:37	J	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	01.05.2021 21:37	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	01.05.2021 21:37	U	1
o-Xylene	95-47-6	0.000928	0.00200	0.000344	mg/kg	01.05.2021 21:37	J	1
Total Xylenes	1330-20-7	0.000928	0.00200	0.000344	mg/kg	01.05.2021 21:37	J	1
Total BTEX		0.00338	0.00200	0.000344	mg/kg	01.05.2021 21:37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.05.2021 21:37			
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.05.2021 21:37			



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-8-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-013

Date Collected: 01.04.2021 12:32

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	855	4.97	0.853	mg/kg	01.05.2021 14:36		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.06.2021 01:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 01:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 01:43	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.06.2021 01:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-130	01.06.2021 01:43	
o-Terphenyl	84-15-1	128	%	70-130	01.06.2021 01:43	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-8-S-1-1.25-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-013

Date Collected: 01.04.2021 12:32

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.000691	0.00200	0.000386	mg/kg	01.05.2021 22:02	J	1
Toluene	108-88-3	0.00102	0.00200	0.000457	mg/kg	01.05.2021 22:02	J	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	01.05.2021 22:02	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	01.05.2021 22:02	U	1
o-Xylene	95-47-6	<0.000345	0.00200	0.000345	mg/kg	01.05.2021 22:02	U	1
Total Xylenes	1330-20-7	<0.000345	0.00200	0.000345	mg/kg	01.05.2021 22:02	U	1
Total BTEX		0.00171	0.00200	0.000345	mg/kg	01.05.2021 22:02	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.05.2021 22:02			
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.05.2021 22:02			



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-9-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-014

Date Collected: 01.04.2021 12:56

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: SPC

Analyst: SPC

Date Prep: 01.05.2021 12:05

% Moisture:

Seq Number: 3146816

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9360	49.5	8.50	mg/kg	01.05.2021 14:52		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

% Moisture:

Seq Number: 3146872

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.06.2021 02:05	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 02:05	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 02:05	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.06.2021 02:05	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-130	01.06.2021 02:05	
o-Terphenyl	84-15-1	123	%	70-130	01.06.2021 02:05	



Certificate of Analytical Results 683338

ARCADIS, Midland, TX

WDDU Water Station

Sample Id: **SB-9-S-0-.5-210104**

Matrix: Soil

Date Received: 01.04.2021 16:28

Lab Sample Id: 683338-014

Date Collected: 01.04.2021 12:56

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

% Moisture:

Seq Number: 3146813

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.000443	0.00201	0.000387	mg/kg	01.05.2021 23:43	J	1
Toluene	108-88-3	0.00119	0.00201	0.000458	mg/kg	01.05.2021 23:43	J	1
Ethylbenzene	100-41-4	<0.000568	0.00201	0.000568	mg/kg	01.05.2021 23:43	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.05.2021 23:43	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 23:43	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	01.05.2021 23:43	U	1
Total BTEX		0.00163	0.00201	0.000346	mg/kg	01.05.2021 23:43	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	98	%	70-130	01.05.2021 23:43			
1,4-Difluorobenzene	540-36-3	84	%	70-130	01.05.2021 23:43			



Blank Summary 683338

ARCADIS, Midland, TX
WDDU Water Station

Sample Id: 7718434-1-BLK
Lab Sample Id: 7718434-1-BLK
Matrix: SOLID

Analytical Method: Chloride by EPA 300
Tech: SPC
Analyst: SPC
Seq Number: 3146816
Prep Method: E300P
Date Prep: 01.05.2021 12:05

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	01.05.2021 12:46	U	1

**Blank Summary 683338****ARCADIS, Midland, TX**

WDDU Water Station

Sample Id: 7718494-1-BLK

Matrix: SOLID

Lab Sample Id: 7718494-1-BLK

Analytical Method: **BTEX by EPA 8021B**

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 01.05.2021 12:00

Seq Number: 3146813

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.05.2021 17:50	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.05.2021 17:50	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.05.2021 17:50	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.05.2021 17:50	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.05.2021 17:50	U	1

**Blank Summary 683338****ARCADIS, Midland, TX**

WDDU Water Station

Sample Id: 7718495-1-BLK

Matrix: SOLID

Lab Sample Id: 7718495-1-BLK

Analytical Method: **BTEX by EPA 8021B**

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.05.2021 10:00

Seq Number: 3146815

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.05.2021 15:32	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.05.2021 15:32	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.05.2021 15:32	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.05.2021 15:32	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.05.2021 15:32	U	1



Blank Summary 683338

ARCADIS, Midland, TX
WDDU Water Station

Sample Id: 7718513-1-BLK
Lab Sample Id: 7718513-1-BLK
Matrix: SOLID

Analytical Method: TPH By SW8015 Mod
Tech: DVM
Analyst: ARM
Seq Number: 3146870
Prep Method: SW8015P
Date Prep: 01.05.2021 10:00

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 11:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.05.2021 11:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 11:56	U	1

**Blank Summary 683338****ARCADIS, Midland, TX**

WDDU Water Station

Sample Id: 7718515-1-BLK

Matrix: SOLID

Lab Sample Id: 7718515-1-BLK

Analytical Method: **TPH By SW8015 Mod**

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.05.2021 10:00

Seq Number: 3146872

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.05.2021 21:43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.05.2021 21:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.05.2021 21:43	U	1

**Blank Summary 683338****ARCADIS, Midland, TX**

WDDU Water Station

Sample Id: 7718602-1-BLK

Matrix: SOLID

Lab Sample Id: 7718602-1-BLK

Analytical Method: **BTEX by EPA 8021B**

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

Seq Number: 3146951

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.06.2021 15:07	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.06.2021 15:07	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.06.2021 15:07	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.06.2021 15:07	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 15:07	U	1



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01072021

Work Orders : 683338

Project ID: 30065089-0002B

Lab Batch #: 3146813

Sample: 7718494-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 15:20

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	70-130	
4-Bromofluorobenzene	0.0284	0.0300	95	70-130	

Lab Batch #: 3146813

Sample: 7718494-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 15:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0322	0.0300	107	70-130	
4-Bromofluorobenzene	0.0340	0.0300	113	70-130	

Lab Batch #: 3146813

Sample: 683338-004 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 16:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0347	0.0300	116	70-130	
4-Bromofluorobenzene	0.0347	0.0300	116	70-130	

Lab Batch #: 3146813

Sample: 683338-004 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 16:35

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0336	0.0300	112	70-130	
4-Bromofluorobenzene	0.0366	0.0300	122	70-130	

Lab Batch #: 3146813

Sample: 7718494-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 17:50

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0265	0.0300	88	70-130	
4-Bromofluorobenzene	0.0243	0.0300	81	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01072021

Work Orders : 683338

Project ID: 30065089-0002B

Lab Batch #: 3146815

Sample: 7718495-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 13:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0309	0.0300	103	70-130	

Lab Batch #: 3146815

Sample: 7718495-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 13:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0275	0.0300	92	70-130	
4-Bromofluorobenzene	0.0315	0.0300	105	70-130	

Lab Batch #: 3146815

Sample: 682774-006 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 14:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0286	0.0300	95	70-130	
4-Bromofluorobenzene	0.0324	0.0300	108	70-130	

Lab Batch #: 3146815

Sample: 682774-006 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 14:34

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0282	0.0300	94	70-130	
4-Bromofluorobenzene	0.0329	0.0300	110	70-130	

Lab Batch #: 3146815

Sample: 7718495-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 15:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0260	0.0300	87	70-130	
4-Bromofluorobenzene	0.0354	0.0300	118	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01072021

Work Orders : 683338

Project ID: 30065089-0002B

Lab Batch #: 3146951

Sample: 7718602-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0279	0.0300	93	70-130	
4-Bromofluorobenzene	0.0304	0.0300	101	70-130	

Lab Batch #: 3146951

Sample: 7718602-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	70-130	
4-Bromofluorobenzene	0.0317	0.0300	106	70-130	

Lab Batch #: 3146951

Sample: 683472-016 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0299	0.0300	100	70-130	
4-Bromofluorobenzene	0.0331	0.0300	110	70-130	

Lab Batch #: 3146951

Sample: 683472-016 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 14:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	70-130	
4-Bromofluorobenzene	0.0363	0.0300	121	70-130	

Lab Batch #: 3146951

Sample: 7718602-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 15:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0261	0.0300	87	70-130	
4-Bromofluorobenzene	0.0334	0.0300	111	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01072021

Work Orders : 683338

Project ID: 30065089-0002B

Lab Batch #: 3146870

Sample: 7718513-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 11:56

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	119	100	119	70-130	
o-Terphenyl	67.0	50.0	134	70-130	**

Lab Batch #: 3146870

Sample: 7718513-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 12:18

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-130	
o-Terphenyl	58.2	50.0	116	70-130	

Lab Batch #: 3146870

Sample: 7718513-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 12:40

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-130	
o-Terphenyl	58.7	50.0	117	70-130	

