

**Ridgeway Arizona Oil Corp.
575 N. Dairy Ashford
Suite 210
Houston, TX 77079**

June 5, 2024

NMOCD District 1
1625 N French Dr.
Hobbs, NM, 88240

**RE: Site Assessment and Remediation Work Plan
Haley Water Facility
NMOCD Reference No. NAPP2310847119
GPS: Latitude 33.66595 Longitude -103.54589
UL "H", Section 34, Township 07S, Range 33E,
Roosevelt County, NM**

Ridgeway Arizona Oil Corp. (Ridgeway) has contracted Pima Environmental Services, LLC (Pima) to perform a site assessment and prepare this remediation work plan, for contaminated soils stockpiled at the Haley Water Facility (Haley). This incident was assigned Incident ID NAPP2310847119, by the New Mexico Oil Conservation Division (NMOCD).

Site Information and Site Characterization

The Haley is located approximately eleven (11) miles NW of Milnesand, NM. This spill site is in Unit H, Section 34, Township 07S, Range 33E, Latitude 33.66595 Longitude -103.54589, Roosevelt County, NM. A Location Map can be found in Figure 1.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology in this area includes scattered lacustrine, playa, and alluvial deposits of the Tahoka, Double Tanks, Tule, Blanco, Blackwater Draw, and Gatuna Formations, the latter of which may be Pliocene at base; outcrops, however, are basically of Quaternary deposits. The soil in this area is made up of Amarose loamy fine sand, dry, having 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well drained. There is a low potential for karst geology to be present around the Haley (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 165 feet below grade surface (BGS). According to the United States Geological Survey well water data, depth to the nearest groundwater in this area is 231 feet BGS. See Appendix A for referenced water surveys.

Table 1 NMAC and Closure Criteria 19.15.29

Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50' (Lack of GW data)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic Map.

Release Information

NAPP2310847119: On July 27, 2022, it was discovered that soils contaminated with crude oil was being stockpiled at location from unknown events. Measures approximately 100' x 45' at a height of approximately 14'. Contained inside a fenced area.

Site Assessment

On February 3, 2024, Pima mobilized personnel to perform a site assessment and collect soil samples. Grab soil samples were collected within and around the impacted area utilizing a hand auger. The estimated volume of this stockpile is approximately 776 cubic yards of soil. The laboratory results from this sampling event can be found in the following data table. A Site Map can be found in Figure 4.

2-3-2024 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
Ridgeway- Haley Central Water Facility NAPP2310847119								
Date: 2/3/2024		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S5	1'	ND	ND	ND	546	130	676	219
	2'	ND	ND	ND	ND	ND	0	28.9
	3'	ND	ND	ND	ND	ND	0	23.5
	4'	ND	ND	ND	ND	ND	0	20.3
S6	1'	ND	ND	ND	507	ND	507	235
	2'	ND	ND	ND	ND	ND	0	26.9
	3'	ND	ND	ND	ND	ND	0	23.3
	4'	ND	ND	ND	ND	ND	0	21
S7	1'	ND	ND	ND	439	ND	439	221
	2'	ND	ND	ND	ND	ND	0	28
	3'	ND	ND	ND	ND	ND	0	23
	4'	ND	ND	ND	ND	ND	0	ND
S8	1'	ND	ND	ND	381	ND	381	234
	2'	ND	ND	ND	ND	ND	0	35.2
	3'	ND	ND	ND	ND	ND	0	22.2
	4'	ND	ND	ND	ND	ND	0	20.7
S9	1'	ND	ND	ND	364	ND	364	249
	2'	ND	ND	ND	ND	ND	0	26.9
	3'	ND	ND	ND	ND	ND	0	23.8
	4'	ND	ND	ND	ND	ND	0	20.3
S10	1'	ND	ND	ND	410	ND	410	321
	2'	ND	ND	ND	ND	ND	0	23.5
	3'	ND	ND	ND	ND	ND	0	20.9
	4'	ND	ND	ND	ND	ND	0	47
SW1	0-4'	ND	ND	ND	ND	ND	0	ND
SW2	0-4'	ND	ND	ND	ND	ND	0	ND
SW3	0-4'	ND	ND	ND	ND	ND	0	ND
SW4	0-4'	ND	ND	ND	ND	ND	0	ND
SW5	0-4'	ND	ND	ND	ND	ND	0	ND

SW6	0-4'	ND	ND	ND	ND	ND	0	ND
SW7	0-4'	ND	ND	ND	ND	ND	0	ND
SW8	0-4'	ND	ND	ND	ND	ND	0	ND
SW9	0-4'	ND	ND	ND	ND	ND	0	ND
SW10	0-4'	ND	ND	ND	ND	ND	0	ND
SW11	0-4'	ND	ND	ND	ND	ND	0	ND
SW12	0-4'	ND	ND	ND	ND	ND	0	ND
SW13	0-4'	ND	ND	ND	ND	ND	0	ND
SW14	0-4'	ND	ND	ND	ND	ND	0	ND
SW15	0-4'	ND	ND	ND	ND	ND	0	ND
SW16	0-4'	ND	ND	ND	ND	ND	0	ND
BG1	1'	ND	ND	ND	ND	ND	0	ND

ND – Non-Detect

Remediation Work Plan

On behalf of Ridgeway, Pima proposes to remediate this area by the following method:

1. Submit a one-call through the NM811 system.
2. The estimated volume of soil to be remediated is approximately 56 cubic yards. This is based on a 4,500 square foot, pyramid area and an average depth of 1' bgs.
3. We propose to excavate the affected area using mechanical equipment and dispose of the contaminated soil at an NMOCD-approved facility, a Site Map can be found in figure 4.
4. After Ridgeway submits a 48-hour notification, we will collect 5-point composite samples from the excavated areas around the stockpile. These sample points will include base samples from excavated areas, and sidewall samples from the walls of each excavations representative of no more than 200 square feet.
5. Upon final receipt of lab reports showing contamination levels are under the regulatory limits of Table 1 NMAC 19.15.29, a remediation closure report will be drafted and submitted to the NMOCD portal for review and approval.
6. Work will commence within 30 days of approval of this work plan by NMOCD and will be completed within 30 days after the start of construction.

For questions or additional information, please feel free to contact:

Ridgeway Arizona Oil Corp – Charles Hinojosa – 713-574-7912 or chinojosa@pedevco.com.

Pima Environmental – DelRae Geller – 806-724-5391 or delrae@pimaoil.com.