Lab Batch #: 3146870

Sample: 683338-001 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 13:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	118	99.9	118	70-130	
o-Terphenyl	59.0	50.0	118	70-130	

Lab Batch #: 3146870

Sample: 683338-001 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 13:46

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	99.7	120	70-130	
o-Terphenyl	59.7	49.9	120	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01072021

Work Orders : 683338

Project ID: 30065089-0002B

Lab Batch #: 3146872

Sample: 7718515-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 21:43

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	120	100	120	70-130	
o-Terphenyl	68.3	50.0	137	70-130	**

Lab Batch #: 3146872

Sample: 7718515-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 22:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	114	100	114	70-130	
o-Terphenyl	59.0	50.0	118	70-130	

Lab Batch #: 3146872

Sample: 7718515-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.05.2021 22:26

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	111	100	111	70-130	
o-Terphenyl	59.0	50.0	118	70-130	

Lab Batch #: 3146872

Sample: 683338-007 S / MS

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 23:10

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.8	121	70-130	
o-Terphenyl	63.7	49.9	128	70-130	

Lab Batch #: 3146872

Sample: 683338-007 SD / MSD

Batch: 1 Matrix: Soil

Units: mg/kg

Date Analyzed: 01.05.2021 23:31

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	122	99.7	122	70-130	
o-Terphenyl	63.9	49.9	128	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



ARCADIS

WDDU Water Station

Analytical Method: Chloride by EPA 300

Seq Number: 3146816

MB Sample Id: 7718434-1-BLK

Matrix: Solid

LCS Sample Id: 7718434-1-BKS

Prep Method: E300P

Date Prep: 01.05.2021

LCSD Sample Id: 7718434-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	256	102	258	103	90-110	1	20	mg/kg	01.05.2021 12:52	

Analytical Method: Chloride by EPA 300

Seq Number: 3146816

Parent Sample Id: 683338-001

Matrix: Soil

MS Sample Id: 683338-001 S

Prep Method: E300P

Date Prep: 01.05.2021

MSD Sample Id: 683338-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1460	248	1650	77	1650	77	90-110	0	20	mg/kg	01.05.2021 13:07	X

Analytical Method: Chloride by EPA 300

Seq Number: 3146816

Parent Sample Id: 683338-011

Matrix: Soil

MS Sample Id: 683338-011 S

Prep Method: E300P

Date Prep: 01.05.2021

MSD Sample Id: 683338-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	11000	4960	16200	105	16200	105	90-110	0	20	mg/kg	01.05.2021 14:20	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146870

MB Sample Id: 7718513-1-BLK

Matrix: Solid

LCS Sample Id: 7718513-1-BKS

Prep Method: SW8015P

Date Prep: 01.05.2021

LCSD Sample Id: 7718513-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1090	109	1020	102	70-130	7	20	mg/kg	01.05.2021 12:18	
Diesel Range Organics (DRO)	<15.0	1000	1050	105	1060	106	70-130	1	20	mg/kg	01.05.2021 12:18	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	119		111		111		70-130	%	01.05.2021 12:18
o-Terphenyl	134	**	116		117		70-130	%	01.05.2021 12:18

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146872

MB Sample Id: 7718515-1-BLK

Matrix: Solid

LCS Sample Id: 7718515-1-BKS

Prep Method: SW8015P

Date Prep: 01.05.2021

LCSD Sample Id: 7718515-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1040	104	1040	104	70-130	0	20	mg/kg	01.05.2021 22:05	
Diesel Range Organics (DRO)	<15.0	1000	1090	109	1080	108	70-130	1	20	mg/kg	01.05.2021 22:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	120		114		111		70-130	%	01.05.2021 22:05
o-Terphenyl	137	**	118		118		70-130	%	01.05.2021 22:05

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



ARCADIS

WDDU Water Station

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146870

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.05.2021

MB Sample Id: 7718513-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.05.2021 11:56	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146872

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.05.2021

MB Sample Id: 7718515-1-BLK

Parameter

	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.05.2021 21:43	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146870

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.05.2021

Parent Sample Id: 683338-001

MS Sample Id: 683338-001 S

MSD Sample Id: 683338-001 SD

Parameter

	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	1140	114	1120	112	70-130	2	20	mg/kg	01.05.2021 13:24	
Diesel Range Organics (DRO)	17.6	999	1180	116	1190	118	70-130	1	20	mg/kg	01.05.2021 13:24	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		120		70-130	%	01.05.2021 13:24
o-Terphenyl	118		120		70-130	%	01.05.2021 13:24

Analytical Method: TPH By SW8015 Mod

Seq Number: 3146872

Matrix: Soil

Prep Method: SW8015P

Date Prep: 01.05.2021

Parent Sample Id: 683338-007

MS Sample Id: 683338-007 S

MSD Sample Id: 683338-007 SD

Parameter

	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	1130	113	1080	108	70-130	5	20	mg/kg	01.05.2021 23:10	
Diesel Range Organics (DRO)	15.9	998	1200	119	1190	118	70-130	1	20	mg/kg	01.05.2021 23:10	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		122		70-130	%	01.05.2021 23:10
o-Terphenyl	128		128		70-130	%	01.05.2021 23:10

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



ARCADIS

WDDU Water Station

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146815

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.05.2021

MB Sample Id: 7718495-1-BLK

LCS Sample Id: 7718495-1-BKS

LCSD Sample Id: 7718495-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.105	105	0.106	106	70-130	1	35	mg/kg	01.05.2021 13:32	
Toluene	<0.000456	0.100	0.113	113	0.115	115	70-130	2	35	mg/kg	01.05.2021 13:32	
Ethylbenzene	<0.000565	0.100	0.104	104	0.108	108	70-130	4	35	mg/kg	01.05.2021 13:32	
m,p-Xylenes	<0.00101	0.200	0.207	104	0.216	108	70-130	4	35	mg/kg	01.05.2021 13:32	
o-Xylene	<0.000344	0.100	0.0996	100	0.104	104	70-130	4	35	mg/kg	01.05.2021 13:32	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		95		92		70-130	%	01.05.2021 13:32
4-Bromofluorobenzene	118		103		105		70-130	%	01.05.2021 13:32

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146813

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.05.2021

MB Sample Id: 7718494-1-BLK

LCS Sample Id: 7718494-1-BKS

LCSD Sample Id: 7718494-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.107	107	0.116	116	70-130	8	35	mg/kg	01.05.2021 15:20	
Toluene	<0.000456	0.100	0.0921	92	0.124	124	70-130	30	35	mg/kg	01.05.2021 15:20	
Ethylbenzene	<0.000565	0.100	0.100	100	0.120	120	70-130	18	35	mg/kg	01.05.2021 15:20	
m,p-Xylenes	<0.00101	0.200	0.204	102	0.243	122	70-130	17	35	mg/kg	01.05.2021 15:20	
o-Xylene	<0.000344	0.100	0.106	106	0.126	126	70-130	17	35	mg/kg	01.05.2021 15:20	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		98		107		70-130	%	01.05.2021 15:20
4-Bromofluorobenzene	81		95		113		70-130	%	01.05.2021 15:20

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146951

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.06.2021

MB Sample Id: 7718602-1-BLK

LCS Sample Id: 7718602-1-BKS

LCSD Sample Id: 7718602-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0968	97	0.102	102	70-130	5	35	mg/kg	01.06.2021 13:06	
Toluene	<0.000456	0.100	0.107	107	0.113	113	70-130	5	35	mg/kg	01.06.2021 13:06	
Ethylbenzene	<0.000565	0.100	0.101	101	0.108	108	70-130	7	35	mg/kg	01.06.2021 13:06	
m,p-Xylenes	<0.00101	0.200	0.200	100	0.218	109	70-130	9	35	mg/kg	01.06.2021 13:06	
o-Xylene	<0.000344	0.100	0.0957	96	0.105	105	70-130	9	35	mg/kg	01.06.2021 13:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		93		95		70-130	%	01.06.2021 13:06
4-Bromofluorobenzene	111		101		106		70-130	%	01.06.2021 13:06

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



ARCADIS

WDDU Water Station

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146815

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.05.2021

Parent Sample Id: 682774-006

MS Sample Id: 682774-006 S

MSD Sample Id: 682774-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000381	0.0990	0.0295	30	0.0313	31	70-130	6	35	mg/kg	01.05.2021 14:13	X
Toluene	<0.000451	0.0990	0.0447	45	0.0457	46	70-130	2	35	mg/kg	01.05.2021 14:13	X
Ethylbenzene	<0.000559	0.0990	0.0491	50	0.0547	55	70-130	11	35	mg/kg	01.05.2021 14:13	X
m,p-Xylenes	<0.00100	0.198	0.0870	44	0.0974	49	70-130	11	35	mg/kg	01.05.2021 14:13	X
o-Xylene	<0.000341	0.0990	0.0485	49	0.0530	53	70-130	9	35	mg/kg	01.05.2021 14:13	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	95		94		70-130	%	01.05.2021 14:13
4-Bromofluorobenzene	108		110		70-130	%	01.05.2021 14:13

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146813

Matrix: Soil

Prep Method: SW5035A

Date Prep: 01.05.2021

Parent Sample Id: 683338-004

MS Sample Id: 683338-004 S

MSD Sample Id: 683338-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	0.000838	0.0998	0.101	100	0.104	103	70-130	3	35	mg/kg	01.05.2021 16:10	
Toluene	0.00148	0.0998	0.0912	90	0.108	107	70-130	17	35	mg/kg	01.05.2021 16:10	
Ethylbenzene	0.000619	0.0998	0.0983	98	0.103	103	70-130	5	35	mg/kg	01.05.2021 16:10	
m,p-Xylenes	<0.00101	0.200	0.198	99	0.208	104	70-130	5	35	mg/kg	01.05.2021 16:10	
o-Xylene	<0.000344	0.0998	0.100	100	0.105	105	70-130	5	35	mg/kg	01.05.2021 16:10	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	116		112		70-130	%	01.05.2021 16:10
4-Bromofluorobenzene	116		122		70-130	%	01.05.2021 16:10

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146951

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.06.2021

Parent Sample Id: 683472-016

MS Sample Id: 683472-016 S

MSD Sample Id: 683472-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0639	64	0.0609	60	70-130	5	35	mg/kg	01.06.2021 13:48	X
Toluene	<0.000457	0.100	0.0807	81	0.0838	83	70-130	4	35	mg/kg	01.06.2021 13:48	
Ethylbenzene	<0.000566	0.100	0.0804	80	0.0887	88	70-130	10	35	mg/kg	01.06.2021 13:48	
m,p-Xylenes	<0.00102	0.200	0.156	78	0.176	87	70-130	12	35	mg/kg	01.06.2021 13:48	
o-Xylene	<0.000345	0.100	0.0757	76	0.0851	84	70-130	12	35	mg/kg	01.06.2021 13:48	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		91		70-130	%	01.06.2021 13:48
4-Bromofluorobenzene	110		121		70-130	%	01.06.2021 13:48

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Chain of Custody Record

683338

Client Information Client Contact: Motgan Jordan Company: ARCADIS U.S., Inc. Address: 1717 W 6th Street, Suite 210 City: Austin State, Zip: TX, 78703 Phone: 281 644 9437 Email: douglas.jordan@arcadis.com Project Name: 30065089-0002B Site: WDDU Water Station		Sampler: J. Steimann Phone: 619 851 072		Lab PM: Kudchadkar, Sachin G E-Mail: sachin.kudchadkar@testamericainc.com		Carrier Tracking No(s): COC No: 600-23595-8666.1 Page: 1 of 2											
		Due Date Requested: TAT Requested (days): 5td PO #: WO #: Project #: 30065089-0002B SSOW#:		Analysis Requested													
Sample Identification		Sample Date 4/10/21		Sample Time 1030		Sample Type (C=Comp, G=grab) G		Matrix (W=water, S=soil, O=waste/oil, BT=Tissue, A=Air) Solid		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8015, GRCI, DRCI, ORO 300 - Chloride 8021- BTEX		Total Number of containers		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)			
														Other:			
Special Instructions/Note:																	
SB-1-S-0-.S-210104 SB-1-S-1-1.25-210104 SB-2-S-0-.S-210104 SB-2-S-1-1.5-210104 SB-3-S-0-.S-210104 SB-3-S-1-1.5-210104 SB-4-S-0-.S-210104 SB-4-S-1-1.25-210104 SB-5-S-0-.S-210104 SB-6-S-0-.S-210104 SB-7-S-0-.S-210104		1030 1047 1055 1101 1109 1119 1140 1145 1155 1217 1242		G Solid 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:											
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:											
Relinquished by: <i>[Signature]</i>		Date/Time: 4/14 1500		Company: Arcadis		Received by: <i>[Signature]</i>		Date/Time: 4-21 1500		Company: Arcadis							
Relinquished by: <i>[Signature]</i>		Date/Time: 4-21 1628		Company: Arcadis		Received by: <i>[Signature]</i>		Date/Time: 4-21 14:28		Company:							
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:							
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 2.1/2.6													

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

Chain of Custody Record

603330

[illegible]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: ARCADIS

Date/ Time Received: 01.04.2021 04.28.00 PM

Work Order #: 683338

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	2.6
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by: Jessica Kramer
Jessica Kramer

Date: 01.05.2021

Checklist reviewed by: Sachin Kudchadkar
Sachin Kudchadkar

Date: 01.05.2021

Analytical Report 683472

for

Arcadis U.S., Inc

Project Manager: Morgan Jordan

WDDU Water Station

030065089-D0002B

01.11.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNi02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.11.2021

Project Manager: **Morgan Jordan**

Arcadis U.S., Inc

1717 W 6th Street, Suite 210

Austin, TX 78703

Reference: Eurofins Xenco, LLC Report No(s): **683472**

WDDU Water Station

Project Address:

Morgan Jordan:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 683472. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 683472 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink, appearing to read "Sachin Kudchadkar", written over a light grey rectangular background.

Sachin Kudchadkar

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SB-10-S-0-.5-210105	S	01.05.2021 09:04		683472-001
SB-11-S-0-.5-210105	S	01.05.2021 09:16		683472-002
SB-12-S-0-.5-210105	S	01.05.2021 09:25		683472-003
SB-13-S-0-.5-210105	S	01.05.2021 09:40		683472-004
SB-14-S-0-.5-210105	S	01.05.2021 09:49		683472-005
SB-14-S-1-1.5-210105	S	01.05.2021 10:00		683472-006
SB-15-S-0-.5-210105	S	01.05.2021 10:10		683472-007
SB-15-S-1-1.5-210105	S	01.05.2021 10:26		683472-008
SB-15-SD-1-1.5-210105	S	01.05.2021 00:00		683472-009
SB-16-S-0-.5-210105	S	01.05.2021 12:11		683472-010
SB-16-S-1-2-210105	S	01.05.2021 12:22		683472-011
SB-17-S-0-.5-210105	S	01.05.2021 12:30		683472-012
SB-17-S-1-2-210105	S	01.05.2021 12:36		683472-013
SB-18-S-0-.5-210105	S	01.05.2021 12:43		683472-014
SB-18-S-1-2-210105	S	01.05.2021 12:53		683472-015
SB-19-S-0-.5-210105	S	01.05.2021 13:00		683472-016
SB-19-S-1-2-210105	S	01.05.2021 13:06		683472-017
SB-19-S-3-3.5-210105	S	01.05.2021 13:16		683472-018
SB-20-S-0-.5-210105	S	01.05.2021 13:30		683472-019

**CASE NARRATIVE****Client Name: Arcadis U.S., Inc****Project Name: WDDU Water Station**Project ID: 030065089-D0002B
Work Order Number(s): 683472Report Date: 01.11.2021
Date Received: 01.05.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3146951 BTEX by EPA 8021B

Lab Sample ID 683472-016 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 683472-016, -017, -018, -019.

The Laboratory Control Sample for Benzene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3146971 Chloride by EPA 300

Lab Sample ID 683472-006 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 683472-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3147005 TPH By SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 683472-004, 683472-019, 683472-014.

Batch: LBA-3147234 BTEX by EPA 8021B

Lab Sample ID 683472-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 683472-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-10-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-001

Date Collected: 01.05.2021 09:04

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15000	99.2	17.0	mg/kg	01.06.2021 17:27		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	16.6	50.0	15.0	mg/kg	01.06.2021 19:46	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 19:46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 19:46	U	1
Total TPH	PHC635	16.6	50.0	15.0	mg/kg	01.06.2021 19:46	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 19:46	
o-Terphenyl	84-15-1	73	%	70-130	01.06.2021 19:46	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-10-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-001

Date Collected: 01.05.2021 09:04

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:

Seq Number: 3147234

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	01.08.2021 14:32	UX	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	01.08.2021 14:32	UX	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	01.08.2021 14:32	UX	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	01.08.2021 14:32	UX	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	01.08.2021 14:32	UX	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	01.08.2021 14:32	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	01.08.2021 14:32	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.08.2021 14:32	
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.08.2021 14:32	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-11-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-002

Date Collected: 01.05.2021 09:16

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15100	99.0	17.0	mg/kg	01.06.2021 17:32		20

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.7	50.0	15.0	mg/kg	01.06.2021 20:43	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 20:43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 20:43	U	1
Total TPH	PHC635	17.7	50.0	15.0	mg/kg	01.06.2021 20:43	J	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number

% Recovery

Units

Limits

Analysis Date

Flag

111-85-3

70

%

70-130

01.06.2021 20:43

84-15-1

76

%

70-130

01.06.2021 20:43



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-11-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-002

Date Collected: 01.05.2021 09:16

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.08.2021 14:52	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	01.08.2021 14:52	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	01.08.2021 14:52	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	01.08.2021 14:52	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 14:52	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 14:52	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	01.08.2021 14:52	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.08.2021 14:52	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.08.2021 14:52	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-12-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-003