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Site Map

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C – Photographic Documentation
- Appendix D – Laboratory Reports



Pima Environmental Services



Figures:

1. Location Map
2. Topographic Map
3. Karst Map
4. Site Map
5. Proposed Excavation Map

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Location Map

Legend

-  11.97 Miles NW of Milnesand, NM
-  Haley Water Station

Haley Water Station

Milnesand 262

206

Google Earth


10 mi

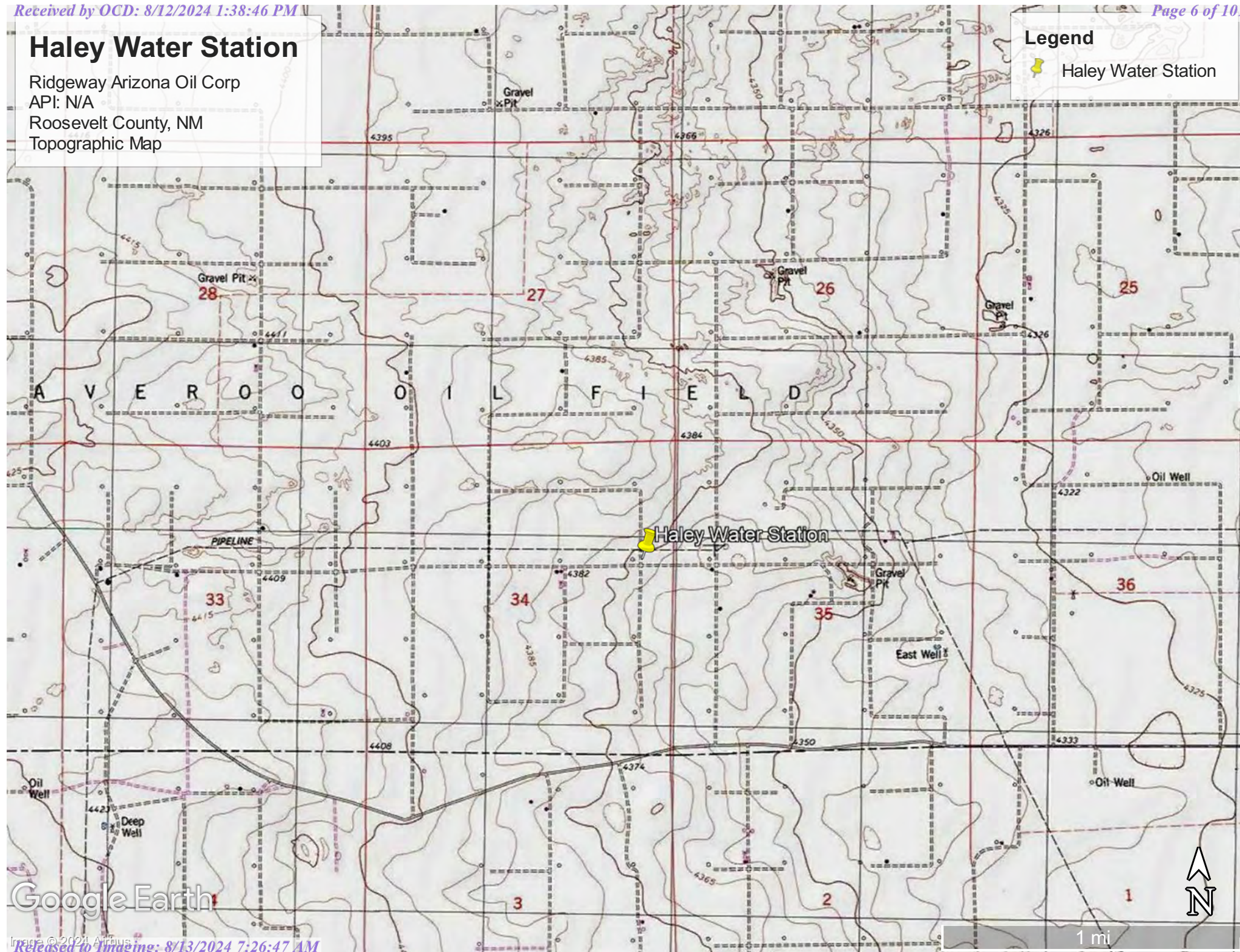


Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Topographic Map

Legend

 Haley Water Station








Google Earth

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Karst Map

Legend

-  Haley Water Station
-  High Karst
-  Low Karst
-  Medium Karst

 Haley Water Station

258

Google Earth





4 mi


Haley Water Facility


Ridgeway Arizona Oil Co.
API: N/A
Roosevelt County, NM
Site Map

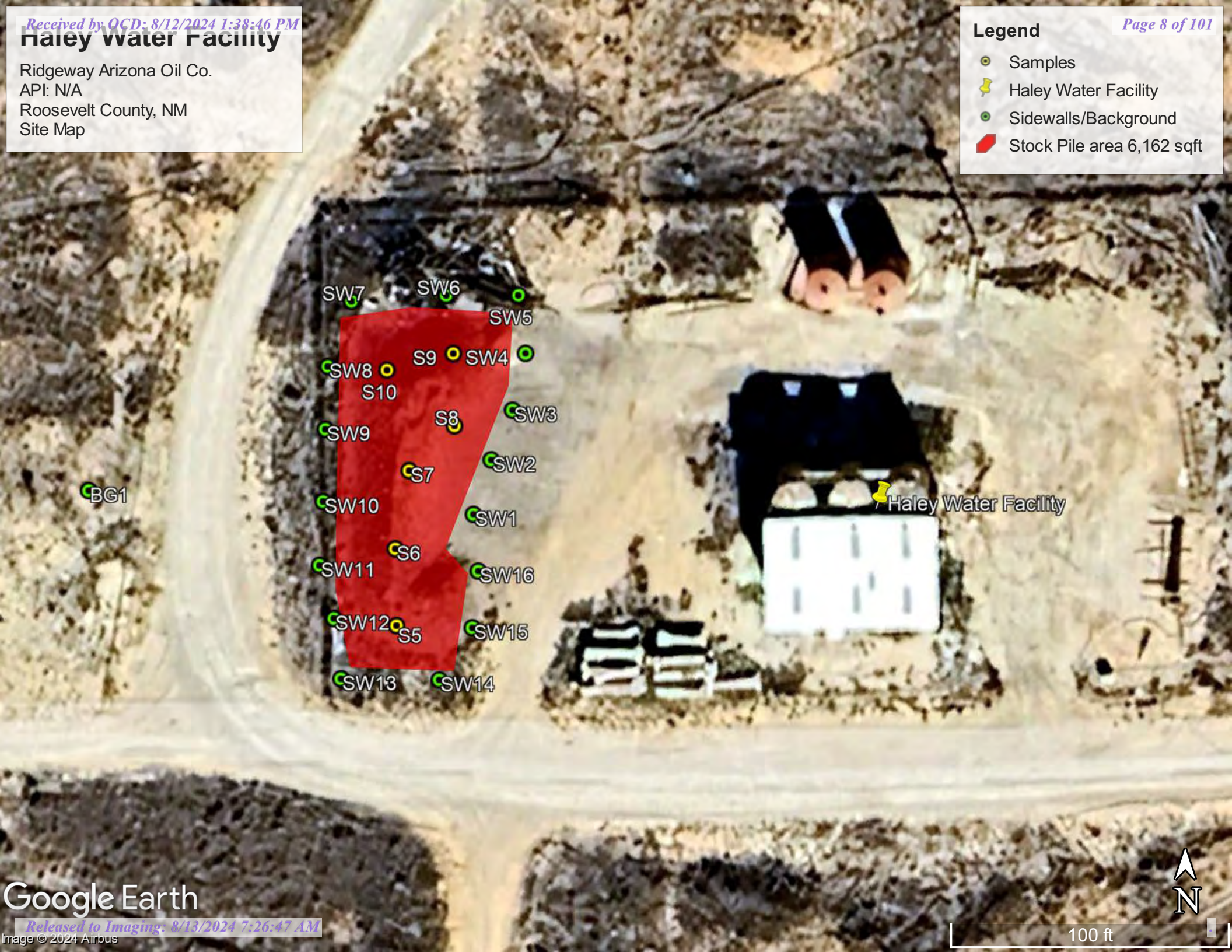
Legend

 Samples

 Haley Water Facility

 Sidewalls/Background




 Stock Pile area 6,162 sqft

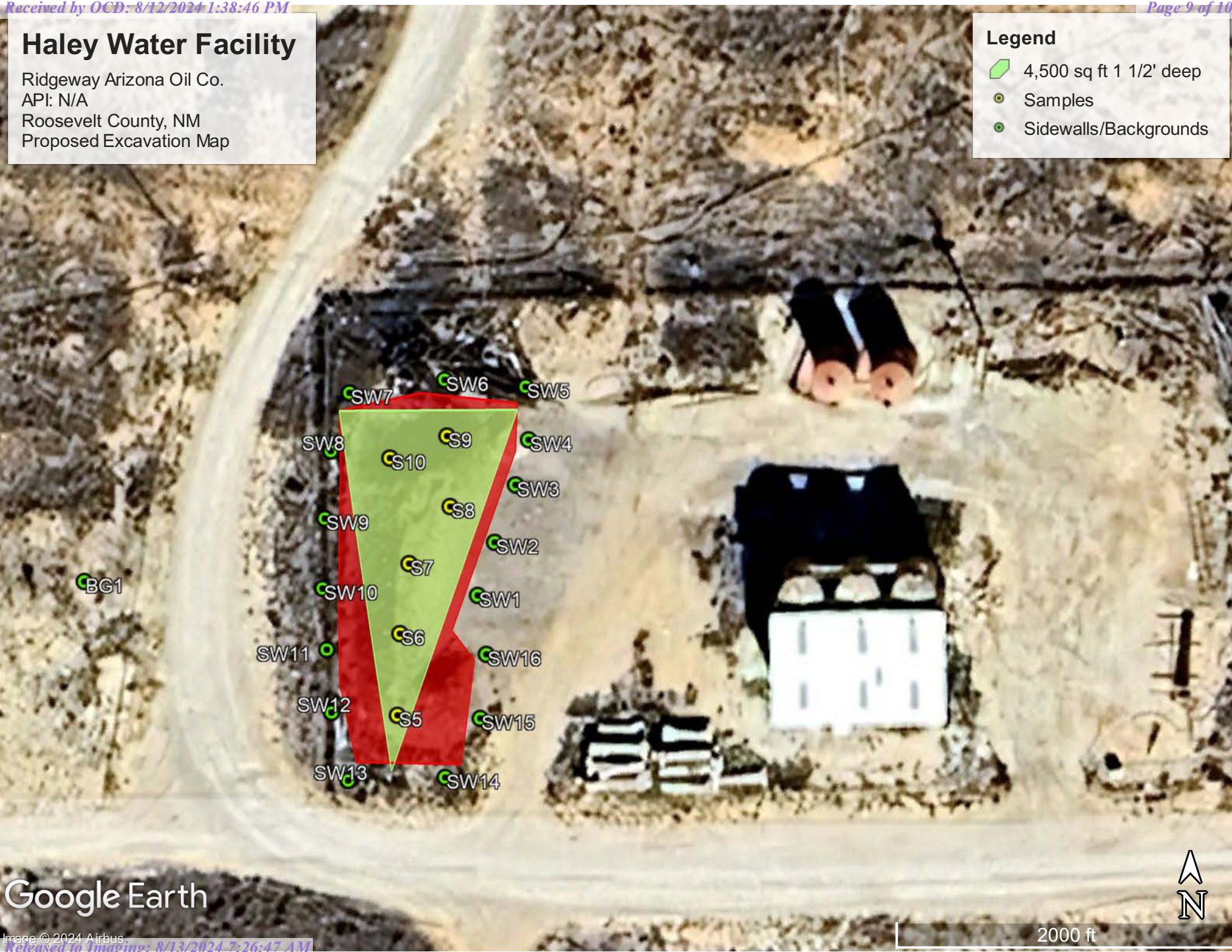


Haley Water Facility

Ridgeway Arizona Oil Co.
API: N/A
Roosevelt County, NM
Proposed Excavation Map

Legend

-  4,500 sq ft 1 1/2' deep
-  Samples
-  Sidewalls/Backgrounds



Google Earth

2000 ft



Pima Environmental Services

Appendix A

Water Surveys:

OSE

USGS

Surface Water Map



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
L 13691 POD1		L	LE	1	1	4	22	09S	32E	637362	3725298	2645	150		
CL 00385 POD1		CL	CH	3	3	4	15	08S	33E	634369	3720406	5692	349		
L 14097 POD1		L	LE	1	3	3	06	20S	35E	638740	3718500	8526	61	0	61
CL 00307 POD1		CL	CH	2	3	4	13	08S	32E	628014	3720298	8940	195	165	30
CL 00314 POD1		CL	CH	1	2	2	34	08S	33E	634611	3716897	9184	220	157	63
Average Depth to Water:														107 feet	
Minimum Depth:														0 feet	
Maximum Depth:														165 feet	

Record Count: 5

UTMNAD83 Radius Search (in meters):

Easting (X): 634834.14

Northing (Y): 3726079.62

Radius: 10000

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.