Date Collected: 01.05.2021 09:25

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6850	50.5	8.67	mg/kg	01.06.2021 17:37		10

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.4	49.9	15.0	mg/kg	01.06.2021 21:02	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.06.2021 21:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.06.2021 21:02	U	1
Total TPH	PHC635	15.4	49.9	15.0	mg/kg	01.06.2021 21:02	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 21:02	
o-Terphenyl	84-15-1	72	%	70-130	01.06.2021 21:02	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-12-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-003

Date Collected: 01.05.2021 09:25

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	01.08.2021 15:12	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	01.08.2021 15:12	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	01.08.2021 15:12	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	01.08.2021 15:12	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	01.08.2021 15:12	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	01.08.2021 15:12	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	01.08.2021 15:12	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.08.2021 15:12	
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.08.2021 15:12	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-13-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-004

Date Collected: 01.05.2021 09:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	812	5.00	0.858	mg/kg	01.06.2021 17:42		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.7	50.0	15.0	mg/kg	01.06.2021 21:22	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 21:22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 21:22	U	1
Total TPH	PHC635	15.7	50.0	15.0	mg/kg	01.06.2021 21:22	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	63	%	70-130	01.06.2021 21:22	**
o-Terphenyl	84-15-1	70	%	70-130	01.06.2021 21:22	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-13-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-004

Date Collected: 01.05.2021 09:40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	01.08.2021 15:33	U	1
Toluene	108-88-3	<0.000455	0.00200	0.000455	mg/kg	01.08.2021 15:33	U	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	01.08.2021 15:33	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	01.08.2021 15:33	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:33	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:33	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:33	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.08.2021 15:33	
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.08.2021 15:33	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-14-S-0-5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-005

Date Collected: 01.05.2021 09:49

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	708	4.97	0.853	mg/kg	01.06.2021 17:47		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.1	50.0	15.0	mg/kg	01.06.2021 21:41	J	1
Diesel Range Organics (DRO)	C10C28DRO	28.8	50.0	15.0	mg/kg	01.06.2021 21:41	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 21:41	U	1
Total TPH	PHC635	45.9	50.0	15.0	mg/kg	01.06.2021 21:41	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 21:41	
o-Terphenyl	84-15-1	72	%	70-130	01.06.2021 21:41	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-14-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-005

Date Collected: 01.05.2021 09:49

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.08.2021 15:53	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.08.2021 15:53	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.08.2021 15:53	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.08.2021 15:53	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:53	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:53	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.08.2021 15:53	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.08.2021 15:53	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.08.2021 15:53	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-14-S-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-006

Date Collected: 01.05.2021 10:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1040	4.98	0.855	mg/kg	01.06.2021 17:53	X	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	18.6	49.9	15.0	mg/kg	01.06.2021 22:00	J	1
Diesel Range Organics (DRO)	C10C28DRO	156	49.9	15.0	mg/kg	01.06.2021 22:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	60.5	49.9	15.0	mg/kg	01.06.2021 22:00		1
Total TPH	PHC635	235	49.9	15.0	mg/kg	01.06.2021 22:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 22:00	
o-Terphenyl	84-15-1	73	%	70-130	01.06.2021 22:00	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-14-S-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-006

Date Collected: 01.05.2021 10:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:

Seq Number: 3147234

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	01.08.2021 16:13	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	01.08.2021 16:13	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	01.08.2021 16:13	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	01.08.2021 16:13	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	01.08.2021 16:13	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	01.08.2021 16:13	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	01.08.2021 16:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.08.2021 16:13	
1,4-Difluorobenzene	540-36-3	98	%	70-130	01.08.2021 16:13	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-007

Date Collected: 01.05.2021 10:10

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	722	5.05	0.867	mg/kg	01.06.2021 18:08		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	16.9	49.8	14.9	mg/kg	01.06.2021 22:19	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	01.06.2021 22:19	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.06.2021 22:19	U	1
Total TPH	PHC635	16.9	49.8	14.9	mg/kg	01.06.2021 22:19	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	82	%	70-130	01.06.2021 22:19	
o-Terphenyl	84-15-1	87	%	70-130	01.06.2021 22:19	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-007

Date Collected: 01.05.2021 10:10

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:

Seq Number: 3147234

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.08.2021 16:34	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	01.08.2021 16:34	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	01.08.2021 16:34	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	01.08.2021 16:34	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:34	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:34	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.08.2021 16:34	
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.08.2021 16:34	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-S-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-008

Date Collected: 01.05.2021 10:26

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1060	4.99	0.857	mg/kg	01.06.2021 18:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	16.4	50.0	15.0	mg/kg	01.06.2021 22:39	J	1
Diesel Range Organics (DRO)	C10C28DRO	52.0	50.0	15.0	mg/kg	01.06.2021 22:39		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	17.3	50.0	15.0	mg/kg	01.06.2021 22:39	J	1
Total TPH	PHC635	85.7	50.0	15.0	mg/kg	01.06.2021 22:39		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 22:39	
o-Terphenyl	84-15-1	73	%	70-130	01.06.2021 22:39	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-S-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-008

Date Collected: 01.05.2021 10:26

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:

Seq Number: 3147234

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000383	0.00199	0.000383	mg/kg	01.08.2021 16:54	U	1
Toluene	108-88-3	<0.000453	0.00199	0.000453	mg/kg	01.08.2021 16:54	U	1
Ethylbenzene	100-41-4	<0.000561	0.00199	0.000561	mg/kg	01.08.2021 16:54	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00398	0.00101	mg/kg	01.08.2021 16:54	U	1
o-Xylene	95-47-6	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:54	U	1
Total Xylenes	1330-20-7	<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:54	U	1
Total BTEX		<0.000342	0.00199	0.000342	mg/kg	01.08.2021 16:54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.08.2021 16:54			
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.08.2021 16:54			



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-SD-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-009

Date Collected: 01.05.2021 00:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1090	4.95	0.850	mg/kg	01.06.2021 18:29		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.7	49.9	15.0	mg/kg	01.06.2021 22:58	J	1
Diesel Range Organics (DRO)	C10C28DRO	34.9	49.9	15.0	mg/kg	01.06.2021 22:58	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	17.1	49.9	15.0	mg/kg	01.06.2021 22:58	J	1
Total TPH	PHC635	69.7	49.9	15.0	mg/kg	01.06.2021 22:58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.06.2021 22:58	
o-Terphenyl	84-15-1	72	%	70-130	01.06.2021 22:58	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-15-SD-1-1.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-009

Date Collected: 01.05.2021 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:

Seq Number: 3147234

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	01.08.2021 17:15	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	01.08.2021 17:15	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	01.08.2021 17:15	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.08.2021 17:15	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.08.2021 17:15	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	01.08.2021 17:15	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	01.08.2021 17:15	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	95	%	70-130	01.08.2021 17:15			
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.08.2021 17:15			



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-16-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-010

Date Collected: 01.05.2021 12:11

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	150	5.04	0.865	mg/kg	01.06.2021 18:34		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	18.3	50.0	15.0	mg/kg	01.06.2021 23:17	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 23:17	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 23:17	U	1
Total TPH	PHC635	18.3	50.0	15.0	mg/kg	01.06.2021 23:17	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	78	%	70-130	01.06.2021 23:17	
o-Terphenyl	84-15-1	82	%	70-130	01.06.2021 23:17	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-16-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-010

Date Collected: 01.05.2021 12:11

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

% Moisture:
Basis: Wet Weight

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000382	0.00198	0.000382	mg/kg	01.08.2021 17:35	U	1
Toluene	108-88-3	<0.000452	0.00198	0.000452	mg/kg	01.08.2021 17:35	U	1
Ethylbenzene	100-41-4	<0.000560	0.00198	0.000560	mg/kg	01.08.2021 17:35	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00397	0.00101	mg/kg	01.08.2021 17:35	U	1
o-Xylene	95-47-6	<0.000342	0.00198	0.000342	mg/kg	01.08.2021 17:35	U	1
Total Xylenes	1330-20-7	<0.000342	0.00198	0.000342	mg/kg	01.08.2021 17:35	U	1
Total BTEX		<0.000342	0.00198	0.000342	mg/kg	01.08.2021 17:35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	106	%	70-130	01.08.2021 17:35	
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.08.2021 17:35	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-16-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-011

Date Collected: 01.05.2021 12:22

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1760	25.0	4.29	mg/kg	01.06.2021 18:39		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	14.9	49.8	14.9	mg/kg	01.06.2021 23:55	J	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	49.8	14.9	mg/kg	01.06.2021 23:55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	01.06.2021 23:55	U	1
Total TPH	PHC635	14.9	49.8	14.9	mg/kg	01.06.2021 23:55	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	71	%	70-130	01.06.2021 23:55	
o-Terphenyl	84-15-1	73	%	70-130	01.06.2021 23:55	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-16-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-011

Date Collected: 01.05.2021 12:22

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

% Moisture:

Seq Number: 3147235

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	01.09.2021 01:25	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	01.09.2021 01:25	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	01.09.2021 01:25	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	01.09.2021 01:25	U	1
o-Xylene	95-47-6	<0.000345	0.00200	0.000345	mg/kg	01.09.2021 01:25	U	1
Total Xylenes	1330-20-7	<0.000345	0.00200	0.000345	mg/kg	01.09.2021 01:25	U	1
Total BTEX		<0.000345	0.00200	0.000345	mg/kg	01.09.2021 01:25	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.09.2021 01:25	
1,4-Difluorobenzene	540-36-3	94	%	70-130	01.09.2021 01:25	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-17-S-0-5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-012

Date Collected: 01.05.2021 12:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1.07	5.00	0.858	mg/kg	01.06.2021 18:45	J	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	19.9	50.0	15.0	mg/kg	01.07.2021 00:14	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.07.2021 00:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.07.2021 00:14	U	1
Total TPH	PHC635	19.9	50.0	15.0	mg/kg	01.07.2021 00:14	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.07.2021 00:14	
o-Terphenyl	84-15-1	71	%	70-130	01.07.2021 00:14	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-17-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-012

Date Collected: 01.05.2021 12:30

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

% Moisture:

Seq Number: 3147235

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	01.09.2021 01:46	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	01.09.2021 01:46	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	01.09.2021 01:46	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	01.09.2021 01:46	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	01.09.2021 01:46	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	01.09.2021 01:46	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	01.09.2021 01:46	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.09.2021 01:46			
1,4-Difluorobenzene	540-36-3	89	%	70-130	01.09.2021 01:46			



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-17-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-013

Date Collected: 01.05.2021 12:36

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	595	5.00	0.858	mg/kg	01.06.2021 18:50		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.0	49.9	15.0	mg/kg	01.07.2021 00:33	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.07.2021 00:33	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.07.2021 00:33	U	1
Total TPH	PHC635	15.0	49.9	15.0	mg/kg	01.07.2021 00:33	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	72	%	70-130	01.07.2021 00:33	
o-Terphenyl	84-15-1	81	%	70-130	01.07.2021 00:33	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-17-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-013

Date Collected: 01.05.2021 12:36

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

% Moisture:

Seq Number: 3147235

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000388	0.00202	0.000388	mg/kg	01.09.2021 02:06	U	1
Toluene	108-88-3	<0.000459	0.00202	0.000459	mg/kg	01.09.2021 02:06	U	1
Ethylbenzene	100-41-4	<0.000569	0.00202	0.000569	mg/kg	01.09.2021 02:06	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00403	0.00102	mg/kg	01.09.2021 02:06	U	1
o-Xylene	95-47-6	<0.000347	0.00202	0.000347	mg/kg	01.09.2021 02:06	U	1
Total Xylenes	1330-20-7	<0.000347	0.00202	0.000347	mg/kg	01.09.2021 02:06	U	1
Total BTEX		<0.000347	0.00202	0.000347	mg/kg	01.09.2021 02:06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.09.2021 02:06			
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.09.2021 02:06			



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-18-S-0-5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-014

Date Collected: 01.05.2021 12:43

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	160	5.05	0.867	mg/kg	01.06.2021 18:55		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	16.1	50.0	15.0	mg/kg	01.07.2021 00:53	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.07.2021 00:53	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.07.2021 00:53	U	1
Total TPH	PHC635	16.1	50.0	15.0	mg/kg	01.07.2021 00:53	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	63	%	70-130	01.07.2021 00:53	**
o-Terphenyl	84-15-1	70	%	70-130	01.07.2021 00:53	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-18-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-014

Date Collected: 01.05.2021 12:43

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

% Moisture:

Seq Number: 3147235

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000389	0.00202	0.000389	mg/kg	01.09.2021 02:27	U	1
Toluene	108-88-3	<0.000460	0.00202	0.000460	mg/kg	01.09.2021 02:27	U	1
Ethylbenzene	100-41-4	<0.000570	0.00202	0.000570	mg/kg	01.09.2021 02:27	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00404	0.00102	mg/kg	01.09.2021 02:27	U	1
o-Xylene	95-47-6	<0.000348	0.00202	0.000348	mg/kg	01.09.2021 02:27	U	1
Total Xylenes	1330-20-7	<0.000348	0.00202	0.000348	mg/kg	01.09.2021 02:27	U	1
Total BTEX		<0.000348	0.00202	0.000348	mg/kg	01.09.2021 02:27	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	88	%	70-130	01.09.2021 02:27			
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.09.2021 02:27			



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-18-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-015

Date Collected: 01.05.2021 12:53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:40

% Moisture:

Seq Number: 3146971

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2250	25.0	4.28	mg/kg	01.06.2021 19:00		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.3	49.9	15.0	mg/kg	01.07.2021 01:12	J	1
Diesel Range Organics (DRO)	C10C28DRO	15.0	49.9	15.0	mg/kg	01.07.2021 01:12	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.07.2021 01:12	U	1
Total TPH	PHC635	30.3	49.9	15.0	mg/kg	01.07.2021 01:12	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.07.2021 01:12	
o-Terphenyl	84-15-1	73	%	70-130	01.07.2021 01:12	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-18-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-015

Date Collected: 01.05.2021 12:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

% Moisture:

Seq Number: 3147235

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.09.2021 02:47	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.09.2021 02:47	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.09.2021 02:47	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.09.2021 02:47	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.09.2021 02:47	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.09.2021 02:47	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.09.2021 02:47	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.09.2021 02:47	
4-Bromofluorobenzene	460-00-4	112	%	70-130	01.09.2021 02:47	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-0-5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-016

Date Collected: 01.05.2021 13:00

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:50

% Moisture:

Seq Number: 3147111

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.850	4.95	0.850	mg/kg	01.07.2021 18:58	U	1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.9	49.9	15.0	mg/kg	01.07.2021 01:31	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.07.2021 01:31	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.07.2021 01:31	U	1
Total TPH	PHC635	17.9	49.9	15.0	mg/kg	01.07.2021 01:31	J	1

Surrogate

1-Chlorooctane

Cas Number

111-85-3

% Recovery

71

Units

%

Limits

70-130

Analysis Date

01.07.2021 01:31

Flag

o-Terphenyl

84-15-1

70

%

70-130

01.07.2021 01:31



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-016

Date Collected: 01.05.2021 13:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000389	0.00202	0.000389	mg/kg	01.06.2021 17:13	UX	1
Toluene	108-88-3	<0.000460	0.00202	0.000460	mg/kg	01.06.2021 17:13	U	1
Ethylbenzene	100-41-4	<0.000570	0.00202	0.000570	mg/kg	01.06.2021 17:13	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00404	0.00102	mg/kg	01.06.2021 17:13	U	1
o-Xylene	95-47-6	<0.000348	0.00202	0.000348	mg/kg	01.06.2021 17:13	U	1
Total Xylenes	1330-20-7	<0.000348	0.00202	0.000348	mg/kg	01.06.2021 17:13	U	1
Total BTEX		<0.000348	0.00202	0.000348	mg/kg	01.06.2021 17:13	U	1

Surrogate

1,4-Difluorobenzene
4-Bromofluorobenzene

Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
540-36-3	100	%	70-130	01.06.2021 17:13	
460-00-4	104	%	70-130	01.06.2021 17:13	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-017

Date Collected: 01.05.2021 13:06

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:50

% Moisture:

Seq Number: 3147111

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	272	5.04	0.865	mg/kg	01.07.2021 19:13		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.5	50.0	15.0	mg/kg	01.07.2021 01:50	J	1
Diesel Range Organics (DRO)	C10C28DRO	15.5	50.0	15.0	mg/kg	01.07.2021 01:50	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.07.2021 01:50	U	1
Total TPH	PHC635	31.0	50.0	15.0	mg/kg	01.07.2021 01:50	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	70	%	70-130	01.07.2021 01:50	
o-Terphenyl	84-15-1	75	%	70-130	01.07.2021 01:50	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-1-2-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-017

Date Collected: 01.05.2021 13:06

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3146951

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000384	0.00200	0.000384	mg/kg	01.06.2021 17:34	U	1
Toluene	108-88-3	<0.000455	0.00200	0.000455	mg/kg	01.06.2021 17:34	U	1
Ethylbenzene	100-41-4	<0.000564	0.00200	0.000564	mg/kg	01.06.2021 17:34	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00399	0.00101	mg/kg	01.06.2021 17:34	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 17:34	U	1
Total Xylenes	1330-20-7	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 17:34	U	1
Total BTEX		<0.000344	0.00200	0.000344	mg/kg	01.06.2021 17:34	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.06.2021 17:34	
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.06.2021 17:34	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-3-3.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-018

Date Collected: 01.05.2021 13:16

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:50

% Moisture:

Seq Number: 3147111

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2550	24.8	4.26	mg/kg	01.07.2021 19:19		5

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.07.2021 02:09	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.07.2021 02:09	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.07.2021 02:09	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.07.2021 02:09	U	1