2/22/24 10:31 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L 13691	POD1	1	1	4	22	09S	32E	637362	3725298 

Driller License:	1058	Driller Company:	KEY'S DRILLING & PUMP SERVICE	
Driller Name:	CLINTON KEY			
Drill Start Date:	02/25/2015	Drill Finish Date:	02/25/2015	Plug Date:
Log File Date:	03/09/2015	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield: 30 GPM
Casing Size:	4.50	Depth Well:	150 feet	Depth Water:

Water Bearing Stratifications:	Top	Bottom	Description
	55	65	Sandstone/Gravel/Conglomerate
	70	143	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	65	150

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/22/24 9:47 AM

POINT OF DIVERSION SUMMARY

Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
L-13691-POD 1 Map

Legend

- 1.64 Miles
- Haley Water Station
- L-13691-POD 1

Haley Water Station

L-13691-POD 1

Google Earth





[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 334206103334201

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 334206103334201 07S.33E.16.443224

Available data for this site

Groundwater: Field measurements



GO

Roosevelt County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°42'07.1", Longitude 103°33'50.2" NAD83

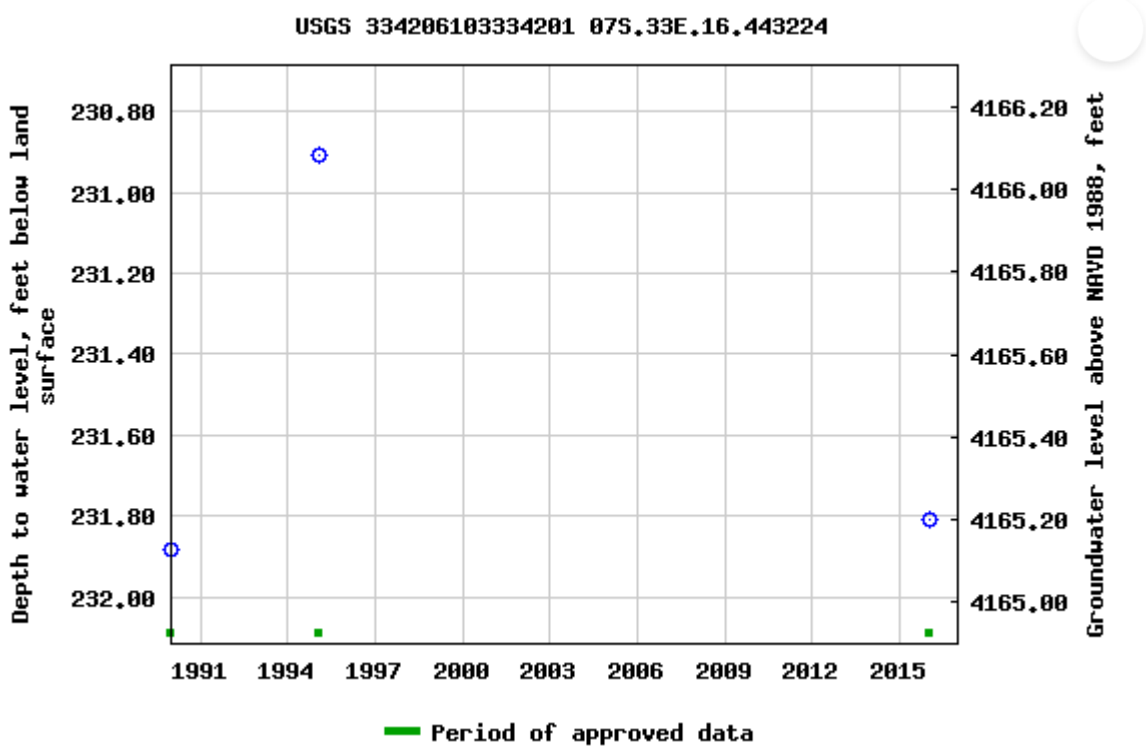
Land-surface elevation 4,397 feet above NAVD88

The depth of the well is 290 feet below land surface.

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2024-02-22 11:45:12 EST




0.79 0.66 nadww02



Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
USGS 334206103334201

Legend

-  2.67 Miles
-  Haley Water Station
-  USGS 334206103334201

USGS 334206103334201

Haley Water Station

Google Earth




2 mi

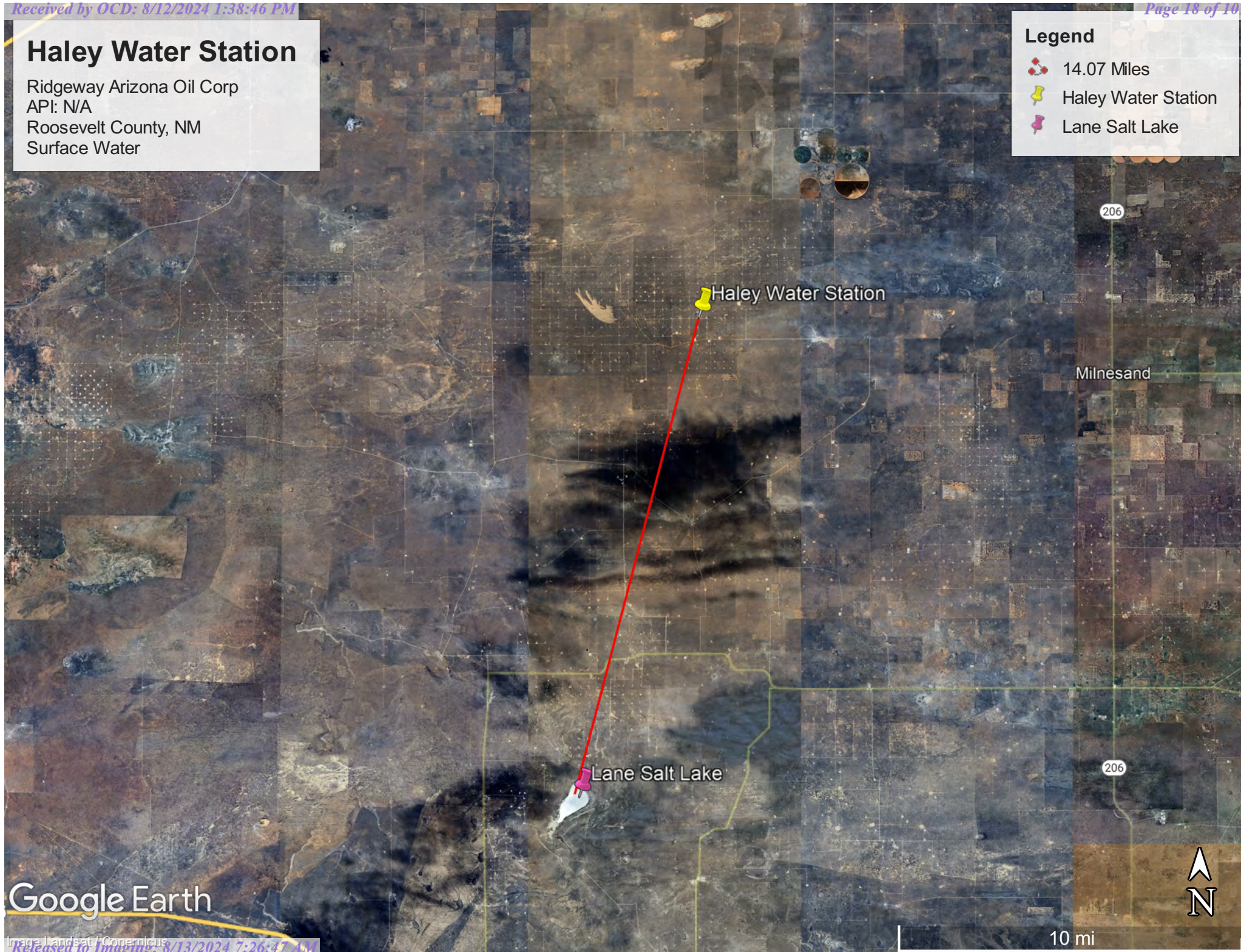


Haley Water Station

Ridgeway Arizona Oil Corp
API: N/A
Roosevelt County, NM
Surface Water

Legend

-  14.07 Miles
-  Haley Water Station
-  Lane Salt Lake



Google Earth



Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Amarose loamy fine sand, 0 to 3 percent slopes---Roosevelt County,
New Mexico