Surrogate

1-Chlorooctane

o-Terphenyl

Cas Number

% Recovery

Units

Limits

Analysis Date

Flag

111-85-3

70

%

70-130

01.07.2021 02:09

84-15-1

74

%

70-130

01.07.2021 02:09



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-19-S-3-3.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-018

Date Collected: 01.05.2021 13:16

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:

Seq Number: 3146951

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00201	0.000386	mg/kg	01.06.2021 17:54	U	1
Toluene	108-88-3	<0.000457	0.00201	0.000457	mg/kg	01.06.2021 17:54	U	1
Ethylbenzene	100-41-4	<0.000567	0.00201	0.000567	mg/kg	01.06.2021 17:54	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00402	0.00102	mg/kg	01.06.2021 17:54	U	1
o-Xylene	95-47-6	<0.000346	0.00201	0.000346	mg/kg	01.06.2021 17:54	U	1
Total Xylenes	1330-20-7	<0.000346	0.00201	0.000346	mg/kg	01.06.2021 17:54	U	1
Total BTEX		<0.000346	0.00201	0.000346	mg/kg	01.06.2021 17:54	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	107	%	70-130	01.06.2021 17:54	
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.06.2021 17:54	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-20-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-019

Date Collected: 01.05.2021 13:30

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:50

% Moisture:

Seq Number: 3147111

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	660	5.00	0.858	mg/kg	01.07.2021 19:24		1

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

% Moisture:

Seq Number: 3147005

Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.7	49.9	15.0	mg/kg	01.07.2021 02:28	J	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	01.07.2021 02:28	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.07.2021 02:28	U	1
Total TPH	PHC635	17.7	49.9	15.0	mg/kg	01.07.2021 02:28	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	66	%	70-130	01.07.2021 02:28	**
o-Terphenyl	84-15-1	71	%	70-130	01.07.2021 02:28	



Certificate of Analytical Results 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: **SB-20-S-0-.5-210105**

Matrix: Solid

Date Received: 01.05.2021 17:01

Lab Sample Id: 683472-019

Date Collected: 01.05.2021 13:30

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

% Moisture:
Basis: Wet Weight

Seq Number: 3146951

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	01.06.2021 18:15	U	1
Toluene	108-88-3	<0.000457	0.00200	0.000457	mg/kg	01.06.2021 18:15	U	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	01.06.2021 18:15	U	1
m,p-Xylenes	179601-23-1	<0.00102	0.00401	0.00102	mg/kg	01.06.2021 18:15	U	1
o-Xylene	95-47-6	<0.000345	0.00200	0.000345	mg/kg	01.06.2021 18:15	U	1
Total Xylenes	1330-20-7	<0.000345	0.00200	0.000345	mg/kg	01.06.2021 18:15	U	1
Total BTEX		<0.000345	0.00200	0.000345	mg/kg	01.06.2021 18:15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	109	%	70-130	01.06.2021 18:15	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.06.2021 18:15	



Blank Summary 683472

Arcadis U.S., Inc, Austin, TX
WDDU Water Station

Sample Id: 7718566-1-BLK
Lab Sample Id: 7718566-1-BLK
Matrix: SOLID

Analytical Method: Chloride by EPA 300
Tech: CHE
Analyst: CHE
Seq Number: 3146971
Prep Method: E300P
Date Prep: 01.06.2021 15:40

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	01.06.2021 16:24	U	1



Blank Summary 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: 7718567-1-BLK

Matrix: SOLID

Lab Sample Id: **7718567-1-BLK**

Analytical Method: **Chloride by EPA 300**

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 01.06.2021 15:50

Seq Number: 3147111

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<0.858	5.00	0.858	mg/kg	01.07.2021 18:42	U	1



Blank Summary 683472

Arcadis U.S., Inc, Austin, TX

WDDU Water Station

Sample Id: 7718602-1-BLK

Matrix: SOLID

Lab Sample Id: 7718602-1-BLK

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.06.2021 10:00

Seq Number: 3146951

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.06.2021 15:07	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.06.2021 15:07	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.06.2021 15:07	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.06.2021 15:07	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.06.2021 15:07	U	1

**Blank Summary 683472****Arcadis U.S., Inc, Austin, TX**

WDDU Water Station

Sample Id: 7718608-1-BLK

Matrix: SOLID

Lab Sample Id: 7718608-1-BLK

Analytical Method: **TPH By SW8015 Mod**

Prep Method: SW8015P

Tech: MNR

Analyst: ARM

Date Prep: 01.06.2021 17:00

Seq Number: 3147005

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.06.2021 18:49	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.06.2021 18:49	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.06.2021 18:49	U	1

**Blank Summary 683472****Arcadis U.S., Inc, Austin, TX**

WDDU Water Station

Sample Id: 7718792-1-BLK

Matrix: SOLID

Lab Sample Id: 7718792-1-BLK

Analytical Method: **BTEX by EPA 8021B**

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 14:00

Seq Number: 3147234

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.08.2021 14:10	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.08.2021 14:10	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.08.2021 14:10	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.08.2021 14:10	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.08.2021 14:10	U	1

**Blank Summary 683472****Arcadis U.S., Inc, Austin, TX**

WDDU Water Station

Sample Id: 7718793-1-BLK

Matrix: SOLID

Lab Sample Id: 7718793-1-BLK

Analytical Method: **BTEX by EPA 8021B**

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 01.08.2021 17:00

Seq Number: 3147235

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000385	0.00200	0.000385	mg/kg	01.09.2021 01:04	U	1
Toluene	108-88-3	<0.000456	0.00200	0.000456	mg/kg	01.09.2021 01:04	U	1
Ethylbenzene	100-41-4	<0.000565	0.00200	0.000565	mg/kg	01.09.2021 01:04	U	1
m,p-Xylenes	179601-23-1	<0.00101	0.00400	0.00101	mg/kg	01.09.2021 01:04	U	1
o-Xylene	95-47-6	<0.000344	0.00200	0.000344	mg/kg	01.09.2021 01:04	U	1



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01112021

Work Orders : 683472

Project ID: 030065089-D0002B

Lab Batch #: 3146951

Sample: 7718602-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:06

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0279	0.0300	93	70-130	
4-Bromofluorobenzene	0.0304	0.0300	101	70-130	

Lab Batch #: 3146951

Sample: 7718602-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:27

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0284	0.0300	95	70-130	
4-Bromofluorobenzene	0.0317	0.0300	106	70-130	

Lab Batch #: 3146951

Sample: 683472-016 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 13:48

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0299	0.0300	100	70-130	
4-Bromofluorobenzene	0.0331	0.0300	110	70-130	

Lab Batch #: 3146951

Sample: 683472-016 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 14:08

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0272	0.0300	91	70-130	
4-Bromofluorobenzene	0.0363	0.0300	121	70-130	

Lab Batch #: 3146951

Sample: 7718602-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 15:07

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0261	0.0300	87	70-130	
4-Bromofluorobenzene	0.0334	0.0300	111	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01112021

Work Orders : 683472

Project ID: 030065089-D0002B

Lab Batch #: 3147234

Sample: 7718792-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 12:11

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0291	0.0300	97	70-130	
4-Bromofluorobenzene	0.0300	0.0300	100	70-130	

Lab Batch #: 3147234

Sample: 7718792-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 12:32

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0292	0.0300	97	70-130	
4-Bromofluorobenzene	0.0302	0.0300	101	70-130	

Lab Batch #: 3147234

Sample: 683472-001 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 12:52

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0283	0.0300	94	70-130	
4-Bromofluorobenzene	0.0299	0.0300	100	70-130	

Lab Batch #: 3147234

Sample: 683472-001 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 13:13

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0285	0.0300	95	70-130	
4-Bromofluorobenzene	0.0310	0.0300	103	70-130	

Lab Batch #: 3147234

Sample: 7718792-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 14:10

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0270	0.0300	90	70-130	
4-Bromofluorobenzene	0.0319	0.0300	106	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01112021

Work Orders : 683472

Project ID: 030065089-D0002B

Lab Batch #: 3147235

Sample: 7718793-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 23:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0293	0.0300	98	70-130	
4-Bromofluorobenzene	0.0288	0.0300	96	70-130	

Lab Batch #: 3147235

Sample: 7718793-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 23:24

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0291	0.0300	97	70-130	
4-Bromofluorobenzene	0.0308	0.0300	103	70-130	

Lab Batch #: 3147235

Sample: 683472-011 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.08.2021 23:45

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0290	0.0300	97	70-130	
4-Bromofluorobenzene	0.0298	0.0300	99	70-130	

Lab Batch #: 3147235

Sample: 683472-011 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.09.2021 00:05

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0290	0.0300	97	70-130	
4-Bromofluorobenzene	0.0302	0.0300	101	70-130	

Lab Batch #: 3147235

Sample: 7718793-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.09.2021 01:04

SURROGATE RECOVERY STUDY

BTEX by EPA 8021B	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
Analytes					
1,4-Difluorobenzene	0.0274	0.0300	91	70-130	
4-Bromofluorobenzene	0.0313	0.0300	104	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Form 2 - Surrogate Recoveries

Project Name: WDDU Water Station

Report Date: 01112021

Work Orders : 683472

Project ID: 030065089-D0002B

Lab Batch #: 3147005

Sample: 7718608-1-BLK / BLK

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 18:49

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.3	100	75	70-130	
o-Terphenyl	42.0	50.0	84	70-130	

Lab Batch #: 3147005

Sample: 7718608-1-BKS / BKS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 19:08

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	123	100	123	70-130	
o-Terphenyl	58.3	50.0	117	70-130	

Lab Batch #: 3147005

Sample: 7718608-1-BSD / BSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 19:27

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	109	100	109	70-130	
o-Terphenyl	51.4	50.0	103	70-130	

Lab Batch #: 3147005

Sample: 683472-001 S / MS

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 20:05

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	124	99.7	124	70-130	
o-Terphenyl	47.3	49.9	95	70-130	

Lab Batch #: 3147005

Sample: 683472-001 SD / MSD

Batch: 1 Matrix: Solid

Units: mg/kg

Date Analyzed: 01.06.2021 20:24

SURROGATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	121	99.6	121	70-130	
o-Terphenyl	45.1	49.8	91	70-130	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = $100 * A / B$

All results are based on MDL and validated for QC purposes.



Arcadis U.S., Inc WDDU Water Station

Analytical Method: Chloride by EPA 300

Seq Number: 3146971

MB Sample Id: 7718566-1-BLK

Matrix: Solid

LCS Sample Id: 7718566-1-BKS

Prep Method: E300P

Date Prep: 01.06.2021

LCSD Sample Id: 7718566-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	260	104	257	103	90-110	1	20	mg/kg	01.06.2021 16:29	

Analytical Method: Chloride by EPA 300

Seq Number: 3147111

MB Sample Id: 7718567-1-BLK

Matrix: Solid

LCS Sample Id: 7718567-1-BKS

Prep Method: E300P

Date Prep: 01.06.2021

LCSD Sample Id: 7718567-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	248	99	250	100	90-110	1	20	mg/kg	01.07.2021 18:47	

Analytical Method: Chloride by EPA 300

Seq Number: 3146971

Parent Sample Id: 683462-001

Matrix: Soil

MS Sample Id: 683462-001 S

Prep Method: E300P

Date Prep: 01.06.2021

MSD Sample Id: 683462-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2630	1260	4090	116	4040	112	90-110	1	20	mg/kg	01.06.2021 16:45	X

Analytical Method: Chloride by EPA 300

Seq Number: 3146971

Parent Sample Id: 683472-006

Matrix: Solid

MS Sample Id: 683472-006 S

Prep Method: E300P

Date Prep: 01.06.2021

MSD Sample Id: 683472-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1040	249	1270	92	1260	88	90-110	1	20	mg/kg	01.06.2021 17:58	X

Analytical Method: Chloride by EPA 300

Seq Number: 3147111

Parent Sample Id: 683472-016

Matrix: Solid

MS Sample Id: 683472-016 S

Prep Method: E300P

Date Prep: 01.06.2021

MSD Sample Id: 683472-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.850	248	258	104	257	104	90-110	0	20	mg/kg	01.07.2021 19:03	

Analytical Method: Chloride by EPA 300

Seq Number: 3147111

Parent Sample Id: 683526-007

Matrix: Soil

MS Sample Id: 683526-007 S

Prep Method: E300P

Date Prep: 01.06.2021

MSD Sample Id: 683526-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	12.5	248	268	103	267	103	90-110	0	20	mg/kg	01.07.2021 20:16	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Arcadis U.S., Inc WDDU Water Station

Analytical Method: TPH By SW8015 Mod

Seq Number: 3147005

MB Sample Id: 7718608-1-BLK

Matrix: Solid

LCS Sample Id: 7718608-1-BKS

Prep Method: SW8015P

Date Prep: 01.06.2021

LCSD Sample Id: 7718608-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1030	103	982	98	70-130	5	20	mg/kg	01.06.2021 19:08	
Diesel Range Organics (DRO)	<15.0	1000	989	99	1020	102	70-130	3	20	mg/kg	01.06.2021 19:08	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	75		123		109		70-130	%	01.06.2021 19:08
o-Terphenyl	84		117		103		70-130	%	01.06.2021 19:08

Analytical Method: TPH By SW8015 Mod

Seq Number: 3147005

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.06.2021

MB Sample Id: 7718608-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.06.2021 18:49	

Analytical Method: TPH By SW8015 Mod

Seq Number: 3147005

Matrix: Solid

Prep Method: SW8015P

Date Prep: 01.06.2021

Parent Sample Id: 683472-001

MS Sample Id: 683472-001 S

MSD Sample Id: 683472-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	16.6	997	835	82	787	77	70-130	6	20	mg/kg	01.06.2021 20:05	
Diesel Range Organics (DRO)	<15.0	997	881	88	853	86	70-130	3	20	mg/kg	01.06.2021 20:05	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		121		70-130	%	01.06.2021 20:05
o-Terphenyl	95		91		70-130	%	01.06.2021 20:05

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146951

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.06.2021

MB Sample Id: 7718602-1-BLK

LCS Sample Id: 7718602-1-BKS

LCSD Sample Id: 7718602-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0968	97	0.102	102	70-130	5	35	mg/kg	01.06.2021 13:06	
Toluene	<0.000456	0.100	0.107	107	0.113	113	70-130	5	35	mg/kg	01.06.2021 13:06	
Ethylbenzene	<0.000565	0.100	0.101	101	0.108	108	70-130	7	35	mg/kg	01.06.2021 13:06	
m,p-Xylenes	<0.00101	0.200	0.200	100	0.218	109	70-130	9	35	mg/kg	01.06.2021 13:06	
o-Xylene	<0.000344	0.100	0.0957	96	0.105	105	70-130	9	35	mg/kg	01.06.2021 13:06	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		93		95		70-130	%	01.06.2021 13:06
4-Bromofluorobenzene	111		101		106		70-130	%	01.06.2021 13:06

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* | (C-E) / (C+E) |
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



Arcadis U.S., Inc

WDDU Water Station

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147234

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.08.2021

MB Sample Id: 7718792-1-BLK

LCS Sample Id: 7718792-1-BKS

LCSD Sample Id: 7718792-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0955	96	0.0964	96	70-130	1	35	mg/kg	01.08.2021 12:11	
Toluene	<0.000456	0.100	0.0939	94	0.0947	95	70-130	1	35	mg/kg	01.08.2021 12:11	
Ethylbenzene	<0.000565	0.100	0.0975	98	0.0980	98	70-130	1	35	mg/kg	01.08.2021 12:11	
m,p-Xylenes	<0.00101	0.200	0.196	98	0.198	99	70-130	1	35	mg/kg	01.08.2021 12:11	
o-Xylene	<0.000344	0.100	0.0978	98	0.0989	99	70-130	1	35	mg/kg	01.08.2021 12:11	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		97		97		70-130	%	01.08.2021 12:11
4-Bromofluorobenzene	106		100		101		70-130	%	01.08.2021 12:11

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147235

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.08.2021

MB Sample Id: 7718793-1-BLK

LCS Sample Id: 7718793-1-BKS

LCSD Sample Id: 7718793-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0954	95	0.0890	89	70-130	7	35	mg/kg	01.08.2021 23:04	
Toluene	<0.000456	0.100	0.0906	91	0.0844	84	70-130	7	35	mg/kg	01.08.2021 23:04	
Ethylbenzene	<0.000565	0.100	0.0916	92	0.0860	86	70-130	6	35	mg/kg	01.08.2021 23:04	
m,p-Xylenes	<0.00101	0.200	0.182	91	0.171	86	70-130	6	35	mg/kg	01.08.2021 23:04	
o-Xylene	<0.000344	0.100	0.0923	92	0.0868	87	70-130	6	35	mg/kg	01.08.2021 23:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	91		98		97		70-130	%	01.08.2021 23:04
4-Bromofluorobenzene	104		96		103		70-130	%	01.08.2021 23:04

Analytical Method: BTEX by EPA 8021B

Seq Number: 3146951

Matrix: Solid

Prep Method: SW5035A

Date Prep: 01.06.2021

Parent Sample Id: 683472-016

MS Sample Id: 683472-016 S

MSD Sample Id: 683472-016 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0639	64	0.0609	60	70-130	5	35	mg/kg	01.06.2021 13:48	X
Toluene	<0.000457	0.100	0.0807	81	0.0838	83	70-130	4	35	mg/kg	01.06.2021 13:48	
Ethylbenzene	<0.000566	0.100	0.0804	80	0.0887	88	70-130	10	35	mg/kg	01.06.2021 13:48	
m,p-Xylenes	<0.00102	0.200	0.156	78	0.176	87	70-130	12	35	mg/kg	01.06.2021 13:48	
o-Xylene	<0.000345	0.100	0.0757	76	0.0851	84	70-130	12	35	mg/kg	01.06.2021 13:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		91		70-130	%	01.06.2021 13:48
4-Bromofluorobenzene	110		121		70-130	%	01.06.2021 13:48