Roosevelt County, New Mexico

AqB—Amarose loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1idyj

Elevation: 2,500 to 4,600 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Not prime farmland

Map Unit Composition

Amarose and similar soils: 85 percent

Minor components: 15 percent

*Estimates are based on observations, descriptions, and transects of
the mapunit.*

Description of Amarose

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy eolian deposits

Typical profile

A - 0 to 10 inches: loamy fine sand

Bt1 - 10 to 34 inches: sandy clay loam

Bt2 - 34 to 42 inches: fine sandy loam

Btk - 42 to 80 inches: loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 55 percent

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Moderate (about 8.2
inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: B

Map Unit Description: Amarose loamy fine sand, 0 to 3 percent slopes---Roosevelt County,
New Mexico

Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Minor Components

Elida

Percent of map unit: 8 percent
Landform: Playa slopes, plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Concave, linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Douro

Percent of map unit: 4 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Triomas

Percent of map unit: 3 percent
Landform: Plains
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R077DY046TX - Sandy 12-17" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Roosevelt County, New Mexico
Survey Area Data: Version 20, Sep 7, 2023

National Flood Hazard Layer FIRMette



103°33'3"W 33°40'13"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone Z
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone X
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
	MAP PANELS	
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 2/22/2024 at 11:51 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Released to Imaging: 8/13/2024 7:26:47 AM

Received by OCD: 8/13/2024 1:38:46 PM







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Wetlands



February 22, 2024

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Pima Environmental Services

Appendix C

Photographic Documentation



SITE PHOTOGRAPHS
Ridgeway Arizona Oil Corporation
Haley Water Station

Assessment







Pima Environmental Services

Appendix D

Laboratory Results

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Haley Chavaroo SA Unit Water
Injection facility

Work Order: E402056

Job Number: 21064-0001

Received: 2/6/2024

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/13/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 2/13/24

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Haley Chavaroo SA Unit Water Injection facility
Workorder: E402056
Date Received: 2/6/2024 7:51:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/6/2024 7:51:00AM, under the Project Name: Haley Chavaroo SA Unit Water Injection facility.

The analytical test results summarized in this report with the Project Name: Haley Chavaroo SA Unit Water Injection facility apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

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Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	
			02/13/24 14:33

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S5 - 1'	E402056-01A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S5-2'	E402056-02A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S5-3'	E402056-03A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S5-4'	E402056-04A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S6-1'	E402056-05A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S6-2'	E402056-06A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S6-3'	E402056-07A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S6-4'	E402056-08A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S7-1'	E402056-09A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S7-2'	E402056-10A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S7-3'	E402056-11A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S7-4'	E402056-12A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S8-1'	E402056-13A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S8-2'	E402056-14A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S8-3'	E402056-15A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S8-4'	E402056-16A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S9-1'	E402056-17A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S9-2'	E402056-18A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S9-3	E402056-19A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S9-4'	E402056-20A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S10-1'	E402056-21A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S10-2'	E402056-22A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S10-3'	E402056-23A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S10-4'	E402056-24A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW1	E402056-25A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW2	E402056-26A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW3	E402056-27A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW4	E402056-28A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW5	E402056-29A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW6	E402056-30A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW7	E402056-31A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW8	E402056-32A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW9	E402056-33A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW10	E402056-34A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW11	E402056-35A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW12	E402056-36A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW13	E402056-37A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW14	E402056-38A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW15	E402056-39A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW16	E402056-40A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.



Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 02/13/24 14:33
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BG1	E402056-41A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S5 - 1'

E402056-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	546	25.0	1	02/08/24	02/12/24	
Oil Range Organics (C28-C36)	130	50.0	1	02/08/24	02/12/24	
<i>Surrogate: n-Nonane</i>						
	90.6 %	50-200		02/08/24	02/12/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	219	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S5-2'

E402056-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	86.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	89.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	97.9 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	28.9	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S5-3'

E402056-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	91.6 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	23.5	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S5-4'

E402056-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	86.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	91.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	104 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	20.3	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S6-1'

E402056-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.1 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	507	125	5	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	250	5	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	156 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	235	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S6-2'

E402056-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	86.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	99.1 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	26.9	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S6-3'

E402056-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	85.9 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	98.6 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	23.3	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S6-4'

E402056-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	21.0	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S7-1'

E402056-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	439	125	5	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	250	5	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	118 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	221	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S7-2'

E402056-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	86.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	105 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	28.0	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S7-3'

E402056-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	85.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	106 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	23.0	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S7-4'

E402056-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S8-1'

E402056-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2406044
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	85.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2406044
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406087
Diesel Range Organics (C10-C28)	381	125	5	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	250	5	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2406075
Chloride	234	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S8-2'

E402056-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	97.7 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	35.2	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S8-3'

E402056-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	90.9 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	96.8 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	22.2	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S8-4'

E402056-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	86.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	108 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	20.7	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S9-1'

E402056-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	87.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	364	125	5	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	250	5	02/08/24	02/09/24	
Surrogate: n-Nonane	109 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	249	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S9-2'

E402056-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	87.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	99.0 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	26.9	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S9-3

E402056-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	87.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	90.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	110 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	23.8	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S9-4'

E402056-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: BA		Batch: 2406044	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406087	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406075	
Chloride	20.3	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S10-1'

E402056-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.1 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	410	50.0	2	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	100	2	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	98.0 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	321	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

S10-2'

E402056-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2406043
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2406043
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406088
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	98.4 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2406090
Chloride	23.5	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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S10-3'

E402056-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	96.0 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	20.9	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

S10-4'

E402056-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	88.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	97.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	91.7 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	47.0	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW1

E402056-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW2

E402056-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	100 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW3

E402056-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.1 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	99.5 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW4

E402056-28

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2406043
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2406043
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406088
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	101 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2406090
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW5

E402056-29

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW6

E402056-30

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW7

E402056-31

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	88.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	107 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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SW8

E402056-32

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.4 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	99.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW9

E402056-33

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
Surrogate: 4-Bromochlorobenzene-PID	87.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	98.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	102 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW10

E402056-34

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.2 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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SW11

E402056-35

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.5 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/08/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW12

E402056-36

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad
PO Box 247
Plains TX, 79355-0247

Project Name: Haley Chavaroo SA Unit Water Injection facility
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
2/13/2024 2:33:47PM

SW13

E402056-37

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.1 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.3 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:33:47PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW14

E402056-38

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.1 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.6 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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SW15

E402056-39

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	86.8 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.0 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	102 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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SW16

E402056-40

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Benzene	ND	0.0250	1	02/06/24	02/11/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/11/24	
Toluene	ND	0.0250	1	02/06/24	02/11/24	
o-Xylene	ND	0.0250	1	02/06/24	02/11/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/11/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/11/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.9 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2406043	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/11/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	98.7 %	70-130		02/06/24	02/11/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406088	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2406090	
Chloride	ND	20.0	1	02/08/24	02/09/24	



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Haley Chavaroo SA Unit Water Injection facility Project Number: 21064-0001 Project Manager: Tom Bynum	Reported: 2/13/2024 2:33:47PM
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BG1

E402056-41

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG		Batch: 2406041	
Benzene	ND	0.0250	1	02/06/24	02/10/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/10/24	
Toluene	ND	0.0250	1	02/06/24	02/10/24	
o-Xylene	ND	0.0250	1	02/06/24	02/10/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/10/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/10/24	
Surrogate: 4-Bromochlorobenzene-PID	91.4 %	70-130		02/06/24	02/10/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG		Batch: 2406041	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	96.4 %	70-130		02/06/24	02/10/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2406086	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane	109 %	50-200		02/08/24	02/09/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2406060	
Chloride	ND	20.0	1	02/06/24	02/08/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406041-BLK1)

Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.08		8.00		88.5	70-130			

LCS (2406041-BS1)

Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.68	0.0250	5.00		93.6	70-130			
Ethylbenzene	4.69	0.0250	5.00		93.7	70-130			
Toluene	4.68	0.0250	5.00		93.5	70-130			
o-Xylene	4.64	0.0250	5.00		92.8	70-130			
p,m-Xylene	9.46	0.0500	10.0		94.6	70-130			
Total Xylenes	14.1	0.0250	15.0		94.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.21		8.00		90.1	70-130			

Matrix Spike (2406041-MS1)

Source: E402055-30

Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.40	0.0250	5.00	ND	88.0	54-133			
Ethylbenzene	4.40	0.0250	5.00	ND	88.1	61-133			
Toluene	4.39	0.0250	5.00	ND	87.8	61-130			
o-Xylene	4.34	0.0250	5.00	ND	86.7	63-131			
p,m-Xylene	8.89	0.0500	10.0	ND	88.9	63-131			
Total Xylenes	13.2	0.0250	15.0	ND	88.2	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.35		8.00		91.8	70-130			

Matrix Spike Dup (2406041-MSD1)

Source: E402055-30

Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.90	0.0250	5.00	ND	97.9	54-133	10.7	20	
Ethylbenzene	4.90	0.0250	5.00	ND	98.1	61-133	10.7	20	
Toluene	4.90	0.0250	5.00	ND	97.9	61-130	10.9	20	
o-Xylene	4.83	0.0250	5.00	ND	96.6	63-131	10.7	20	
p,m-Xylene	9.88	0.0500	10.0	ND	98.8	63-131	10.5	20	
Total Xylenes	14.7	0.0250	15.0	ND	98.0	63-131	10.6	20	
Surrogate: 4-Bromochlorobenzene-PID	7.38		8.00		92.2	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406043-BLK1) Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.44		8.00		93.0	70-130			

LCS (2406043-BS1) Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.67	0.0250	5.00		93.3	70-130			
Ethylbenzene	4.67	0.0250	5.00		93.5	70-130			
Toluene	4.66	0.0250	5.00		93.3	70-130			
o-Xylene	4.62	0.0250	5.00		92.3	70-130			
p,m-Xylene	9.45	0.0500	10.0		94.5	70-130			
Total Xylenes	14.1	0.0250	15.0		93.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.47		8.00		93.4	70-130			

Matrix Spike (2406043-MS1) Source: E402056-32 Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	5.05	0.0250	5.00	ND	101	54-133			
Ethylbenzene	5.05	0.0250	5.00	ND	101	61-133			
Toluene	5.04	0.0250	5.00	ND	101	61-130			
o-Xylene	5.00	0.0250	5.00	ND	100	63-131			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
Total Xylenes	15.2	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.69		8.00		96.1	70-130			

Matrix Spike Dup (2406043-MSD1) Source: E402056-32 Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.66	0.0250	5.00	ND	93.2	54-133	8.00	20	
Ethylbenzene	4.69	0.0250	5.00	ND	93.8	61-133	7.45	20	
Toluene	4.66	0.0250	5.00	ND	93.2	61-130	7.81	20	
o-Xylene	4.64	0.0250	5.00	ND	92.8	63-131	7.49	20	
p,m-Xylene	9.48	0.0500	10.0	ND	94.8	63-131	7.19	20	
Total Xylenes	14.1	0.0250	15.0	ND	94.2	63-131	7.29	20	
Surrogate: 4-Bromochlorobenzene-PID	7.72		8.00		96.5	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406044-BLK1) Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.33		8.00		91.6	70-130			

LCS (2406044-BS1) Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.54	0.0250	5.00		90.9	70-130			
Ethylbenzene	4.45	0.0250	5.00		89.0	70-130			
Toluene	4.55	0.0250	5.00		91.1	70-130			
o-Xylene	4.49	0.0250	5.00		89.7	70-130			
p,m-Xylene	9.11	0.0500	10.0		91.1	70-130			
Total Xylenes	13.6	0.0250	15.0		90.7	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.49		8.00		93.6	70-130			

Matrix Spike (2406044-MS1) Source: E402056-18 Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.82	0.0250	5.00	ND	96.4	54-133			
Ethylbenzene	4.71	0.0250	5.00	ND	94.2	61-133			
Toluene	4.83	0.0250	5.00	ND	96.6	61-130			
o-Xylene	4.77	0.0250	5.00	ND	95.4	63-131			
p,m-Xylene	9.65	0.0500	10.0	ND	96.5	63-131			
Total Xylenes	14.4	0.0250	15.0	ND	96.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.57		8.00		94.6	70-130			

Matrix Spike Dup (2406044-MSD1) Source: E402056-18 Prepared: 02/06/24 Analyzed: 02/12/24

Benzene	4.88	0.0250	5.00	ND	97.7	54-133	1.32	20	
Ethylbenzene	4.79	0.0250	5.00	ND	95.9	61-133	1.72	20	
Toluene	4.90	0.0250	5.00	ND	98.0	61-130	1.47	20	
o-Xylene	4.86	0.0250	5.00	ND	97.2	63-131	1.88	20	
p,m-Xylene	9.83	0.0500	10.0	ND	98.3	63-131	1.84	20	
Total Xylenes	14.7	0.0250	15.0	ND	97.9	63-131	1.85	20	
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		97.9	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406041-BLK1) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.8	70-130			

LCS (2406041-BS2) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	50.8	20.0	50.0		102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.83		8.00		97.8	70-130			