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Arcadis U.S., Inc
WDDU Water Station

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147234

Parent Sample Id: 683472-001

Matrix: Solid

MS Sample Id: 683472-001 S

Prep Method: SW5035A

Date Prep: 01.08.2021

MSD Sample Id: 683472-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.00778	8	0.00992	10	70-130	24	35	mg/kg	01.08.2021 12:52	X
Toluene	<0.000455	0.0998	0.00713	7	0.00948	10	70-130	28	35	mg/kg	01.08.2021 12:52	X
Ethylbenzene	<0.000564	0.0998	0.00764	8	0.0106	11	70-130	32	35	mg/kg	01.08.2021 12:52	X
m,p-Xylenes	<0.00101	0.200	0.0158	8	0.0220	11	70-130	33	35	mg/kg	01.08.2021 12:52	X
o-Xylene	<0.000344	0.0998	0.00860	9	0.0120	12	70-130	33	35	mg/kg	01.08.2021 12:52	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		95		70-130	%	01.08.2021 12:52
4-Bromofluorobenzene	100		103		70-130	%	01.08.2021 12:52

Analytical Method: BTEX by EPA 8021B

Seq Number: 3147235

Parent Sample Id: 683472-011

Matrix: Solid

MS Sample Id: 683472-011 S

Prep Method: SW5035A

Date Prep: 01.08.2021

MSD Sample Id: 683472-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000389	0.101	0.0752	74	0.0743	74	70-130	1	35	mg/kg	01.08.2021 23:45	
Toluene	<0.000460	0.101	0.0723	72	0.0704	70	70-130	3	35	mg/kg	01.08.2021 23:45	
Ethylbenzene	<0.000570	0.101	0.0742	73	0.0717	72	70-130	3	35	mg/kg	01.08.2021 23:45	
m,p-Xylenes	<0.00102	0.202	0.147	73	0.141	71	70-130	4	35	mg/kg	01.08.2021 23:45	
o-Xylene	<0.000348	0.101	0.0729	72	0.0698	70	70-130	4	35	mg/kg	01.08.2021 23:45	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		97		70-130	%	01.08.2021 23:45
4-Bromofluorobenzene	99		101		70-130	%	01.08.2021 23:45

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

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

Chain of Custody Record

Client Information		Sampler: J. Steinmann		Lab File: Kudchadkar, Sachin G		Carrier Tracking No(s):		COC No: 200-23595-8666.1		
Client Contact: Moltan Jordan		Phone: 619 851 8792		E-Mail: sachin.kudchadkar@testamericainc.com				Page 1 of 2		
Company: ARCADIS U.S., Inc.								Job #: 0083477		
Address: 1717 W 6th Street, Suite 210		Due Date Requested:		Analysis Requested						
City: Austin		TAT Requested (days): Std								
State, Zip: TX, 78703		PO #:								
Phone: 281 644 9437		WO #:								
Email: douglas.jordan@arcadis.com		Project #: 30065089-0002B		SSOW#:		Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)				
Site: WDDU Water Station										
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	8015, GRD/ DRD/ ORO	300 - Chloride	8021- BTEX	Total Number of containers	Special Instructions/Note:
SB-10-S-O-S-210105	1/05/20	0904	G	Solid	X	N	N	N	1	
SB-11-S-O-S-210105		0916		Solid						
SB-12-S-O-S-210105		0925		Solid						
SB-13-S-O-S-210105		0940		Solid						
SB-14-S-O-S-210105		0949		Solid						
SB-14-S-1-1.S-210105		1000		Solid						
SB-15-S-O-S-210105		1010		Solid						
SB-15-S-1-1.S-210105		1026		Solid						
SB-15-SD-1-1.S-210105				Solid						
SB-16-S-O-S-210105		1211		Solid						
SB-16-S-1-2-210105		1222		Solid						
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological					☒ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:	Time:		Method of Shipment:					
Relinquished by: Carlos Grajeda		Date/Time: 1/05/20 1600	Company: Arcadis		Received by: Carlos Grajeda		Date/Time: 1-5-21 1600		Company: Arcadis	
Relinquished by: Carlos Grajeda		Date/Time: 1-5-21 1701	Company: Arcadis		Received by: Carlos Grajeda		Date/Time: 1-5-21 1701		Company: Arcadis	
Relinquished by: Carlos Grajeda		Date/Time: 1-5-21 1701	Company: Arcadis		Received by: Carlos Grajeda		Date/Time: 1-5-21 1701		Company: Arcadis	
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: _____				Cooler Temperature(s) °C and Other Remarks: 18					

Eurofins Xenco

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

Chain of Custody Record

[illegible]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Arcadis U.S., Inc

Date/ Time Received: 01.05.2021 05.01.00 PM

Work Order #: 683472

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

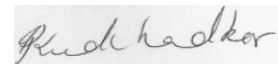
Checklist completed by:



Brianna Teel

Date: 01.06.2021

Checklist reviewed by:



Sachin Kudchadkar

Date: 01.06.2021

Appendix D

Photographic Log

ARCADIS		PHOTOGRAPHIC LOG	
Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 1	Date: 01/04/2021		
Direction Photo Taken: Facing south			
Description: Signage on site			

ARCADIS		PHOTOGRAPHIC LOG	
Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 2	Date: 01/04/2021		
Direction Photo Taken: Southwest			
Description: Source of leak northeast of valve box			



PHOTOGRAPHIC LOG

Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 3	Date: 01/04/2021		
Direction Photo Taken: Facing south			
Description: West of valve box center of drainage			



PHOTOGRAPHIC LOG

Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 4	Date: 01/04/2021		
Direction Photo Taken: Facing north			
Description: Center of drainage where it bends southwest facing north to valve box			



PHOTOGRAPHIC LOG

Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 5	Date: 01/04/2021		
Direction Photo Taken: Facing southwest			
Description: Center of drainage where it bends southwest from the southwest			



PHOTOGRAPHIC LOG

Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 6	Date: 01/04/2021		
Direction Photo Taken: Facing east/northeast			
Description: Southwest of drainage near 3" flowline			

ARCADIS		PHOTOGRAPHIC LOG	
Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 7	Date: 01/04/2021		
Direction Photo Taken: Facing southwest			
Description: Southwest of drainage in between flowlines			

ARCADIS		PHOTOGRAPHIC LOG	
Property Name: WDDU Water Station		Location: Lea County, NM	Case No. 1RP-2108
Photo No. 8	Date: 01/04/2021		
Direction Photo Taken: Facing east/northeast			
Description: End of drainage near 2 7/8" flowline southwest			

Appendix E

Revised C-141 Form 1RP-2108

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	NGRL0905661261
District RP	1RP-2108
Facility ID	fGRL0905660588
Application ID	NA

Release Notification

Responsible Party

Responsible Party: Chevron USA	OGRID: 4323
Contact Name: Armando Martinez	Contact Telephone: 505-690-5408
Contact email: amarti@chevron.com	Incident # (assigned by OCD) NGRL0905661261
Contact mailing address:	

Location of Release Source

Latitude 32.171070 _____ Longitude -103.089443 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: WDDU Water Station	Site Type: Water Station
Date Release Discovered: 02/17/2009	API# (if applicable): 30-025-30823

Unit Letter	Section	Township	Range	County
L	32	24S	38E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☐ Crude Oil	Volume Released (bbls):	Volume Recovered (bbls):
☒ Produced Water	Volume Released (bbls): 158	Volume Recovered (bbls): 60
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Internal corrosion on 2" Steel IPC nipple from Water Injection Station failed.

State of New Mexico
Oil Conservation Division

Page 2

Incident ID	NGRL0905661261
District RP	1RP-2108
Facility ID	fGRL0905660588
Application ID	NA

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Release was greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Initial C-141 Form was submitted on February 20, 2009.	

Incident ID	NGRL0905661261
District RP	1RP-2108
Facility ID	fGRL0905660588
Application ID	NA

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?	<u>105</u> (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. **Attached.**
Field data: **Attached.**
Data table of soil contaminant concentration data: **Attached.**
Depth to water determination: **>101 feet bgs**
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release: **None identified.**
Boring or excavation logs: **Boring Logs attached.**
Photographs including date and GIS information: **Photographic log attached.**
Topographic/Aerial maps; **Topographic map attached.**
Laboratory data including chain of custody: **Attached.**

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

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Incident ID	NGRL0905661261
District RP	1RP-2108
Facility ID	fGRL0905660588
Application ID	NA

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: Armando Martinez Title: Environmental Project Manager

Signature:  Date: 07/30/2021

email: amarti@chevron.com Telephone: 505-690-
5408

OCD Only

Received by: Date:

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10205 Westheimer Road, Suite 800
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Phone: 713 953 4800
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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 52790

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 52790
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Submitted report accepted as information only. Proceed with additional delineation and workplan development. Submit work plan via the OCD permitting portal by 6/9/2023.	3/8/2023