Matrix Spike (2406041-MS2) Source: E402055-30 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	48.3	20.0	50.0	ND	96.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.93		8.00		99.2	70-130			

Matrix Spike Dup (2406041-MSD2) Source: E402055-30 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130	9.74	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		8.00		98.9	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406043-BLK1) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.1	70-130			

LCS (2406043-BS2) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	51.8	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.85		8.00		98.2	70-130			

Matrix Spike (2406043-MS2) Source: E402056-32 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	53.6	20.0	50.0	ND	107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.87		8.00		98.4	70-130			

Matrix Spike Dup (2406043-MSD2) Source: E402056-32 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	51.3	20.0	50.0	ND	103	70-130	4.55	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.3	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406044-BLK1) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.23		8.00		90.3	70-130			

LCS (2406044-BS2) Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	44.5	20.0	50.0		88.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.3	70-130			

Matrix Spike (2406044-MS2) Source: E402056-18 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	42.8	20.0	50.0	ND	85.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.2	70-130			

Matrix Spike Dup (2406044-MSD2) Source: E402056-18 Prepared: 02/06/24 Analyzed: 02/12/24

Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.2	70-130	4.16	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.30		8.00		91.3	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406086-BLK1) Prepared: 02/08/24 Analyzed: 02/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.7		50.0		109	50-200			

LCS (2406086-BS1) Prepared: 02/08/24 Analyzed: 02/08/24

Diesel Range Organics (C10-C28)	251	25.0	250		100	38-132			
Surrogate: n-Nonane	53.4		50.0		107	50-200			

Matrix Spike (2406086-MS1) Source: E402055-24 Prepared: 02/08/24 Analyzed: 02/08/24

Diesel Range Organics (C10-C28)	265	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	54.9		50.0		110	50-200			

Matrix Spike Dup (2406086-MSD1) Source: E402055-24 Prepared: 02/08/24 Analyzed: 02/08/24

Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132	2.97	20	
Surrogate: n-Nonane	53.6		50.0		107	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406087-BLK1)					Prepared: 02/08/24 Analyzed: 02/09/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	57.9		50.0		116	50-200			

LCS (2406087-BS1)					Prepared: 02/08/24 Analyzed: 02/09/24				
Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132			
Surrogate: n-Nonane	54.9		50.0		110	50-200			

Matrix Spike (2406087-MS1)					Source: E402056-03		Prepared: 02/08/24 Analyzed: 02/09/24		
Diesel Range Organics (C10-C28)	299	25.0	250	ND	119	38-132			
Surrogate: n-Nonane	56.7		50.0		113	50-200			

Matrix Spike Dup (2406087-MSD1)					Source: E402056-03		Prepared: 02/08/24 Analyzed: 02/09/24		
Diesel Range Organics (C10-C28)	306	25.0	250	ND	122	38-132	2.46	20	
Surrogate: n-Nonane	58.4		50.0		117	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2406088-BLK1) Prepared: 02/08/24 Analyzed: 02/09/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.3		50.0		103	50-200			

LCS (2406088-BS1) Prepared: 02/08/24 Analyzed: 02/09/24

Diesel Range Organics (C10-C28)	262	25.0	250		105	38-132			
Surrogate: n-Nonane	53.1		50.0		106	50-200			

Matrix Spike (2406088-MS1) Source: E402056-25 Prepared: 02/08/24 Analyzed: 02/09/24

Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	54.0		50.0		108	50-200			

Matrix Spike Dup (2406088-MSD1) Source: E402056-25 Prepared: 02/08/24 Analyzed: 02/09/24

Diesel Range Organics (C10-C28)	252	25.0	250	ND	101	38-132	3.37	20	
Surrogate: n-Nonane	49.7		50.0		99.5	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406060-BLK1)					Prepared: 02/06/24 Analyzed: 02/08/24				
Chloride	ND	20.0							
LCS (2406060-BS1)					Prepared: 02/06/24 Analyzed: 02/08/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2406060-MS1)					Source: E402054-21		Prepared: 02/06/24 Analyzed: 02/08/24		
Chloride	256	20.0	250	ND	102	80-120			
Matrix Spike Dup (2406060-MSD1)					Source: E402054-21		Prepared: 02/06/24 Analyzed: 02/08/24		
Chloride	256	20.0	250	ND	102	80-120	0.0418	20	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406075-BLK1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Chloride	ND	20.0							
LCS (2406075-BS1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2406075-MS1)					Source: E402056-03		Prepared: 02/08/24 Analyzed: 02/09/24		
Chloride	274	20.0	250	23.5	100	80-120			
Matrix Spike Dup (2406075-MSD1)					Source: E402056-03		Prepared: 02/08/24 Analyzed: 02/09/24		
Chloride	275	20.0	250	23.5	101	80-120	0.346	20	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/13/2024 2:33:47PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2406090-BLK1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Chloride	ND	20.0							
LCS (2406090-BS1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2406090-MS1)					Source: E402056-24		Prepared: 02/08/24 Analyzed: 02/08/24		
Chloride	292	20.0	250	47.0	97.9	80-120			
Matrix Spike Dup (2406090-MSD1)					Source: E402056-24		Prepared: 02/08/24 Analyzed: 02/08/24		
Chloride	299	20.0	250	47.0	101	80-120	2.47	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/13/24 14:33

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 5

Haley Chavez SA Unit Water Injection Facility

Client: Pima Environmental Services

Project:

Project Manager: Tom Bynum

Address: 5614 N. Lovington Hwy.

City, State, Zip Hobbs, NM. 88240

Phone: 580-748-1613

Email: tom@pimaoil.com

Report due by:

Bill To

Attention: Ridgeview Arizona Oil Corp.

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-300

Lab Use Only

Lab WO#
E 402056Job Number
21064-0001

TAT

1D 2D 3D Standard
X

EPA Program

CWA SDWA

Analysis and Method

RCRA

State

NM CO UT AZ TX
X

Remarks

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
10:16	2/3	S	1	S5-1'	1							X		
10:21				S5-2'	2									
10:36				S5-3'	3									
10:42				S5-4'	4									
10:48				S6-1'	5									
10:52				S6-2'	6									
11:08				S6-3'	7									
11:17				S6-4'	8									
11:26				S7-1'	9									
11:31				S7-2'	10									

Additional Instructions:

Bill to Pima Environmental

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5°C on subsequent days.

Relinquished by: (Signature) Kurtine Hume	Date 2/5/24	Time 3:03	Received by: (Signature) Michelle Gough	Date 2-5-24	Time 1503	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N
Relinquished by: (Signature) Michelle Gough	Date 2-5-24	Time 1730	Received by: (Signature) Andrew Nesso	Date 2-5-24	Time 1730	T1 T2 T3
Relinquished by: (Signature) Andrew Nesso	Date 2-5-24	Time 2330	Received by: (Signature) AQ	Date 2-6-24	Time 0751	AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


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Project Information

Chain of Custody

Page 2 of 5

Huber Chavarron SA Unit Water Injection Facility

Client: Pima Environmental Services				Bill To		Lab Use Only		TAT			EPA Program									
Project: _____				Attention: Pidgeway Arizona Oil Corp.		Lab WO# E 402056		Job Number 21014000			1D	2D	3D	Standard	CWA	SDWA				
Project Manager: Tom Bynum				Address: _____																
Address: 5614 N. Lovington Hwy.				City, State, Zip _____																
City, State, Zip Hobbs, NM. 88240				Phone: _____																
Phone: 580-748-1613				Email: _____																
Email: tom@pimaoil.com				Pima Project # 7-300																
Report due by: _____																				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM	BGDOC TX	State		Remarks			
11:36	2/3	S	1	S7-3'	11								X			NM	CO	UT	AZ	TX
11:42				S7-4'	12															
11:49				S8-1'	13															
11:56				S8-2'	14															
11:59				S8-3'	15															
12:06				S8-4'	16															
12:11				S9-1'	17															
12:16				S9-2'	18															
12:20				S9-3'	19															
12:26				S9-4'	20															

Additional Instructions:

Bill to Pima Environmental

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6°C on subsequent days.

Relinquished by: (Signature) <i>Kirine Adams</i>	Date 2/5/24	Time 3:03	Received by: (Signature) <i>Carroll Corp</i>	Date 2-5-24	Time 1503	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <i>Michael Corp</i>	Date 2-5-24	Time 1730	Received by: (Signature) <i>Andrew M. B.</i>	Date 2-5-24	Time 1730	
Relinquished by: (Signature) <i>Andrew M. B.</i>	Date 2-5-24	Time 2330	Received by: (Signature) <i>Ali</i>	Date 2-6-24	Time 0751	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


envirotech

Project Information

Chain of Custody

Page 3 of 5

Haley Chavarro SA Unit Water Injection Facility

Client: Pima Environmental Services

Project:

Project Manager: Tom Bynum

Address: 5614 N. Lovington Hwy.

City, State, Zip Hobbs, NM, 88240

Phone: 580-748-1613

Email: tom@pimaoil.com

Report due by:

Bill To

Attention: Pidegax Arizona Oil Corp.

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-300

Lab Use Only

Lab WO#

Job Number

E 402056 21004001

Analysis and Method

TAT

1D 2D 3D Standard

X

EPA Program

CWA SDWA

RCRA

State

NM CO UT AZ TX

Y

Remarks

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
12:30	2/3	S	1	S10-1'	21							X		
12:35				S10-2'	22									
12:41				S10-3'	23									
12:56				S10-4'	24									
12:59				SW1	25									
1:00				SW2	26									
1:11				SW3	27									
1:16				SW4	28									
1:21				SW5	29									
1:26				SW6	30									

Additional Instructions:

Bill to Pima

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by:

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
Corinne Hame	2-5-24	3:03	Michelle Ceph	2-5-24	1503	Received on ice: (Y) N
Michelle Ceph	2-5-24	1730	Andrew M. 850	2-5-24	1730	T1 T2 T3
Andrew M. 850	2-5-24	2330	SE	2-6-24	0751	AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Chain of Custody

Project Information

Halley Chauvorn SA Unit Water Injection facility

Client: Pima Environmental Services					Bill To: <u>Ridgeway Arizona Oil Corp</u>					Lab Use Only					TAT				EPA Program					
Project: _____					Attention: _____					Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA					
Project Manager: Tom Bynum					Address: _____					E402056		21064-001					X							
Address: 5614 N. Lovington Hwy.					City, State, Zip					Analysis and Method												RCRA		
City, State, Zip: Hobbs, NM, 88240					Phone: _____					DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM	BGDOC TX	State					
Phone: 580-748-1613					Email: _____														NM	CO	UT	AZ	TX	
Email: tom@pimaoil.com					Pima Project # 7-300																			
Report due by: _____																								
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number															Remarks				
2:15	2/3	S	1	BG1	41																			
Additional Instructions: Bill to Pima																								
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.															Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.									
Relinquished by: (Signature) <u>Carime Hume</u>					Date <u>2/5/24</u>		Time <u>3:03</u>		Received by: (Signature) <u>Michael Byr</u>					Date <u>2-5-24</u>		Time <u>1503</u>		Lab Use Only						
Relinquished by: (Signature) <u>Michael Byr</u>					Date <u>2-5-24</u>		Time <u>1730</u>		Received by: (Signature) <u>Andrew Moss</u>					Date <u>2-5-24</u>		Time <u>1730</u>		Received on ice: <u>(Y) N</u>						
Relinquished by: (Signature) <u>Andrew Moss</u>					Date <u>2-5-24</u>		Time <u>2330</u>		Received by: (Signature) <u>AO</u>					Date <u>2-6-24</u>		Time <u>0751</u>		T1 _____ T2 _____ T3 _____						
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____															Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					AVG Temp °C <u>4</u>				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																								

Envirotech Analytical Laboratory

Printed: 2/6/2024 4:43:11PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Pima Environmental Services-Carlsbad	Date Received:	02/06/24 07:51	Work Order ID:	E402056
Phone:	(575) 631-6977	Date Logged In:	02/06/24 08:32	Logged In By:	Angelina Pineda
Email:	tom@pimaoil.com	Due Date:	02/12/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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Santa Fe, NM 87505

QUESTIONS

Action 372824

QUESTIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	372824
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2310847119
Incident Name	NAPP2310847119 HALEY CENTRAL WATER FACILITY @ 0
Incident Type	Other
Incident Status	Remediation Plan Received
Incident Facility	[fCH1903857157] HALEY WATER STATION

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Haley Central Water Facility
Date Release Discovered	07/27/2022
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Other Other (Specify) Crude Oil Released: 0 BBL Recovered: 0 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Contaminated soils stockpiled at location from unkown events. Measures approximately 100' x 45' at a height of approximately 14'. Contained inside fenced area.

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QUESTIONS, Page 2

Action 372824

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	372824
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	More info needed to determine if this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Unavailable.
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Charles Hinojosa Title: Operations Manager Email: chinojosa@pedevco.com Date: 08/12/2024
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QUESTIONS, Page 3

Action 372824

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	372824
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	321
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	676
GRO+DRO	(EPA SW-846 Method 8015M)	546
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	09/12/2024
On what date will (or did) the final sampling or liner inspection occur	02/03/2024
On what date will (or was) the remediation complete(d)	11/11/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	4500
What is the estimated volume (in cubic yards) that will be remediated	56

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 372824

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:	164557
	Action Number:	372824
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Charles Hinojosa Title: Operations Manager Email: chinojosa@pedevco.com Date: 08/12/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 372824

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372824
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 372824

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372824
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 372824

CONDITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372824
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	The remediation plan is approved as written. Ridgeway Arizona Oil Co. has 90-days (November 12, 2024) to submit to OCD its appropriate or final remediation closure report.	8/13/2024